



The 2014 Golden Gate National Parks BioBlitz - Data Management and the Event Species List

Achieving a Quality Dataset from a Large Scale Event

Natural Resource Report NPS/GOGA/NRR—2016/1147





ON THIS PAGE

Photograph of BioBlitz participants conducting data entry into iNaturalist.
Photograph courtesy of the National Park Service.

ON THE COVER

Photograph of BioBlitz participants collecting aquatic species data in the Presidio of San Francisco.
Photograph courtesy of National Park Service.

The 2014 Golden Gate National Parks BioBlitz - Data Management and the Event Species List

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Abstract

We reviewed the data management techniques used to generate species occurrence data during the Golden Gate National Parks BioBlitz and produced a species list from the event. This large scale, all-taxa inventory of biodiversity in the Golden Gate National Recreation Area and Muir Woods National Monument was held on March 28-29, 2014. Co-hosted by National Geographic, the National Park Service, the Golden Gate National Parks Conservancy, and the Presidio Trust, the event involved thousands of participants and hundreds of data recorders. Although the internet platform iNaturalist was utilized as the core database for species observations, and a high proportion of data entered during the event went directly into iNaturalist by observers in the field via a mobile app, other forms of data such as paper datasheets and spreadsheets had to be processed on desktop computers. Of the 2,884 species documented during the BioBlitz, 1,718 were new to the park, i.e. not already on the Golden Gate National Recreation Area official species list. We were also able to confirm species occurrence for a further 73 species already on the park list noted as expected for the area but without supporting observational data. The protracted length of time between data collection and the production of a definitive species list is in part a reflection of the level of data processing required to combine data from multiple formats, as well as challenges correlating taxonomic nomenclature between synonymous records. Widespread adoption of a single platform such as iNaturalist for similar events would help ease production of species lists. This report also includes data management recommendations for further bioblitz events, as well as the full species list as an appendix.

Introduction

From Friday, March 28 until noon on Saturday, March 29, 2014, an ambitious park-wide BioBlitz took place within the 80,000 acres of the “Golden Gate National Parks” (GGNP), which includes the Golden Gate National Recreation Area, Muir Woods National Monument, and Fort Point National Historic Site (NPS, 2014). The event was a collaboration between the National Park Service, the Golden Gate National Parks Conservancy, the Presidio Trust, and National Geographic as a part of National Geographic’s decade of annual BioBlitzes leading up to the National Park Service Centennial in 2016.

The 2014 BioBlitz, like the others before it, was an inventory event spanning two days where experts, school children, and members of the public came together to seek out, identify, and document as many different species as possible from all taxonomic groups, and to learn about the biodiversity of their nearby national parks. An event like this presents an opportunity to gather a considerable number of scientists and experts in one place, and have them available for public interaction. Members of the public and students are able to observe and help scientists in field work, and also are encouraged to capture species data on their own for later verification or identification by an expert. These interactions are designed to offer the public opportunities to learn about park biodiversity, conservation, and the value of scientific research. The event was a hybridization of a focused effort to document species as well as providing educational opportunities to a wide range of individuals. The educational aspects of the event merit greater evaluation elsewhere, but the scope of this report is limited to event data management and review. For context of event complexity, however, we include a sketch of the range of activities in the overall BioBlitz.

The Golden Gate National Recreation Area was chosen for the 2014 BioBlitz in part because of its proximity to the large population of the San Francisco Bay Area. To reach as many people as possible, the event included many activities in addition to scientist-led biological inventories. Partner organizations including the California Academy of Sciences, Slide Ranch, Institute at the Golden Gate, The Marine Mammal Center, Aquarium of the Bay, and a local high school hosted biodiversity-themed talks and events in the weeks leading up to the BioBlitz. A large, two-day Biodiversity Festival at Crissy Field’s East Beach showcased the region’s biodiversity, and encouraged Bay Area residents to get involved in protecting and becoming stewards of the natural environment. The festival included a wide variety of music, photography and drawing workshops, hands-on science activities, talks, and live-animal demonstrations by local groups, including over 50 prominent science, nature, and environmental organizations.

Students from nine public school districts and eight youth organizations and community centers across the San Francisco Bay Area participated in this event, with the majority coming from underserved communities. These young people, some of whom were experiencing being in a national park for the first time, were able to take part in one of 89 expert-led biological inventories that also included a trained field educator to ensure they had a quality, authentic field science experience that allowed them to learn in the field, ask questions, and make their own connections to the natural world. There were also special educational and interpretive opportunities at the Biodiversity Festival

that extended the reach of BioBlitz to hundreds of students and teachers who could not participate in field inventories.

In total, over 300 scientists and experts took part in the 2014 BioBlitz in the Golden Gate National Parks, along with approximately 9,000 students and members of the public who visited the Biodiversity Festival or joined one of the 250 expert-led inventories offered between noon on Friday and noon on Saturday (San Francisco Bay Area Science and Learning, 2015). Despite heavy rain on Saturday that impeded observation of some taxonomic groups, a total of 2,884 species were observed during the BioBlitz, of which 1,718 were not already on the park species lists. We were able to confirm occurrence for a further 73 species that were noted on the park species list as “probably present,” but did not previously have observational data to substantiate presence.

BioBlitzes are an opportunity for a park to revisit and add to its official species list. Ideally, a species list should be a comprehensive account of what can be found in the park, a beneficial tool for land management decisions and conservation efforts. However, species lists are less effective if not regularly updated, or if focused on only a few taxonomic groups that pertain to the expertise of park employees, or limited solely to more well-known taxonomic groups such as vascular plants and vertebrates. BioBlitzes attract a broad range of experts and scientists to take part, affording parks an ability to gather information on lesser-known distributions of taxonomic groups, or previously understudied habitats. For example, during the 2014 GGNP’s BioBlitz, the first ever redwood tree canopy survey was conducted in Muir Woods, resulting in the documentation of a species previously unknown to that site, the arboreal salamander *Aneides lugubris*. In this way a BioBlitz sits at the intersection between an educational event and a scientific endeavor to document park species.

Due to the timed nature of a BioBlitz, species data are gathered quickly and, because of the diversity of participant’s interests and habits, often in more than one format. However, for the event to effectively celebrate the range of biodiversity being investigated there is also a need to consolidate data in a timely manner. During the event, spectators are keen to learn which species are being observed, which can add to the sense of discovery and involvement. The ability to display a dynamic running total of observations can help keep participants engaged throughout the 24 hours. Generally, a BioBlitz event culminates with some form of announcement that involves event totals (such as number of species observed, number new to the park) and, though tentative, these tallies are often quoted in press releases subsequent to a BioBlitz, so it is important to get the totals as accurate as possible.

We describe below the management practices utilized during the BioBlitz for dealing with such a large influx of taxonomic data, as well as detail the various processes used for validating data quality in the months that followed the event. A very high level and effort of data processing was required to produce a definitive species event list, so in an attempt to help others who may be planning a BioBlitz, we include a suite of recommendations based upon our methodology and experiences. The focus of this report is limited to the accumulation and management of biodiversity occurrence data; highlights related to other aspects of the event can be found at www.sfnps.org/bioblitz or <http://www.nationalgeographic.com/explorers/projects/bioblitz/golden-gate-california-2014/>.

Methods

Preparing the antecedent park species lists for the BioBlitz

Official National Park Service (NPS) park species lists reside within a national database known as NPSpecies (www.irma.nps.gov/NPSpecies/). This internet based platform is available to all NPS units for documentation of park biodiversity. The database contains standardized information on the occurrence of species in parks, including scientific names and their synonyms, common names, abundance, residency, nativeness, and more. During the creation of NPSpecies, most of the original endeavor to certify park lists went towards vertebrates and vascular plants. In preparation for the BioBlitz, considerable effort was invested in collecting verified datasets that had not yet made it into NPSpecies. Such datasets included intertidal organisms from park research, and plants recently documented by an invasive plants monitoring team, and other invertebrate data. Additionally, the geographic scope of the BioBlitz included three parks, referred to collectively as the Golden Gate National Parks (GGNP): Golden Gate National Recreation Area (GGNRA), Muir Woods National Monument, and Fort Point National Historic Site. The GGNRA also includes areas of sufficient fame that they are sometimes referred to as parks: the Presidio of San Francisco and Alcatraz Island. These sub-areas also had their own species lists in NPSpecies. Each park or unit's list was reviewed and supplemented with data that had not previously been entered and then a single checklist of species was compiled by combining the five lists, to be used as a comparison with the forthcoming BioBlitz data.

BioBlitz data collectors

The BioBlitz event was comprised of a mixture of public and expert-only inventories, in order to capture as much quality data as possible from the BioBlitz event, while also providing the public with a meaningful and enjoyable experience. There were a number of check-in stations, spread widely throughout the GGNRA, with a selection of two hour BioBlitz inventories setting out from each station. Around ten members of the public were able to participate in each inventory. Each of the 155 public biological inventories was led by an expert, and most focused upon one taxonomic group, such as fungi, amphibians, or mammals. There were also a few that were more general in focus, where the inventory looked at biodiversity existing within a particular habitat, for instance a night-time forest inventory in Muir Woods. The public were encouraged to record their own observations in iNaturalist, though an assigned data helper also went with nearly every group. This allowed the scientist or expert more freedom to interact with the group, while helping to ensure that everything observed was being recorded.

In addition to the public inventories, there were also over 35 expert-only biological inventories that were targeted to capture data in places that were less accessible, such as those which required a hike over difficult terrain or used boats to access. Small teams were also used for sampling in sensitive habitat. Additionally, some expert-only inventories focused on things that needed longer than two hours for data collection, such as monitoring fungus gnat malaise traps, and others were focused on species hard to identify without a microscope, such as tardigrades. These targeted inventories were designed to ensure safe and effective logistics for areas and sampling techniques not suited to larger groups. Several experts participating in these targeted efforts who had collected hard to see

organisms could then share their findings with interested members of the public in a lab space designed into the Biodiversity Festival.

BioBlitz data entry

Organizers decided early in the planning process for the 2014 BioBlitz to utilize web-based citizen science platforms to a greater extent than previously attempted during National Park Service - National Geographic BioBlitzes. This allowed for a wider range of data collection options and enabled observers to select the most appropriate data collection platform for their chosen taxonomic group, level of experience, and comfort. However, this flexibility also generated more than one workflow to get observation records into a consolidated database in the time frame that the design of the event demanded.

Although the use of iNaturalist (www.iNaturalist.org), particularly the mobile application, was heavily promoted and encouraged during build up to the event as the preferred method of field data capture, the planning team decided to also keep the option of paper data sheets. Reasons for this included the fact that not all participants had access to a smart phone, not everyone who did have access was comfortable taking it into the field, some participants were unlikely to practice sufficiently to develop proficiency with the mobile app in advance, and some taxonomic groups had nomenclature that had not yet been fully integrated into iNaturalist.

During the BioBlitz, observations were recorded in one of four ways. Observers used:

- Mobile platforms in the field. Both iNaturalist and apps (such as BirdLog) that deliver bird records to Cornell Laboratory of Ornithology's online database, eBird (www.ebird.org), were accepted methods of data collection.
- The iNaturalist website, either at home or at one of the data centers to upload field notes and photos. There were six data centers available; one at each main inventory check-in area.
- Paper data sheets. Participants using paper data sheets were directed to hand these in to a data center before leaving the BioBlitz. This included data sheets from the field, or from specialists using one of the microscope lab spaces.
- Another tabular data format. Generally this was in the form of Excel spreadsheets from specialists identifying organisms such as bacteria, invertebrates, or diatoms.

All data that were not directly entered into iNaturalist had to be assimilated into the web based platform during the event, by trained data helpers at one of the data centers. Data were either manually entered into iNaturalist using one of six generic iNaturalist accounts set up in advance (one for each data center), or batch uploaded into the GGNP's BioBlitz project. This methodology differed somewhat from previous NPS/National Geographic BioBlitzes as, prior to 2013, all data had been recorded in the field on paper data sheets then entered manually into a custom database during the event. In the 2013 event, at Jean Lafitte, some observations were recorded in the field on the social network app Project Noah, but still downloaded from that in order to enter into another

dedicated database (Budde and Kingston, 2014). The 2014 GGNP BioBlitz was the first time that an external platform was used to store and manage observation data.

iNaturalist was chosen as the main repository for BioBlitz data because it has distinct advantages over spreadsheets or a custom database. The platform helps standardize data entry in the field: by providing users pick-lists of species names pulled from a centralized database, erroneously spelled entries are dramatically reduced. Because iNaturalist is available to everyone free of charge on the web or via smartphone apps, it provides a way for citizen scientists to get fully involved and become part of the BioBlitz even if they do not manage to take part in one of the organized inventories. Evidence for identification is provided mainly by digital photograph or a sound recording, which can enhance the validity of an observation, as well as provide an engaging resource for event participants to share observations with one another. The wider online network of iNaturalist members help verify identifications, and observation totals update dynamically and automatically throughout the event.

A GGNP BioBlitz project called “Golden Gate National Parks BioBlitz March 28th and 29th 2014” was created within iNaturalist. Projects are easily created within iNaturalist as a way to pool a subset of observations that meet a set of pre-defined criteria, such as within a geographic area during a certain period of time, or only observations of certain taxonomic groups. Participants needed to join the GGNP BioBlitz project prior to attending the BioBlitz and then submit their observations to it. (Note that iNaturalist has subsequently changed default project definitions so that observers do not have to explicitly join a bioblitz project to contribute records.) Although the project page was available to view before the BioBlitz, observations were prevented from inclusion if they fell outside the pre-defined twenty-four hour window.

Data quality control

During the event, data went through a preliminary quality control process. The wider iNaturalist online community reviewed observation records in real time, and could verify an observation by agreeing with it, or offering a new or different identification based upon the photo and descriptive evidence provided. Data that were entered by data helpers or batch uploaded were checked for accuracy, particularly spelling mistakes, though generally the presence of a look up function in iNaturalist did a good job of mitigating spelling errors.

The iNaturalist status of “research grade” was used as a benchmark for accepting an observation as valid. At the time of the BioBlitz, in order to become research grade, an observation needed to have a location, time, image (or sound recording), as well as an identification that is agreed upon by two or more iNaturalist user accounts. However, later changes to the design of the platform required an observation to be identified at least to species level as well. This did not change our process of quality control, but has meant that some observations which were accepted as having acquired “research grade” in the original download of data, now no longer appear to have that status within iNaturalist due to identification only to genus or higher.

In the months following the BioBlitz, multiple groups of people were recruited to conduct further identification verification. The iNaturalist social network continued to be utilized for observations with photographs to achieve research grade. Volunteers reviewed records for validity, especially

proper taxonomic designation. Taxonomic specialists both within the National Park Service and beyond were utilized to review observations. There was also a group of project curators (trusted specialists in their respective fields), that reviewed and curated project-based records with no photographic evidence; these included data received from eBird. The latter group was especially important, as, due to the construct of iNaturalist, records cannot become research grade without a photo (or sound recording). For records created by trusted specialists in their fields and of taxa expected in the region, a project curator could agree with the identity of the observation. This created a “curated” status equivalent to research grade, but only within the bounds of the GGNP BioBlitz project. Two approaches were used to address observations of taxa unexpected for the region. Records without sufficient evidence to ever become research grade were not curated and left out of the final count. Alternatively, taxonomy was generalized when there was not enough evidence to support an observation, e.g. a poor quality photograph first identified as a spined green stink bug *Loxa flavicollis*, may have been identified as simply Hemiptera by the curator, thus bringing the agreed upon level of the record up to a taxonomic order rather than species.

During the data review and curation process, the initial method was to check all observations. This was a time-consuming undertaking however, and so the data review methodology shifted to focus on verifying the resulting overall taxonomic list rather than each record. The review process subsequently focused on taxa that stood out in some way and locating the record(s) related to those taxa. Records receiving detailed scrutiny included those representing taxa new to the park list, rare in the region, or outside of an expected range. By adopting these filters as the primary curation technique, we accepted into the project list the common species expected for the area, and also accepted that within the overall body of iNaturalist records for the project, there were records of varying quality for the common species. This shift in methodology worked well at quickly eliminating erroneous observations, but also meant that some observations of well-known species in the area were not fully curated.

Though all observations included in the iNaturalist project for the event occurred during the BioBlitz, not all data were submitted during that time period. This was particularly true for taxonomic groups not readily identifiable in the field, which required further lab work to identify to genus or species. Various packets of data entering iNaturalist long after the event meant that acquiring a complete and clean dataset for the 2014 GGNP’s BioBlitz was a gradual process. Additionally, there was one dataset of bacteria that could not be entered into iNaturalist, as the underlying iNaturalist database did not have the capacity to recognize the taxonomy of a majority of those entries. The final dataset was extracted on January 22, 2015 from iNaturalist and contained a combination of research grade and curated records. It was saved as a Microsoft Excel file, and the bacteria data appended. The Excel sheets were imported into Microsoft Access along with the species list from NPSpecies for comparison and further clean up. In particular, the list was checked for synonyms between older and newer taxonomic designations. iNaturalist itself is a dynamic system with new references regularly being added, though at any given time the system may not be able to reconcile all synonyms between old and new names. During this BioBlitz itself, new taxonomy was added to the iNaturalist system, and these records were therefore in particular need of careful review. Additionally, where there were

multiple subspecies recorded for the same species. These were generalized to a single species designation for the purpose of computing sum counts for different taxonomic groups.

Results

Due to the dynamic nature of iNaturalist as a multi-user platform open to ongoing editing and addition of historic records, results presented here may differ from data downloaded or accessed after January 22, 2015.

Diversity

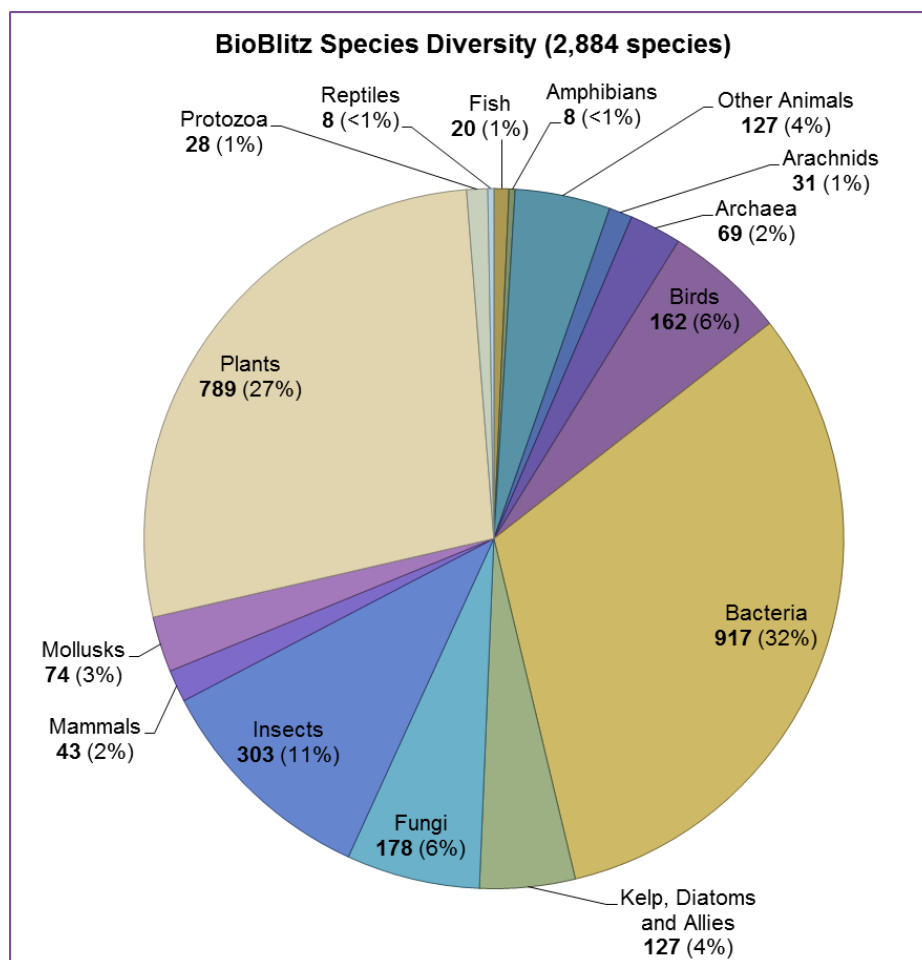


Figure 1: Species diversity and total number of species recorded at the 2014 Golden Gate National Parks BioBlitz. Percentage of total diversity for each taxonomic group is provided in parenthesis.

Figure 1 above shows the proportion of different taxonomic groups within the final species count from the 2014 GGNP's BioBlitz. The number of species observed is in bold, with the percentage of the whole that each taxon group represents indicated in parenthesis. Please note, the term species refers to the number of individual species observed or lowest taxonomic rank if identification to species was unavailable, and provided the record could only have represented a single species; for example, if only one record of the family Gammaridae was recorded, it must have represented a single species. Additionally, multiple subspecies within the same species were counted only once at

the species level. However, the full list containing both species and subspecies can be found as an appendix to this report.

Effort

An observer was any person that generated at least one event record to an iNaturalist account (Figure 2). For comparison of relative effort between groups, observers that recorded observations in different taxonomic groups were counted once within each group.

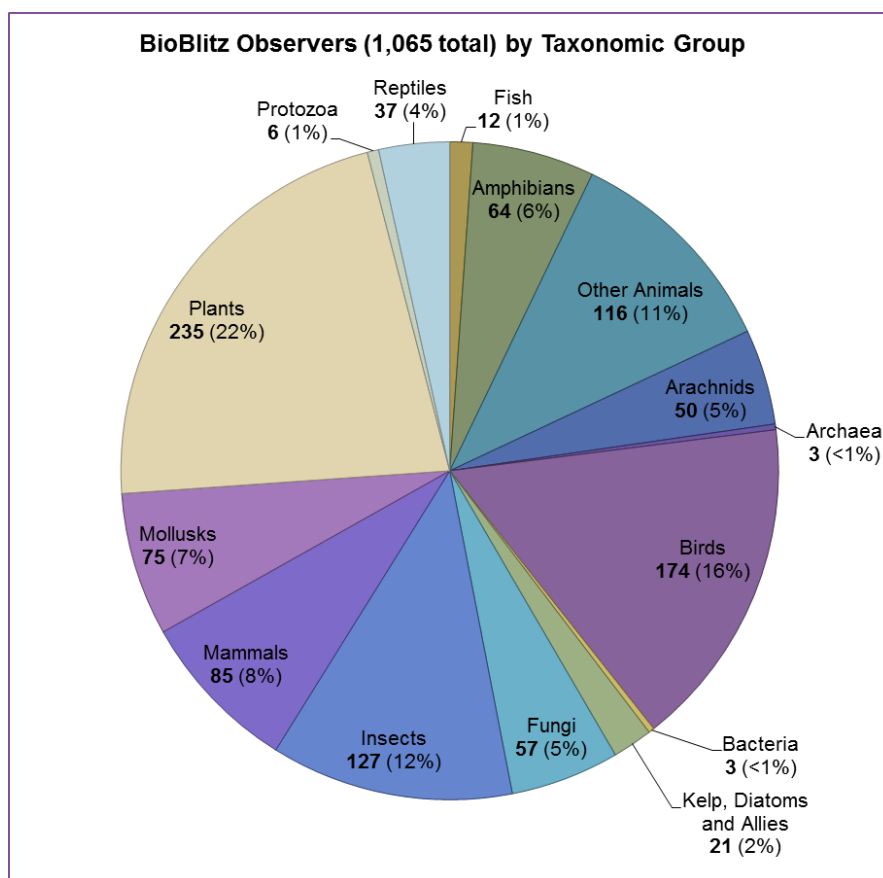


Figure 2: Number and proportion of the 2014 Golden Gate National Parks BioBlitz observers by taxonomic group. Percentage of total observers for each taxonomic group are provided in parenthesis.

Inviting a broad sweep of observations from taxonomic specialists, as well as general public observations, resulted in a collection of records that suggests differences in the effort needed to document different taxa. We compared the number of observers within each taxonomic group to the proportion of taxonomic observations, and to the proportion each group represents of the event's total documented biodiversity. As can be seen from Figures 1 and 2 (above), and 3 (below), the observers who made plant observations achieved a high percentage of the total observations and also represented a high percentage of the biodiversity. In contrast, the very small percentage of observers recording bacteria achieved a reasonable percentage of the total BioBlitz observations, and a high percentage of total biodiversity. Amphibian and reptile observers combined to make a group representing 10 percent of observers, but only returned 1.5 percent of the total observations, and

contributed less than 1 percent of the overall biodiversity observed during the event. This suggests a relationship between detectability and time required per organism for identification that influenced the return on effort by any given observer. Plants are conspicuous and stationary, and therefore allow for a fairly rapid accumulation of records. Twenty years ago, bacteria would have required a huge amount of effort, but with mechanization of DNA analysis, a few observers in a laboratory were able to generate a great number of observations.

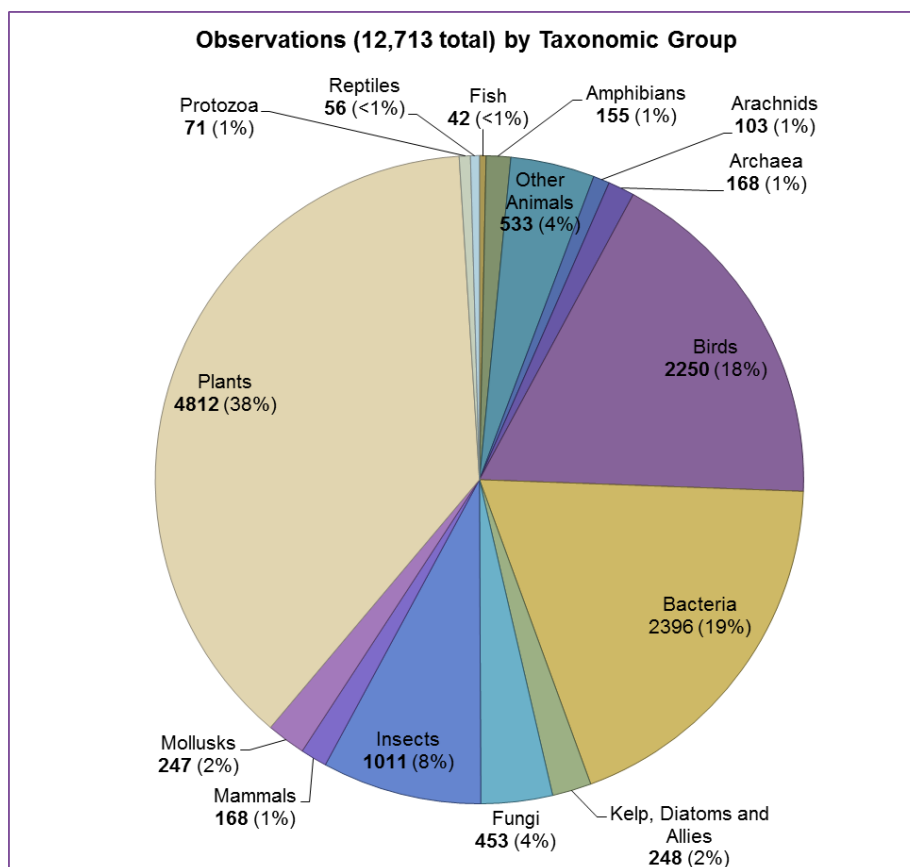


Figure 3: Number and proportion of the 2014 Golden Gate National Parks BioBlitz observations by taxonomic group, and total number of observations. Percentage of total observations for each taxonomic group are provided in parenthesis.

Comparing Figure 2 to Figure 3, it can be seen that the proportion of overall diversity within the event relative to the proportion of observations shrinks markedly for groups with a high number of repeat detections, such as birds and amphibians. Conversely, the proportion grows for groups with high number of unique observations such as bacteria and fungi.

Taxa found only once - unique among event observations

A high percentage of unique species observations within a group represent some combination of the difficulty of detection for that species and the relative level of effort that went into the investigation of that group. Very few bird observations (less than one percent) were unique, which was to be expected, since there were a lot of birders participating in the event. Birds, amphibians, and plants

represent fairly conspicuous groups with a good level of effort dedicated to documenting them during the BioBlitz. Conversely, nearly one quarter of spider observations were unique, with only five percent of people recording an arachnid observation. Rain during the second day of the event may also have decreased the detectability of this group overall. The high percentage of fish species that were observed only once, nearly 30 percent, suggests that more effort searching for fish would have resulted in a good return of additional species.

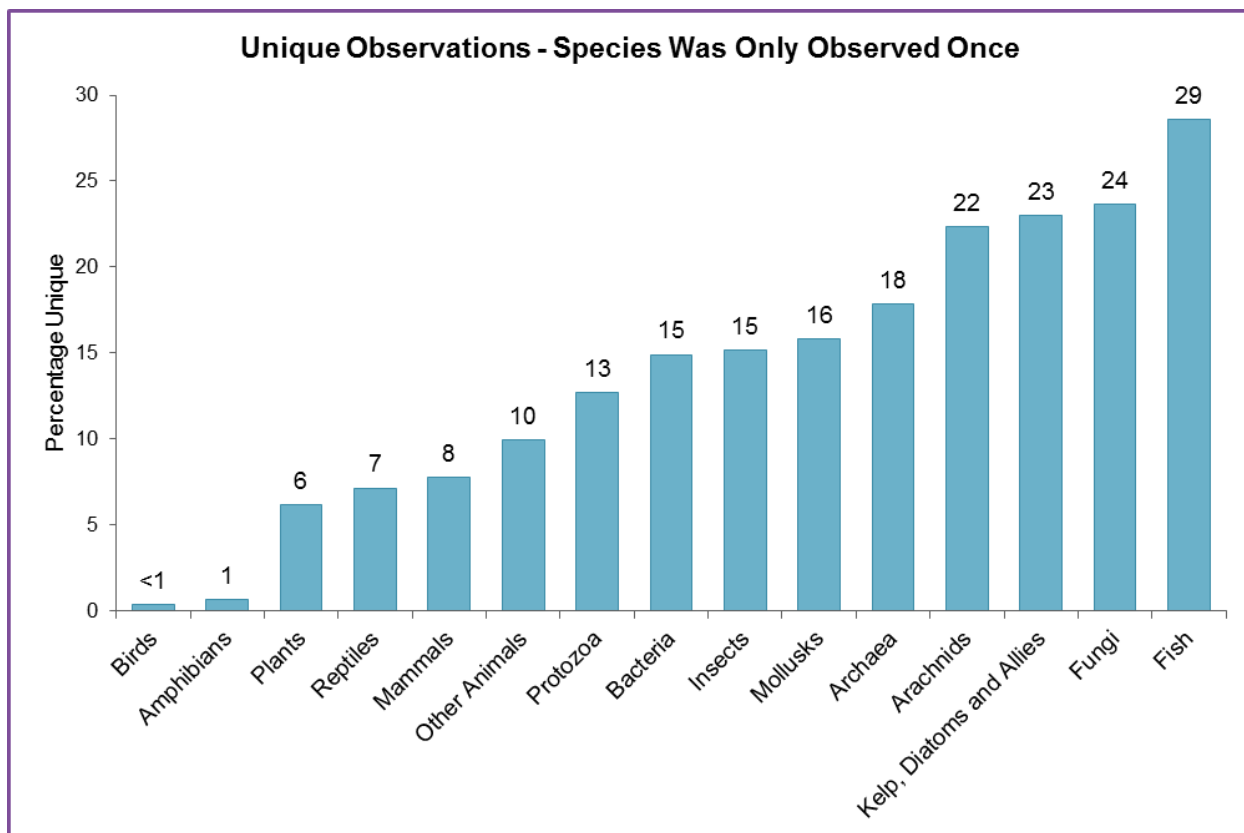


Figure 4: The percentage of unique observations made during the 2014 Golden Gate National Parks Bioblitz by taxonomic group

Comparison of BioBlitz results with the antecedent park species list

The 2014 GGNP's BioBlitz generated a total of 1,718 new species that could be added to the park species list. The following table shows a comparison between the two lists.

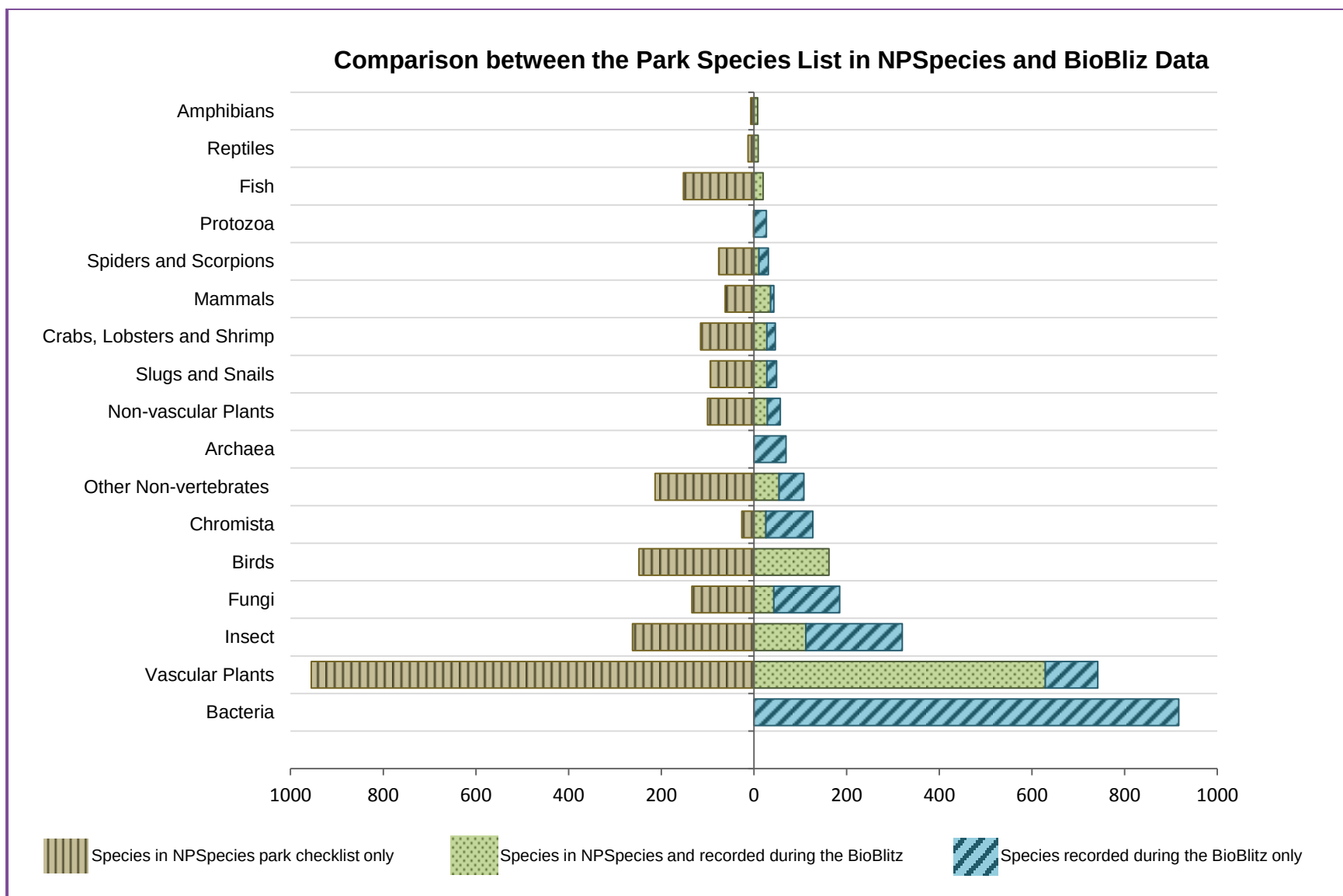


Figure 5: Comparison between antecedent park species list and the 2014 Golden Gate National Parks BioBlitz data

Since prior work in compiling the NPSpecies park list had focused on vascular plants and vertebrates it was not surprising that the BioBlitz succeeded in documenting many new records of taxa in groups such as bacteria, insects, and chromista. However, many of these species have undoubtedly been documented in historical research, but never formalized as an NPSpecies record. Note that plants and mammals identified in the BioBlitz but not on the park NPSpecies list were primarily domestic plants located in park gardens, or domestic mammals located in park pastures or corrals. While the National Park Service is interested in feral or escaped species, domestic animals or cultivated plants are of little interest to natural resource staff and are therefore not included on park species lists.

NPSpecies contains presence information for each species within each park unit, and in the original certification process some species were placed on the list because they were expected to occur within the park, but had no direct evidence to support their occurrence in the park. These were given an occurrence value of “Probably Present.” Other species were known to have appeared historically but had no contemporary evidence and thus acquired an occurrence value of “Not In Park (Historic).” The BioBlitz generated observation records for 73 species with these occurrence values, providing evidence for upgrading these records to “Present.” Of these, 61 records were of vascular plants, one bird, ten invertebrates, and one mammal species (Pacific white-sided dolphin).

Discussion and recommendations for future events

Prior to 2014, a co-hosted National Geographic and National Park Service BioBlitz had not used a web based platform as a major data collection tool as well as a dynamic repository of data. Therefore, the GGNRA was in a unique position with few precedents upon which to build a comprehensive action plan. One of the advertised goals of the BioBlitz was to ultimately use the resulting data to update the park species list in NPSpecies; the following discussion arose from that endeavor.

A significant success of the 2014 GGNP BioBlitz was that many experts and public alike who embraced the concept, and came out to participate and document species, despite the rainy weather during the second day of the event. The high number of observations (12,713) is testament to the usability of data entry systems employed, and to an effective group of organizers and attendees alike, who were able to initiate and maintain an atmosphere of discovery throughout the entire event. For the most part the public inventories were well attended, particularly night-time inventories, and many taxonomic groups were represented, though some more thoroughly than others.

Use of the web based platform, iNaturalist, as the repository for the BioBlitz data, has advantages that continue long after the event is over. iNaturalist is one of the data publishers to the Global Biodiversity Information Facility which provides freely available, verified biological datasets to the scientific community (www.gbif.org). Only research grade observations are accepted, so by encouraging a high standard of data entry and curation of records, the 2014 GGNP BioBlitz contributed a substantial dataset that can be utilized for scientific research beyond the immediate goals of the event. Other organizations, such as Calflora, also use iNaturalist research grade observations that meet their specific requirements (Calflora, 2015). BioBlitz data will thereby be valuable for reducing data gaps and improving research into species distributions at a greater resolution than park boundaries.

Creating a BioBlitz project within iNaturalist does have advantages with regard to sensitive species data, although during the GGNP BioBlitz it did rely on a potential observer to take the extra step of joining the project prior to making an observation. Sharing data pertaining to sensitive species can be of a big concern to natural resource agencies, particularly if spatial data are involved. iNaturalist does obscure the publicly accessible location coordinates by up to ten kilometers for sensitive species. However, having an accurate location for a species observation is highly beneficial to a natural resource manager. The advantage of the iNaturalist project is that although data for sensitive species are publically obscured by default, the administrator and project curators (as well as the observer) can access the unobscured coordinates. The same is true for those observations where the geoprivacy was set to “obscured” by the observer, but not “private.” With recent upgrades to iNaturalist, incidental observations that might be of interest to a project (such as those made during a BioBlitz time and place, even though the observer was not intentionally taking part), can now be added subsequently by the project curators, however coordinates will remain obscured if the geoprivacy setting is “private.”

The park species list, extracted from NPSpecies and used to compare with BioBlitz data, was derived from five lists housed within NPSpecies. A species list is a valuable aid to ongoing park strategy and conservation methods, but can quickly become outdated or incomplete unless maintained on a regular basis. One of the challenges posed by the approach to hold the event with a multi park boundary was that there was no single definitive list of area wide species. Maintaining multiple park lists within a single boundary has administrative and data resolution advantages and disadvantages not within the scope of this report, but adds an extra level of effort needed to maintain up to date lists in NPSpecies. Condensing this data into one checklist and making sure the contents were current presented a major challenge when preparing for the BioBlitz.

Issues arose especially with regard to out-of-date nomenclature, particularly when one park unit list had a species scientific name updated but another had not. This caused synonym errors and inadvertent duplicate entries in the consolidated list that needed to be rectified. The database behind iNaturalist didn't always recognize the same nomenclature for a species that the park biologists preferred. For example, at the time of the event, iNaturalist used the more global taxonomic nomenclature from Kew Gardens for the plant kingdom, while California botanists prefer the more locally specialized nomenclature from the 2012 Jepson Manual Vascular Plants of California. This presented further challenges when comparing the two datasets after the event. To reliably compare the data, multiple crosswalk tables, which help map fields across different databases, had to be meticulously constructed. The taxonomic hierarchies (for whether an organism was a vascular plant, protozoa, etc.) didn't entirely match between the two platforms. For example, NPSpecies breaks down plants into vascular and non-vascular plants, whereas iNaturalist lumps most together simply as "plants," with some non-vascular plants falling into the "kelp, diatom and allies" grouping. Again this required multiple queries and a construction of a crosswalk table to rectify. Whilst the latter didn't directly impact the data, it was necessary for quantifying and displaying data.

One consequence of having to produce comparable datasets is that it highlighted just how static the park species list had become in NPSpecies, and the requisite workload to update it. However, the multiple crosswalks created to compare datasets also produced query tools that would allow rapid identification of outmoded NPSpecies records, which is an extremely useful by-product and should facilitate record maintenance towards a refined park species list.

Recommendations

The 2014 GGNP's BioBlitz produced thousands of useful species occurrence records and dozens that either confirmed presence of species in the participating parks or represented range expansions. The event also produced data that required a great deal of review in order to produce a definitive species list, and generated numerous records of questionable or no utility, somewhat due to limitations in methodology. Reviewing the event through all stages of data collection to examine what could have been done to generate better quality data, has led us to the following recommendations to put forward for data management in future BioBlitz endeavors.

1. **The data should be considered an event product rather than a by-product.** While a BioBlitz includes interpretation and outreach goals, other core aspects of the event are contributing to expanded information about biodiversity and generation of a good species list. To best fulfill these goals, pay as much attention to the science and methodology of data collection as to the other aspects of BioBlitz planning. Recognize that there is a time commitment involved in order to return a quality product.
2. **Envision your data goals in advance.** Decide at the planning stage what you want to achieve from the BioBlitz and resulting dataset in order to best strategize data entry methods and required fields. Some questions to consider are: What types of taxa are you emphasizing? How many hours do you have available to dedicate to review and cleanup of data? What is the final resting place for the dataset? Will iNaturalist fulfill all of your goals or is it one tool in the toolkit?
3. **Train your core group in advance on iNaturalist (or other platform to be used).** For all taxa or multi-taxa events, the iNaturalist platform is an excellent tool. To be most effective, however, integrate adoption of iNaturalist methods into the event. Build a cadre of users who are proficient in its use and capable of coaching others leading up to and during the event. Events with more of a taxonomic focus may be well served by platforms such as eBird that are designed for data with the same focus. However, the remainder of the recommendations below related to all taxa events will generally focus on use of iNaturalist.
4. **Reconcile and review taxonomy in advance.** If the intent is to compare the resulting BioBlitz data with existing species lists, make sure the antecedent lists are clean, free of errors, and up to date with current nomenclature before the event. Check that your organization's preferred taxonomy sources are compatible with iNaturalist. If the organization has no preferred taxonomy sources, it would be greatly beneficial to reconcile the existing species lists with iNaturalist taxonomy before the event. Though potentially time consuming, this will greatly reduce the time spent cleaning up the data post event. When tallying up the BioBlitz results, false positives can be generated by the fact that within the iNaturalist taxonomy there may be two names that you consider synonyms.
5. **Be strategic with choice of taxonomic groups to search for during your event.** Decide what type of BioBlitz would fulfill the goals of the event. An all taxa BioBlitz is great for public outreach and education; flora and large fauna can be fairly easy to observe, and

identification can happen by larger groups of people at the same time, generally without the use of expensive or specialist equipment. However, the very conspicuousness of organisms will likely mean multiple observations of the same species—effort that could potentially have been more directed. If the existing park species list is fairly comprehensive in certain taxonomic groups, a more focused BioBlitz on previously underreported taxonomic groups could be a productive goal. Alternatively, combine the two approaches, but play to the strengths of available data collection methods to make every record count. Perhaps ask a different question than simply occurrence for taxonomic groups already represented, to make sure data collection effort is not wasted, such as the construction of repeatable observation grids, intensive search areas, or transects to collect species distribution and abundance data.

6. **A central event goal is to create evidence with lasting value.** Emphasize from the start that the benefit of using iNaturalist is the construction of a global archive of biodiversity evidence that will contribute to future decades of research. The purpose of the event is to create quality records of lasting research value, a 21st century version of Charles Darwin on an exploration. Describing it in this way will help to engage participants to create records of enduring value and encourage a high standard of observation record quality. Instill the idea that photos or sound recordings should primarily serve as evidence for a second person to conclude the same identification as the observer, and that descriptions should be used for features too ephemeral to photograph. Be creative with cameras integrated into microscopes for tiny diagnostic features. Provide training materials on biological digital photography methods and make sure to include which diagnostic features are important for each taxonomic group, and how to capture those in focus.
7. **Utilize experts within the social network platform to verify photographs.** Recruit beyond the geography of the event itself; this is a great way to encourage participation by people who cannot make it to the event, as well as increasing the pool of expert identifiers for more specialized taxonomic groups. Make sure the online user names for chosen experts are well documented. This will make it easier to verify that a record has been curated satisfactorily.
8. **Use paper as little as possible.** Paper datasheets make sense for people who do not own a mobile device capable of operating the app, or for people in a lab space taking photographs through a dissecting microscope. However, paper should only be used as a temporary tracking tool on the way towards creation of an iNaturalist record that includes photographic or sound recording evidence. Do not use paper datasheets for general observations that lack sustaining evidence. These cannot be verified easily by a second user and do not function well in the iNaturalist platform. If collecting data that does not easily fit into the iNaturalist model (such as bacteria or DNA data), this should be tracked using another method.
9. **Set up data centers as data coaching locations rather than processing centers.** The greatest value of iNaturalist expert users on site is to coach others on getting their data in, not typing it for them. Help observers without iNaturalist accounts to set one up and record their data. This means they gain ownership and responsibility of their records, and can be contacted through the social platform, as well as reducing data entry errors. “Orphan” records

in general user accounts are difficult and time consuming to verify or manage, and are not fully utilizing the power of the social platform. Encourage all users to follow up on their iNaturalist observations in order to achieve a higher rate of identifications that reach a positive consensus.

10. **Do not let the appeal of the event’s grand finale checklist impede the focus on creating a dataset of lasting utility.** One of the key aspects of the BioBlitz is the fanfare summary count at the end of the event. By using iNaturalist as a single platform to create that dynamic count, it may be tempting to enter unsubstantiated data into general user accounts for the big reveal. Arbitrarily forcing data from one format to another where it may not be a natural fit can cause problems. In the case of iNaturalist, this is mainly due to a lack of photographic evidence. If members of a bioblitz give in to this temptation, make sure that data are deleted from iNaturalist on the following day (whilst keeping the original data format). The data did not meet the criteria of creating high quality digital photograph or sound recording evidence and is not worth further management time in such a platform. An alternative could be to set up a temporary database in a separate system that integrates data sets from multiple sources, including the one from iNaturalist, during the event. Preset queries could be run at any time during the event to produce the dynamic counts, and the original data stays in its appropriate format, preventing issues such as loss of resolution, data entry errors, verification issues and unnecessary data management after the event.
11. **Work in advance on geographic boundaries and encourage participants to use open geoprivacy.** Before the event, decide upon the resolution of spatial data required, as this will affect the post event workload. For instance, if the desired outcome of the BioBlitz is simply to indicate which species are present within the park boundary, then only one observation of each species has to reach research grade or curated standard (although as many quality records as possible is desirable). However, it may be decided that a finer resolution of species observation is required, such as in the case of the GGNP BioBlitz where the results will populate the multiple park species lists within NPSpecies. This means that at least one observation of each species from within the spatial extent covered by each one of the lists needs to reach research grade or the curated standard, with potential to markedly increase the curation workload. Encourage users to not have their geoprivacy set to “private” for BioBlitz observations, it will obscure a spatial location, and during dataset quality control there is no way to see where such records really are located, or even if they are within park boundaries. The finer the spatial resolution required, the greater the imperative for a higher quality of observation records, and documentation of expert’s usernames.

Conclusion

In large measure, the 2014 Golden Gate National Parks BioBlitz was designed as an outreach event to stimulate interest in science and conservation of biodiversity. These are laudable aspects to include in the planning of any BioBlitz. The event itself was well attended by members of the public, school children, and scientists alike, encouraging many first time visitors to the park. The combination of BioBlitz and Biodiversity Festival offered an engaging mix of education, public outreach, and science; from taking part in scientific field work, to learning about Bay Area biodiversity and conservation. There is no doubt that, with the resources available, it successfully produced a broad snapshot of what could be found on GGNRA land on March 28th and 29th, 2014. A total of 2,884 species were observed during the BioBlitz with 1,718 of those not already on the park species lists and a further 73 species updated. However, the results and methodology reflect fundamental challenges throughout all stages of large-scale citizen science event planning. The protracted length of time between the event and publication of the data are generally indicative of the high level of involvement necessary to compile not just a clean data set, but one comparable with the park's official NPSpecies list. This suggests that although a park species list is an extremely valuable tool, there is yet a great deal of effort that would be required to pool results of all species documentation from one geographic area into one system. Common use of a system such as iNaturalist in the future will allow greater ease in generation of comprehensive species lists.

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Appendix A

Table of validated taxa observed during the 2014 GGNP BioBlitz

Taxa observed during the 2014 GGNP BioBlitz- nomenclature source is iNaturalist.			
Denotes subspecies	Category of Taxa	Scientific Name	Common Name
	Amphibian	<i>Aneides lugubris</i>	Arboreal Salamander
	Amphibian	<i>Batrachoseps attenuatus</i>	California Slender Salamander
	Amphibian	<i>Dicamptodon ensatus</i>	California Giant Salamander
	Amphibian	<i>Ensatina eschscholtzii</i>	Ensatina
subspecies	Amphibian	<i>Ensatina eschscholtzii xanthoptica</i>	Yellow-eyed Ensatina
	Amphibian	<i>Pseudacris sierra</i>	Sierran Treefrog
	Amphibian	<i>Rana draytonii</i>	California Red-legged Frog
	Amphibian	<i>Taricha granulosa</i>	Rough-skinned Newt
	Amphibian	<i>Taricha torosa</i>	California Newt
	Bird	<i>Accipiter cooperii</i>	Cooper's Hawk
	Bird	<i>Accipiter striatus</i>	Sharp-shinned Hawk
	Bird	<i>Aechmophorus clarkii</i>	Clark's Grebe
	Bird	<i>Aechmophorus occidentalis</i>	Western Grebe
	Bird	<i>Aegolius acadicus</i>	Northern Saw-whet Owl
	Bird	<i>Aeronautes saxatalis</i>	White-throated Swift
	Bird	<i>Agelaius phoeniceus</i>	Red-winged Blackbird
	Bird	<i>Aix sponsa</i>	Wood Duck
	Bird	<i>Anas acuta</i>	Northern Pintail
	Bird	<i>Anas americana</i>	American Wigeon
	Bird	<i>Anas clypeata</i>	Northern Shoveler
	Bird	<i>Anas crecca</i>	Green-winged Teal
	Bird	<i>Anas cyanoptera</i>	Cinnamon Teal
	Bird	<i>Anas penelope</i>	Eurasian Wigeon
	Bird	<i>Anas platyrhynchos</i>	Mallard
	Bird	<i>Anas strepera</i>	Gadwall
	Bird	<i>Anser albifrons</i>	Greater White-fronted Goose
	Bird	<i>Anthus rubescens</i>	American Pipit
	Bird	<i>Aphelocoma californica</i>	Western Scrub-Jay
subspecies	Bird	<i>Aphelocoma californica californica</i>	Coastal Western Scrub-Jay
	Bird	<i>Aquila chrysaetos</i>	Golden Eagle
	Bird	<i>Aratinga erythrogenys</i>	Red-masked Parakeet
	Bird	<i>Ardea alba</i>	Great Egret
	Bird	<i>Ardea herodias</i>	Great Blue Heron
	Bird	<i>Arenaria melanocephala</i>	Black Turnstone
	Bird	<i>Aythya affinis</i>	Lesser Scaup

Taxa observed during the 2014 GGNP BioBlitz- nomenclature source is iNaturalist.			
Denotes subspecies	Category of Taxa	Scientific Name	Common Name
	Bird	<i>Aythya marila</i>	Greater Scaup
	Bird	<i>Bombycilla cedrorum</i>	Cedar Waxwing
	Bird	<i>Branta canadensis</i>	Canada Goose
	Bird	<i>Bubo virginianus</i>	Great Horned Owl
	Bird	<i>Bucephala albeola</i>	Bufflehead
	Bird	<i>Bucephala clangula</i>	Common Goldeneye
	Bird	<i>Buteo jamaicensis</i>	Red-tailed Hawk
subspecies	Bird	<i>Buteo jamaicensis calurus</i>	
	Bird	<i>Buteo lineatus</i>	Red-shouldered Hawk
subspecies	Bird	<i>Buteo lineatus elegans</i>	California Red-shouldered Hawk
	Bird	<i>Buteo swainsoni</i>	Swainson's Hawk
	Bird	<i>Butorides virescens</i>	Green Heron
	Bird	<i>Calidris alba</i>	Sanderling
	Bird	<i>Calidris minutilla</i>	Least Sandpiper
	Bird	<i>Calidris virgata</i>	Surfbird
	Bird	<i>Callipepla californica</i>	California Quail
	Bird	<i>Calypte anna</i>	Anna's Hummingbird
	Bird	<i>Cardellina pusilla</i>	Wilson's Warbler
	Bird	<i>Cathartes aura</i>	Turkey Vulture
	Bird	<i>Catharus guttatus</i>	Hermit Thrush
	Bird	<i>Cepphus columba</i>	Pigeon Guillemot
	Bird	<i>Certhia americana</i>	Brown Creeper
	Bird	<i>Chamaea fasciata</i>	Wrentit
	Bird	<i>Charadrius nivosus</i>	Snowy Plover
	Bird	<i>Charadrius vociferus</i>	Killdeer
	Bird	<i>Chondestes grammacus</i>	Lark Sparrow
	Bird	<i>Circus cyaneus</i>	Northern Harrier
	Bird	<i>Cistothorus palustris</i>	Marsh Wren
	Bird	<i>Colaptes auratus</i>	Northern Flicker
	Bird	<i>Columba livia</i>	Rock Pigeon
	Bird	<i>Corvus brachyrhynchos</i>	American Crow
	Bird	<i>Corvus corax</i>	Common Raven
	Bird	<i>Cyanocitta stelleri</i>	Steller's Jay
	Bird	<i>Dryocopus pileatus</i>	Pileated Woodpecker
	Bird	<i>Egretta thula</i>	Snowy Egret
	Bird	<i>Elanus leucurus</i>	White-tailed Kite
	Bird	<i>Empidonax difficilis</i>	Pacific-slope Flycatcher

Taxa observed during the 2014 GGNP BioBlitz- nomenclature source is iNaturalist.			
Denotes subspecies	Category of Taxa	Scientific Name	Common Name
	Bird	<i>Euphagus cyanocephalus</i>	Brewer's Blackbird
	Bird	<i>Falco columbarius</i>	Merlin
	Bird	<i>Falco peregrinus</i>	Peregrine Falcon
	Bird	<i>Falco sparverius</i>	American Kestrel
	Bird	<i>Fulica americana</i>	American Coot
	Bird	<i>Fulmarus glacialis</i>	Northern Fulmar
	Bird	<i>Gallinago delicata</i>	Wilson's Snipe
	Bird	<i>Gavia immer</i>	Common Loon
	Bird	<i>Gavia pacifica</i>	Pacific Loon
	Bird	<i>Gavia stellata</i>	Red-throated Loon
	Bird	<i>Geothlypis trichas</i>	Common Yellowthroat
	Bird	<i>Haematopus bachmani</i>	Black Oystercatcher
	Bird	<i>Haemorhous mexicanus</i>	House Finch
	Bird	<i>Haemorhous purpureus</i>	Purple Finch
	Bird	<i>Haliaeetus leucocephalus</i>	Bald Eagle
	Bird	<i>Hirundo rustica</i>	Barn Swallow
	Bird	<i>Hydroprogne caspia</i>	Caspian Tern
	Bird	<i>Icterus cucullatus</i>	Hooded Oriole
	Bird	<i>Junco hyemalis</i>	Dark-eyed Junco
	Bird	<i>Larus argentatus</i>	Herring Gull
	Bird	<i>Larus californicus</i>	California Gull
	Bird	<i>Larus canus</i>	Mew Gull
	Bird	<i>Larus delawarensis</i>	Ring-billed Gull
	Bird	<i>Larus glaucescens</i>	Glaucous-winged Gull
	Bird	<i>Larus occidentalis</i>	Western Gull
	Bird	<i>Limnodromus scolopaceus</i>	Long-billed Dowitcher
	Bird	<i>Limosa fedoa</i>	Marbled Godwit
	Bird	<i>Loxia curvirostra</i>	Red Crossbill
	Bird	<i>Megaceryle alcyon</i>	Belted Kingfisher
	Bird	<i>Melanitta americana</i>	Black Scoter
	Bird	<i>Melanitta fusca</i>	White-winged Scoter
	Bird	<i>Melanitta perspicillata</i>	Surf Scoter
	Bird	<i>Meleagris gallopavo</i>	Wild Turkey
	Bird	<i>Melospiza melodia</i>	Song Sparrow
	Bird	<i>Melospiza crissalis</i>	California Towhee
	Bird	<i>Mergus merganser</i>	Common Merganser
	Bird	<i>Mergus serrator</i>	Red-breasted Merganser
	Bird	<i>Molothrus ater</i>	Brown-headed Cowbird

Taxa observed during the 2014 GGNP BioBlitz- nomenclature source is iNaturalist.

Denotes subspecies	Category of Taxa	Scientific Name	Common Name
	Bird	<i>Numenius americanus</i>	Long-billed Curlew
	Bird	<i>Numenius phaeopus</i>	Whimbrel
	Bird	<i>Nycticorax nycticorax</i>	Black-crowned Night-Heron
	Bird	<i>Oreothlypis celata</i>	Orange-crowned Warbler
	Bird	<i>Oxyura jamaicensis</i>	Ruddy Duck
	Bird	<i>Pandion haliaetus</i>	Osprey
	Bird	<i>Passer domesticus</i>	House Sparrow
	Bird	<i>Passerculus sandwichensis</i>	Savannah Sparrow
	Bird	<i>Passerella iliaca</i>	Fox Sparrow
	Bird	<i>Patagioenas fasciata</i>	Band-tailed Pigeon
	Bird	<i>Pelecanus occidentalis</i>	Brown Pelican
	Bird	<i>Petrochelidon pyrrhonota</i>	Cliff Swallow
	Bird	<i>Phalacrocorax auritus</i>	Double-crested Cormorant
	Bird	<i>Phalacrocorax pelagicus</i>	Pelagic Cormorant
	Bird	<i>Phalacrocorax penicillatus</i>	Brandt's Cormorant
	Bird	<i>Pheucticus melanocephalus</i>	Black-headed Grosbeak
	Bird	<i>Picoides nuttallii</i>	Nuttall's Woodpecker
	Bird	<i>Picoides pubescens</i>	Downy Woodpecker
	Bird	<i>Picoides villosus</i>	Hairy Woodpecker
	Bird	<i>Pipilo maculatus</i>	Spotted Towhee
	Bird	<i>Podiceps auritus</i>	Horned Grebe
	Bird	<i>Podiceps grisegena</i>	Red-necked Grebe
	Bird	<i>Podiceps nigricollis</i>	Eared Grebe
	Bird	<i>Podilymbus podiceps</i>	Pied-billed Grebe
	Bird	<i>Poecile rufescens</i>	Chestnut-backed Chickadee
	Bird	<i>Porzana carolina</i>	Sora
	Bird	<i>Psaltriparus minimus</i>	Bushtit
	Bird	<i>Rallus limicola</i>	Virginia Rail
	Bird	<i>Recurvirostra americana</i>	American Avocet
	Bird	<i>Regulus calendula</i>	Ruby-crowned Kinglet
	Bird	<i>Regulus satrapa</i>	Golden-crowned Kinglet
	Bird	<i>Sayornis nigricans</i>	Black Phoebe
	Bird	<i>Sayornis saya</i>	Say's Phoebe
	Bird	<i>Selasphorus sasin</i>	Allen's Hummingbird
	Bird	<i>Setophaga coronata</i>	Yellow-rumped Warbler
subspecies	Bird	<i>Setophaga coronata auduboni</i>	Audubon's Warbler
	Bird	<i>Setophaga townsendi</i>	Townsend's Warbler
	Bird	<i>Sialia mexicana</i>	Western Bluebird

Taxa observed during the 2014 GGNP BioBlitz- nomenclature source is iNaturalist.			
Denotes subspecies	Category of Taxa	Scientific Name	Common Name
	Bird	<i>Sitta pygmaea</i>	Pygmy Nuthatch
	Bird	<i>Spinus pinus</i>	Pine Siskin
	Bird	<i>Spinus psaltria</i>	Lesser Goldfinch
	Bird	<i>Spinus tristis</i>	American Goldfinch
	Bird	<i>Stelgidopteryx serripennis</i>	Northern Rough-winged Swallow
	Bird	<i>Streptopelia decaocto</i>	Eurasian Collared-Dove
	Bird	<i>Strix occidentalis</i>	Spotted Owl
subspecies	Bird	<i>Strix occidentalis caurina</i>	Northern Spotted Owl
	Bird	<i>Strix varia</i>	Barred Owl
	Bird	<i>Sturnella neglecta</i>	Western Meadowlark
	Bird	<i>Sturnus vulgaris</i>	European Starling
	Bird	<i>Tachycineta bicolor</i>	Tree Swallow
	Bird	<i>Tachycineta thalassina</i>	Violet-green Swallow
	Bird	<i>Thryomanes bewickii</i>	Bewick's Wren
	Bird	<i>Toxostoma redivivum</i>	California Thrasher
	Bird	<i>Tringa incana</i>	Wandering Tattler
	Bird	<i>Tringa melanoleuca</i>	Greater Yellowlegs
	Bird	<i>Tringa semipalmata</i>	Willet
	Bird	<i>Troglodytes aedon</i>	House Wren
	Bird	<i>Troglodytes pacificus</i>	Pacific Wren
	Bird	<i>Turdus migratorius</i>	American Robin
	Bird	<i>Tyto alba</i>	Barn Owl
	Bird	<i>Uria aalge</i>	Common Murre
	Bird	<i>Vireo gilvus</i>	Warbling Vireo
	Bird	<i>Vireo huttoni</i>	Hutton's Vireo
	Bird	<i>Zenaida macroura</i>	Mourning Dove
	Bird	<i>Zonotrichia atricapilla</i>	Golden-crowned Sparrow
	Bird	<i>Zonotrichia leucophrys</i>	White-crowned Sparrow
subspecies	Bird	<i>Zonotrichia leucophrys nuttalli</i>	Nuttall's White-crowned Sparrow
	Chromista	<i>Achnanthes brevipes</i>	
subspecies	Chromista	<i>Achnanthes brevipes intermedia</i>	
	Chromista	<i>Achnanthes hauckiana</i>	
subspecies	Chromista	<i>Achnanthes hauckiana rostrata</i>	
	Chromista	<i>Achnanthes minutissima</i>	
	Chromista	<i>Actinocyclus octonarius</i>	
	Chromista	<i>Alaria marginata</i>	winged kelp
	Chromista	<i>Amphipleura rutilans</i>	

Taxa observed during the 2014 GGNP BioBlitz- nomenclature source is iNaturalist.

Denotes subspecies	Category of Taxa	Scientific Name	Common Name
	Chromista	<i>Amphora granulata</i>	
	Chromista	<i>Amphora ovalis</i>	
	Chromista	<i>Amphora pediculus</i>	
	Chromista	<i>Analipus japonicus</i>	
	Chromista	<i>Astartiella wellsiae</i>	
	Chromista	<i>Aulacoseira</i>	
	Chromista	<i>Bacillaria paxillifer</i>	
	Chromista	<i>Caloneis westii</i>	
	Chromista	<i>Campylodiscus</i>	
	Chromista	<i>Ceratium furca</i>	
	Chromista	<i>Ceratium lineatum</i>	
	Chromista	<i>Chaetoceros</i>	
	Chromista	<i>Cocconeis californica</i>	
	Chromista	<i>Cocconeis neodiminuta</i>	
	Chromista	<i>Cocconeis placentula</i>	
	Chromista	<i>Cocconeis scutellum</i>	
	Chromista	<i>Coscinodiscus</i>	
	Chromista	<i>Cyclotella meneghiniana</i>	
	Chromista	<i>Cymbella microcephala</i>	
	Chromista	<i>Delphineis surirella</i>	
	Chromista	<i>Denticula subtilis</i>	
	Chromista	<i>Desmarestia ligulata</i>	
	Chromista	<i>Diatoma tenuis</i>	
	Chromista	<i>Diploneis marginestriata</i>	
	Chromista	<i>Diploneis ovalis</i>	
	Chromista	<i>Discostella stelligera</i>	
	Chromista	<i>Ditylum</i>	
	Chromista	<i>Ectocarpus</i>	
	Chromista	<i>Egregia menziesii</i>	feather boa kelp
	Chromista	<i>Encyonema minutum</i>	
	Chromista	<i>Entomoneis alata</i>	
	Chromista	<i>Entomoneis paludosa</i>	
	Chromista	<i>Epithemia sorex</i>	
	Chromista	<i>Fallacia pygmaea</i>	
	Chromista	<i>Fragilaria fasciculata</i>	
	Chromista	<i>Fragilaria pulchella</i>	
	Chromista	<i>Fragilaria tabulata</i>	
	Chromista	<i>Fragilaria ulna</i>	

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Denotes subspecies	Category of Taxa	Scientific Name	Common Name
	Chromista	<i>Fucus distichus</i>	Rockweed
	Chromista	<i>Gomphonema clavatum</i>	
	Chromista	<i>Gomphonema parvulum</i>	
	Chromista	<i>Gomphonema truncatum</i>	
	Chromista	<i>Grammatophora marina</i>	
	Chromista	<i>Gyrosigma balticum</i>	
	Chromista	<i>Gyrosigma exile</i>	
	Chromista	<i>Gyrosigma eximium</i>	
	Chromista	<i>Hemiaulus</i>	
	Chromista	<i>Hippodonta</i>	
	Chromista	<i>Isthmia nervosa</i>	
	Chromista	<i>Laminaria setchellii</i>	
	Chromista	<i>Laminaria sinclairii</i>	
	Chromista	<i>Lauderia</i>	
	Chromista	<i>Leptocylindrus</i>	
	Chromista	<i>Licmophora lyngbyei</i>	
	Chromista	<i>Lithodesmium</i>	
	Chromista	<i>Macrocystis pyrifera</i>	Giant Kelp
	Chromista	<i>Mastogloia</i>	
	Chromista	<i>Melosira granulata</i>	
	Chromista	<i>Melosira moniliformis</i>	
	Chromista	<i>Navicula amphibola</i>	
	Chromista	<i>Navicula cincta</i>	
	Chromista	<i>Navicula cuspidata</i>	
	Chromista	<i>Navicula digito-radiata</i>	
	Chromista	<i>Navicula elginensis</i>	
	Chromista	<i>Navicula gregaria</i>	
	Chromista	<i>Navicula halophila</i>	
	Chromista	<i>Navicula peregrina</i>	
	Chromista	<i>Navicula salinarum</i>	
	Chromista	<i>Navicula tripunctata</i>	
	Chromista	<i>Nitzschia amphibia</i>	
	Chromista	<i>Nitzschia bryophila</i>	
	Chromista	<i>Nitzschia fasciculata</i>	
	Chromista	<i>Nitzschia frustulum</i>	
	Chromista	<i>Nitzschia gandersheimiensis</i>	
	Chromista	<i>Nitzschia gracilis</i>	
	Chromista	<i>Nitzschia palea</i>	

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Denotes subspecies	Category of Taxa	Scientific Name	Common Name
	Chromista	<i>Nitzschia perminuta</i>	
	Chromista	<i>Nitzschia punctata</i>	
	Chromista	<i>Nitzschia pusilla</i>	
	Chromista	<i>Nitzschia scalpelliformis</i>	
	Chromista	<i>Nitzschia sigma</i>	
	Chromista	<i>Nitzschia sigmaformis</i>	
	Chromista	<i>Nitzschia tryblionella</i>	
	Chromista	<i>Odontella aurita</i>	
	Chromista	<i>Opephora</i>	
	Chromista	<i>Paralia sulcata</i>	
	Chromista	<i>Pelvetiopsis limitata</i>	Little Rockweed
	Chromista	<i>Phaeostrophion irregulare</i>	
	Chromista	<i>Pinnularia acuminata</i>	
	Chromista	<i>Placoneis explanata</i>	
	Chromista	<i>Pleurosigma formosum</i>	
	Chromista	<i>Protoperidinium</i>	
	Chromista	<i>Pseudolithoderma nigrum</i>	
	Chromista	<i>Pseudo-nitzschia delicatissima</i>	
	Chromista	<i>Pseudo-nitzschia seriata</i>	
	Chromista	<i>Pseudostaurosira brevistriata</i>	
	Chromista	<i>Pterygophora californica</i>	
	Chromista	<i>Ralfsia pacifica</i>	
	Chromista	<i>Rhizosolenia</i>	
	Chromista	<i>Rhoicosphenia abbreviata</i>	
	Chromista	<i>Rhopalodia gibberula</i>	
	Chromista	<i>Rhopalodia operculata</i>	
	Chromista	<i>Sargassum muticum</i>	Japanese Wireweed
	Chromista	<i>Scytosiphon dotyi</i>	
	Chromista	<i>Sellaphora pupula</i>	
	Chromista	<i>Skeletonema</i>	
	Chromista	<i>Staurosira construens</i>	
subspecies	Chromista	<i>Staurosira construens venter</i>	
	Chromista	<i>Stephanocystis osmundacea</i>	chain bladder kelp
	Chromista	<i>Stephanodiscus excentricus</i>	
	Chromista	<i>Stephanopyxis</i>	
	Chromista	<i>Surirella fastuosa</i>	
	Chromista	<i>Surirella linearis</i>	
	Chromista	<i>Surirella ovata</i>	

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Denotes subspecies	Category of Taxa	Scientific Name	Common Name
	Chromista	<i>Thalassionema nitzschioides</i>	
	Chromista	<i>Thalassiosira eccentrica</i>	
	Chromista	<i>Thalassiosira nordenskiöldii</i>	
	Chromista	<i>Trachyneis aspera</i>	
	Chromista	<i>Tropidoneis</i>	
	Chromista	<i>Tryblionella acuminata</i>	
	Chromista	<i>Tryblionella granulata</i>	
	Chromista	<i>Vaucheria</i>	
	Crab/Lobster/Shrimp	<i>Americorophium spinicorne</i>	
	Crab/Lobster/Shrimp	<i>Armadillidium vulgare</i>	Common Pill-bug
	Crab/Lobster/Shrimp	<i>Balanus crenatus</i>	Wrinkled Barnacle
	Crab/Lobster/Shrimp	<i>Balanus glandula</i>	Acorn Barnacle
	Crab/Lobster/Shrimp	<i>Caecidotea tomalensis</i>	
	Crab/Lobster/Shrimp	<i>Cancer productus</i>	Red Rock Crab
	Crab/Lobster/Shrimp	<i>Caprella californica</i>	
	Crab/Lobster/Shrimp	<i>Caprella mutica</i>	Japanese Skeleton Shrimp
	Crab/Lobster/Shrimp	<i>Chthamalus dalli</i>	
	Crab/Lobster/Shrimp	<i>Cirripedia</i>	barnacles
	Crab/Lobster/Shrimp	<i>Copepoda</i>	Copepods
	Crab/Lobster/Shrimp	<i>Corophium heteroceratum</i>	
	Crab/Lobster/Shrimp	<i>Crangon nigricauda</i>	Blacktail Bay Shrimp
	Crab/Lobster/Shrimp	<i>Crangonyx</i>	
	Crab/Lobster/Shrimp	<i>Cytheromorpha grandwashensis</i>	
	Crab/Lobster/Shrimp	<i>Emerita analoga</i>	Pacific Sand Crab
	Crab/Lobster/Shrimp	<i>Eudorella pacifica</i>	Camaroncitos encapuchados
	Crab/Lobster/Shrimp	<i>Gammarus locusta</i>	
	Crab/Lobster/Shrimp	<i>Hemigrapsus nudus</i>	Purple Shore Crab
	Crab/Lobster/Shrimp	<i>Hemigrapsus oregonensis</i>	Yellow Shore Crab
	Crab/Lobster/Shrimp	<i>Heptacarpus</i>	
	Crab/Lobster/Shrimp	<i>Hyaella</i>	
	Crab/Lobster/Shrimp	<i>Leptochelia</i>	
	Crab/Lobster/Shrimp	<i>Ligia occidentalis</i>	Western Sea Roach
	Crab/Lobster/Shrimp	<i>Ligia pallasii</i>	rock louse
	Crab/Lobster/Shrimp	<i>Listriella</i>	
	Crab/Lobster/Shrimp	<i>Metacarcinus magister</i>	Dungeness Crab
	Crab/Lobster/Shrimp	<i>Monocorophium insidiosum</i>	
	Crab/Lobster/Shrimp	<i>Neotrypaea californiensis</i>	Bay Ghost Shrimp
	Crab/Lobster/Shrimp	<i>Pachycheles rudis</i>	Thickclaw Porcelain Crab

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	Crab/Lobster/Shrimp	<i>Pachygrapsus crassipes</i>	Striped Shore Crab
	Crab/Lobster/Shrimp	<i>Pacifastacus leniusculus</i>	Signal Crayfish
	Crab/Lobster/Shrimp	<i>Pagurus hirsutiusculus</i>	Hairy Hermit Crab
	Crab/Lobster/Shrimp	<i>Pagurus samuelis</i>	blueband hermit
	Crab/Lobster/Shrimp	<i>Phoxocephalidae</i>	
	Crab/Lobster/Shrimp	<i>Pollicipes polymerus</i>	Goose Barnacle
	Crab/Lobster/Shrimp	<i>Porcellio scaber</i>	European woodlouse
	Crab/Lobster/Shrimp	<i>Procambarus clarkii</i>	Red Swamp Crawfish
	Crab/Lobster/Shrimp	<i>Pugettia producta</i>	Northern Kelp Crab
	Crab/Lobster/Shrimp	<i>Radimella aurita</i>	
	Crab/Lobster/Shrimp	<i>Robustaurila jollaensis</i>	
	Crab/Lobster/Shrimp	<i>Romaleon antennarium</i>	Pacific Rock Crab
	Crab/Lobster/Shrimp	<i>Semibalanus cariosus</i>	thatched barnacle
	Crab/Lobster/Shrimp	<i>Spinileberis hyalina</i>	
	Crab/Lobster/Shrimp	<i>Talitridae</i>	Sandhoppers
	Crab/Lobster/Shrimp	<i>Tetraclita rubescens</i>	Pink acorn barnacle
	Crab/Lobster/Shrimp	<i>Thecostraca</i>	Barnacles
	Fish	<i>Amphistichus argenteus</i>	Barred surfperch
	Fish	<i>Amphistichus rhodoterus</i>	Redtail surfperch
	Fish	<i>Atherinops affinis</i>	topsmelt silverside
	Fish	<i>Atherinopsis californiensis</i>	jack silverside
	Fish	<i>Clevelandia ios</i>	Arrow Gobi
	Fish	<i>Cottus gulosus</i>	Riffle Sculpin
	Fish	<i>Cyprinus carpio</i>	Common Carp
	Fish	<i>Eucyclogobius newberryi</i>	Tidewater Goby
	Fish	<i>Gambusia affinis</i>	Western Mosquitofish
	Fish	<i>Gasterosteus aculeatus</i>	Three-spined Stickleback
	Fish	<i>Hypsopsetta guttulata</i>	Diamond turbot
	Fish	<i>Ictalurus punctatus</i>	Channel Catfish
	Fish	<i>Leptocottus armatus</i>	Pacific Staghorn Sculpin
	Fish	<i>Micrometrus minimus</i>	Dwarf surfperch
	Fish	<i>Micropterus salmoides</i>	Largemouth Bass
	Fish	<i>Morone saxatilis</i>	Striped Bass
	Fish	<i>Oncorhynchus kisutch</i>	Coho Salmon
	Fish	<i>Paralichthys californicus</i>	California halibut
	Fish	<i>Parophrys vetulus</i>	English sole
	Fish	<i>Phanerodon furcatus</i>	White surfperch
	Fungi	<i>Agaricus californicus</i>	

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	Fungi	<i>Agaricus subrutilescens</i>	
	Fungi	<i>Agrocybe erebia</i>	
	Fungi	<i>Agrocybe praecox</i>	
	Fungi	<i>Alectoria imshaugii</i>	Spiny Witch's Hair
	Fungi	<i>Amanita muscaria</i>	Fly Agaric
	Fungi	<i>Amanita novinupta</i>	
	Fungi	<i>Amanita pantherina</i>	Panthercap
	Fungi	<i>Amanita protecta</i>	
	Fungi	<i>Amanita velosa</i>	springtime amanita
	Fungi	<i>Annulohypoxylon thouarsianum</i>	Cramp Balls
	Fungi	<i>Armillaria mellea</i>	Honey Mushroom
	Fungi	<i>Arthonia</i>	Comma Lichens
	Fungi	<i>Auriscalpium vulgare</i>	Earpick Fungus
	Fungi	<i>Bjerkandera adusta</i>	smoky polypore
	Fungi	<i>Bolbitius reticulatus</i>	
	Fungi	<i>Bolbitius titubans</i>	Yellow Fieldcap
	Fungi	<i>Boletus chrysenteron</i>	Red-cracking Bolete
	Fungi	<i>Boletus eastwoodiae</i>	
	Fungi	<i>Boletus edulis</i>	King Bolete
	Fungi	<i>Bryoria tortuosa</i>	Yellow-twist Horsehair Lichen
	Fungi	<i>Buellia dialyta</i>	
	Fungi	<i>Buellia muriformis</i>	
	Fungi	<i>Calicium abietinum</i>	
	Fungi	<i>Calocera cornea</i>	club-like tuning fork
	Fungi	<i>Calocera viscosa</i>	Jelly-antler
	Fungi	<i>Caulorhiza umbonata</i>	
	Fungi	<i>Chroogomphus vinicolor</i>	Pine Spikes
	Fungi	<i>Chrysothrix candelaris</i>	Gold Dust Lichen
	Fungi	<i>Chrysothrix xanthina</i>	
	Fungi	<i>Cladonia bellidiflora</i>	Toy Soldiers
	Fungi	<i>Cladonia chlorophaea</i>	Mealy Pixie Cup
	Fungi	<i>Cladonia coniocraea</i>	Common Powderhorn
	Fungi	<i>Cladonia furcata</i>	Many-forked Cladonia
	Fungi	<i>Cladonia transcendens</i>	
	Fungi	<i>Clavaria fragilis</i>	Fairy Fingers
	Fungi	<i>Clitocybe</i>	
	Fungi	<i>Collema furfuraceum</i>	
	Fungi	<i>Coprinopsis</i>	

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Denotes subspecies	Category of Taxa	Scientific Name	Common Name
	Fungi	<i>Corticaceae</i>	
	Fungi	<i>Cotylidia</i>	
	Fungi	<i>Crepidotus</i>	
	Fungi	<i>Cyphelium inquinans</i>	
	Fungi	<i>Cystolepiota seminuda</i>	
	Fungi	<i>Dacrymyces palmatus</i>	
	Fungi	<i>Dendrothele candida</i>	
	Fungi	<i>Dolichousnea longissima</i>	Old Man's Beard
	Fungi	<i>Entoloma</i>	
	Fungi	<i>Evernia prunastri</i>	Oakmoss
	Fungi	<i>Fellhanera bouteillei</i>	
	Fungi	<i>Flavoparmelia caperata</i>	Common Greenshield Lichen
	Fungi	<i>Flavopunctelia flaventior</i>	Speckled Greenshield
	Fungi	<i>Fomitopsis pinicola</i>	Red-banded Polypore
	Fungi	<i>Galerina</i>	
	Fungi	<i>Ganoderma applanatum</i>	Artist's Bracket
	Fungi	<i>Geastrales</i>	Earth Stars
	Fungi	<i>Gliophorus psittacinus</i>	Parrot Mushroom
	Fungi	<i>Gymnopilus</i>	
	Fungi	<i>Gymnopus quercophilus</i>	
	Fungi	<i>Gymnopus villosipes</i>	
	Fungi	<i>Helvella maculata</i>	
	Fungi	<i>Hemimycena</i>	
	Fungi	<i>Heterobasidion occidentale</i>	
	Fungi	<i>Heterodermia leucomelos</i>	
	Fungi	<i>Hygrocybe acutoconica</i>	
	Fungi	<i>Hygrocybe coccinea</i>	Scarlet Waxy Cap
	Fungi	<i>Hygrocybe punicea</i>	Crimson Waxcap
	Fungi	<i>Hygrocybe virginea</i>	Snowy Waxcap
subspecies	Fungi	<i>Hygrocybe virginea virginea</i>	
	Fungi	<i>Hypholoma fasciculare</i>	Sulphur Tuft
	Fungi	<i>Hypocenomyce castaneocinerea</i>	
	Fungi	<i>Hypocenomyce oligospora</i>	
	Fungi	<i>Hypogymnia apinnata</i>	
	Fungi	<i>Hypogymnia enteromorpha</i>	
	Fungi	<i>Hypogymnia enteromorphoides</i>	
	Fungi	<i>Hypogymnia heterophylla</i>	Seaside Bone Lichen
	Fungi	<i>Hypogymnia occidentalis</i>	Lattice Tube Lichen

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Denotes subspecies	Category of Taxa	Scientific Name	Common Name
	Fungi	<i>Hypogymnia physodes</i>	Hooded Tube Lichen
	Fungi	<i>Hypotrachyna afrorevoluta</i>	
	Fungi	<i>Hypotrachyna revoluta</i>	
	Fungi	<i>Imshaugia aleurites</i>	Salted Starburst Lichen
	Fungi	<i>Inocybe</i>	
	Fungi	<i>Kretzschmaria deusta</i>	brittle cinder
	Fungi	<i>Lactarius rubidus</i>	Candy Cap
	Fungi	<i>Laetiporus gilbertsonii</i>	Sulphur Shelf
	Fungi	<i>Lecania naegelii</i>	
	Fungi	<i>Lenzites betulina</i>	gilled polypore
	Fungi	<i>Lepraria</i>	Dust Lichens
	Fungi	<i>Leptonia</i>	
	Fungi	<i>Leucogyrophana romellii</i>	
	Fungi	<i>Leucopaxillus gentianeus</i>	
	Fungi	<i>Loxosporopsis corallifera</i>	
	Fungi	<i>Lycogala epidendrum</i>	Wolf's Milk
	Fungi	<i>Lycoperdon perlatum</i>	Common Puffball
	Fungi	<i>Marasmius</i>	
	Fungi	<i>Melanoleuca</i>	
	Fungi	<i>Menegazzia subsimilis</i>	
	Fungi	<i>Micromphale sequoiae</i>	
	Fungi	<i>Morchella elata</i>	Black Morel
	Fungi	<i>Mycena acicula</i>	
	Fungi	<i>Mycena adscendens</i>	
	Fungi	<i>Mycena aurantiomarginata</i>	
	Fungi	<i>Mycena galericulata</i>	common bonnet
	Fungi	<i>Mycena haematopus</i>	bleeding fairy helmet
	Fungi	<i>Mycena pura</i>	Lilac Bonnet
	Fungi	<i>Niebla cephalota</i>	Powdery Sea-Fog Lichen
	Fungi	<i>Niebla homalea</i>	Armored Sea-Fog Lichen
	Fungi	<i>Ochrolechia juvenalis</i>	
	Fungi	<i>Parasola auricoma</i>	
	Fungi	<i>Parmelia hygrophila</i>	
	Fungi	<i>Parmelia sulcata</i>	Shield Lichen
	Fungi	<i>Parmotrema arnoldii</i>	Arnold's Parmotrema Lichen
	Fungi	<i>Parmotrema perlatum</i>	Black Stone Flower
	Fungi	<i>Parmotrema stuppeum</i>	
	Fungi	<i>Peltigera collina</i>	Tree Pelt Lichen

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	Fungi	<i>Pertusaria californica</i>	California Pore Lichen
	Fungi	<i>Peziza</i>	
	Fungi	<i>Phlogiotis helvelloides</i>	apricot jelly
	Fungi	<i>Phylloblastia</i>	
	Fungi	<i>Physcia adscendens</i>	Hooded Rosette Lichen
	Fungi	<i>Physcia tribacia</i>	Beaded Rosette Lichen
	Fungi	<i>Placynthiella uliginosa</i>	
	Fungi	<i>Platismatia glauca</i>	Varied Rag Lichen
	Fungi	<i>Platismatia herrei</i>	Herre's Ragged Lichen
	Fungi	<i>Pluteus</i>	
	Fungi	<i>Postia fragilis</i>	
	Fungi	<i>Protoparmelia ochrocoeca</i>	
	Fungi	<i>Psathyrella</i>	
	Fungi	<i>Puccinia evadens</i>	
	Fungi	<i>Punctelia jeckeri</i>	
	Fungi	<i>Punctelia perreticulata</i>	
	Fungi	<i>Pyrrhospora quernea</i>	
	Fungi	<i>Ramalina canariensis</i>	
	Fungi	<i>Ramalina farinacea</i>	Farinose Cartilage Lichen
	Fungi	<i>Ramalina leptocarpha</i>	
	Fungi	<i>Ramalina menziesii</i>	Lace Lichen
	Fungi	<i>Ramalina pollinaria</i>	Powdery Twig Lichen
	Fungi	<i>Ramalina subleptocarpha</i>	
	Fungi	<i>Ramaria</i>	Coral Fungi
	Fungi	<i>Russula cerolens</i>	
	Fungi	<i>Russula rosacea</i>	
	Fungi	<i>Sarcoscypha coccinea</i>	Scarlet cup
	Fungi	<i>Schizophyllum commune</i>	split-gill mushroom
	Fungi	<i>Schizopora paradoxa</i>	
	Fungi	<i>Scutellinia</i>	
	Fungi	<i>Sphaerophorus tuckermanii</i>	Tuckerman's Coral Lichen
	Fungi	<i>Stereum hirsutum</i>	Hairy Curtain Crust
	Fungi	<i>Stereum ostrea</i>	False Turkey-tail
	Fungi	<i>Suillus fuscotomentosus</i>	
	Fungi	<i>Trametes versicolor</i>	Turkey-tail
	Fungi	<i>Trapeliopsis flexuosa</i>	Board Lichen
	Fungi	<i>Tremella aurantia</i>	
	Fungi	<i>Tremella mesenterica</i>	Witch's Butter

Taxa observed during the 2014 GGNP BioBlitz- nomenclature source is iNaturalist.			
Denotes subspecies	Category of Taxa	Scientific Name	Common Name
	Fungi	<i>Trichaptum abietinum</i>	Purplepore Bracket
	Fungi	<i>Tubaria</i>	
	Fungi	<i>Tuckermannopsis orbata</i>	variable wrinkle-lichen
	Fungi	<i>Tyromyces chioneus</i>	White Cheese Polypore
	Fungi	<i>Usnea ceratina</i>	
	Fungi	<i>Usnea chaetophora</i>	
	Fungi	<i>Usnea cornuta</i>	
	Fungi	<i>Usnea filipendula</i>	Fishbone Beard Lichen
	Fungi	<i>Usnea flavocardia</i>	
	Fungi	<i>Usnea fragilescens</i>	
subspecies	Fungi	<i>Usnea fragilescens mollis</i>	
	Fungi	<i>Usnea hirta</i>	Bristly Beard Lichen
	Fungi	<i>Usnea rubicunda</i>	Red Beard Lichen
	Fungi	<i>Usnea subfloridana</i>	Boreal Beard Lichen
	Fungi	<i>Volvopluteus gloiocephalus</i>	Stubble Rosegill
	Fungi	<i>Xanthomendoza fulva</i>	Bare-bottomed Sunburst Lichen
	Fungi	<i>Xanthoparmelia lineola</i>	Tight Rock-shield
	Fungi	<i>Xanthoria parietina</i>	Maritime Sunburst Lichen
	Fungi	<i>Xerocomus</i>	
	Fungi	<i>Xeromphalina caudicinalis</i>	
	Fungi	<i>Xylaria hypoxylon</i>	Candlesnuff Fungus
	Fungi	<i>Bryoria fremontii</i>	
	Fungi	<i>Lecanora strobilina</i>	
	Fungi	<i>Alyxoria varia</i>	
	Fungi	<i>Carbonicola myrmecina</i>	
	Fungi	<i>Chromofulvea dialyta</i>	
	Fungi	<i>Lecanora jamesii</i>	
	Fungi	<i>Variolaria amara</i>	
	Insect	<i>Acrididae</i>	Short-horned Grasshoppers
	Insect	<i>Acronicta spinea</i>	
	Insect	<i>Aedes squamiger</i>	
	Insect	<i>Aedes washinoi</i>	
	Insect	<i>Aeshnidae</i>	Darners
	Insect	<i>Agapetus</i>	
	Insect	<i>Agraulis vanillae</i>	Gulf Fritillary
	Insect	<i>Agulla</i>	
	Insect	<i>Alloperla</i>	

Taxa observed during the 2014 GGNP BioBlitz- nomenclature source is iNaturalist.

Denotes subspecies	Category of Taxa	Scientific Name	Common Name
	Insect	<i>Ameletus</i>	
	Insect	<i>Amiocentrus aspilus</i>	
	Insect	<i>Anacharitinae</i>	
	Insect	<i>Anasa tristis</i>	squash bug
	Insect	<i>Ancistrocerus</i>	
	Insect	<i>Andrena</i>	
	Insect	<i>Anopheles franciscanus</i>	
	Insect	<i>Anopheles occidentalis</i>	
	Insect	<i>Anthicidae</i>	Ant-like Flower Beetles
	Insect	<i>Anthocoridae</i>	
	Insect	<i>Anthomyiidae</i>	
	Insect	<i>Anthophorini</i>	Digger Bees
	Insect	<i>Aphelinidae</i>	
	Insect	<i>Aphididae</i>	Aphids
	Insect	<i>Aphodius</i>	
	Insect	<i>Apionidae</i>	
	Insect	<i>Apis mellifera</i>	Honey Bee
	Insect	<i>Argia vivida</i>	Vivid Dancer
	Insect	<i>Argyrotaenia franciscana</i>	Orange Tortrix Moth
	Insect	<i>Baetis tricaudatus</i>	
	Insect	<i>Battus philenor</i>	Pipevine Swallowtail Butterfly
	Insect	<i>Bethylidae</i>	
	Insect	<i>Bibionidae</i>	March Flies
	Insect	<i>Bombus californicus</i>	California Bumble Bee
	Insect	<i>Bombus fervidus</i>	Yellow Bumble Bee
	Insect	<i>Bombus melanopygus</i>	Black-tailed Bumblebee
	Insect	<i>Bombus vosnesenskii</i>	Yellow-faced Bumblebee
	Insect	<i>Braconidae</i>	Braconid Wasps
	Insect	<i>Brillia</i>	
	Insect	<i>Brychius pacificus</i>	
	Insect	<i>Calineuria californica</i>	
	Insect	<i>Calliphoridae</i>	Blowflies
	Insect	<i>Callirhytis quercussuttoni</i>	Gouty Stem Gall Wasp
	Insect	<i>Callophrys augustinus</i>	Brown Elf
	Insect	<i>Callophrys viridis</i>	Coastal Green Hairstreak
	Insect	<i>Caloptilia</i>	
	Insect	<i>Camponotus vicinus</i>	Bicolored Carpenter Ant
	Insect	<i>Cantharidae</i>	Soldier Beetles

Taxa observed during the 2014 GGNP BioBlitz- nomenclature source is iNaturalist.

Denotes subspecies	Category of Taxa	Scientific Name	Common Name
	Insect	<i>Celastrina echo</i>	Echo Azure
	Insect	<i>Celastrina ladon</i>	Spring Azure
	Insect	<i>Celina</i>	
	Insect	<i>Centroptilum</i>	
	Insect	<i>Cerambycidae</i>	Longhorn Beetles
	Insect	<i>Ceraphronidae</i>	
	Insect	<i>Ceratina</i>	Small Carpenter Bees
	Insect	<i>Ceratopogoninae</i>	
	Insect	<i>Cercopidae</i>	Spittle Bugs
	Insect	<i>Ceuthophilus californianus</i>	California camel cricket
	Insect	<i>Chelifera</i>	
	Insect	<i>Chloropidae</i>	grass flies
	Insect	<i>Chrysididae</i>	Cuckoo Wasps
	Insect	<i>Chrysolina bankii</i>	
	Insect	<i>Chrysopidae</i>	Green Lacewings
	Insect	<i>Chrysops</i>	deer flies
	Insect	<i>Cicadellidae</i>	Leafhoppers
	Insect	<i>Cinygma</i>	
	Insect	<i>Cinygmula</i>	
	Insect	<i>Cixiidae</i>	
	Insect	<i>Coccinella californica</i>	California Lady Beetle
	Insect	<i>Coccinella septempunctata</i>	Seven-spotted Ladybird
	Insect	<i>Coelopa</i>	
	Insect	<i>Coelosia</i>	
	Insect	<i>Coenonympha tullia californica</i>	California Ringlet
	Insect	<i>Coniopterygidae</i>	Dustywings
	Insect	<i>Cordyla neglecta</i>	
	Insect	<i>Corixidae</i>	Water Boatmen
	Insect	<i>Corynoneura</i>	
	Insect	<i>Cricotopus</i>	
	Insect	<i>Cryptolabis</i>	
	Insect	<i>Culex erythrothorax</i>	
	Insect	<i>Culex pipiens</i>	common house mosquito
	Insect	<i>Culex tarsalis</i>	
	Insect	<i>Culiseta incidens</i>	Cold Weather Mosquito
	Insect	<i>Culiseta inornata</i>	
	Insect	<i>Culiseta particeps</i>	
	Insect	<i>Danaus plexippus</i>	Monarch Butterfly

Taxa observed during the 2014 GGNP BioBlitz- nomenclature source is iNaturalist.			
Denotes subspecies	Category of Taxa	Scientific Name	Common Name
	Insect	<i>Demicryptochironomus</i>	
	Insect	<i>Dermestidae</i>	Skin Beetles
	Insect	<i>Despaxia augusta</i>	
	Insect	<i>Diabrotica undecimpunctata</i>	Spotted Cucumber Beetle
subspecies	Insect	<i>Diabrotica undecimpunctata undecimpunctata</i>	Western Spotted Cucumber Beetle
	Insect	<i>Diadocidia borealis</i>	
	Insect	<i>Diadocidia stanfordensis</i>	
	Insect	<i>Diapriidae</i>	
	Insect	<i>Dicosmoecus</i>	October Caddis
	Insect	<i>Dipheter hageni</i>	
	Insect	<i>Dixa</i>	
	Insect	<i>Dolichopodidae</i>	Long-legged flies
	Insect	<i>Drosophila</i>	
	Insect	<i>Drunella flavilinea</i>	
	Insect	<i>Dryocosmus dubiosus</i>	
	Insect	<i>Ecdyonurus criddlei</i>	
	Insect	<i>Ectrepesthoneura</i>	
	Insect	<i>Egira rubrica</i>	
	Insect	<i>Egira simplex</i>	
	Insect	<i>Elateridae</i>	Click Beetles
	Insect	<i>Emmelina monodactyla</i>	Morning-glory Plume Moth
	Insect	<i>Encyrtidae</i>	
	Insect	<i>Epeorus</i>	
	Insect	<i>Ephemerella excrucians</i>	
	Insect	<i>Ephydriidae</i>	Shore Flies
	Insect	<i>Epinotia</i>	
	Insect	<i>Eubrianax edwardsii</i>	
	Insect	<i>Eucoilinae</i>	Eucoiline wasps
	Insect	<i>Eukiefferiella claripennis</i>	
	Insect	<i>Eulophidae</i>	
	Insect	<i>Eupelmidae</i>	
	Insect	<i>Eupithecia</i>	
	Insect	<i>Eurytomidae</i>	Seed Chalcid
	Insect	<i>Euura lasiolepis</i>	Arroyo Willow Stem Sawfly
	Insect	<i>Exechia cincinnata</i>	
	Insect	<i>Forficula auricularia</i>	Common Earwig
	Insect	<i>Formica argentea</i>	Silvery Field Ant

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Denotes subspecies	Category of Taxa	Scientific Name	Common Name
	Insect	<i>Formica fusca</i>	
	Insect	<i>Formica subpolita</i>	
	Insect	<i>Gastrancistrus</i>	
	Insect	<i>Gelis</i>	
	Insect	<i>Gerridae</i>	Water Striders
	Insect	<i>Glossosoma</i>	
	Insect	<i>Gnorimoschema baccharisella</i>	Coyote Brush Stem Gall moth
	Insect	<i>Gomphidae</i>	Clubtails
	Insect	<i>Grammia ornata</i>	Ornate Tiger Moth
	Insect	<i>Grapholita</i>	
	Insect	<i>Gumaga</i>	
	Insect	<i>Hadroneura pullata</i>	
	Insect	<i>Halictidae</i>	Sweat Bees
	Insect	<i>Haploperla chilnualna</i>	Mosca de piedra
	Insect	<i>Harpalus caliginosus</i>	Murky Ground Beetle
	Insect	<i>Heleniella</i>	
	Insect	<i>Heleomyzidae</i>	
	Insect	<i>Hemerobius</i>	
	Insect	<i>Hemieuxoa rudens</i>	
	Insect	<i>Heteroplectron californicum</i>	
	Insect	<i>Heterotrissocladius marcidus</i>	
	Insect	<i>Hippodamia convergens</i>	Convergent Lady Beetle
	Insect	<i>Histeridae</i>	Hister Beetles
	Insect	<i>Hydrophilidae</i>	Scavenger Water Beetles
	Insect	<i>Hydroporinae</i>	
	Insect	<i>Hydropsyche</i>	
	Insect	<i>Hylephila phyleus</i>	Fiery Skipper
	Insect	<i>Inocelliidae</i>	
	Insect	<i>Isoperla</i>	
	Insect	<i>Junonia coenia</i>	Common Buckeye
	Insect	<i>Lampyridae</i>	Fireflies
	Insect	<i>Largus californicus</i>	Bordered Plant Bug
	Insect	<i>Largus cinctus</i>	
	Insect	<i>Lasius alienus</i>	
	Insect	<i>Latridiidae</i>	mildew beetles
	Insect	<i>Leia striata</i>	
	Insect	<i>Leiodidae</i>	Round Fungus Beetles
	Insect	<i>Lenarchus</i>	

Taxa observed during the 2014 GGNP BioBlitz- nomenclature source is iNaturalist.			
Denotes subspecies	Category of Taxa	Scientific Name	Common Name
	Insect	<i>Lepidostoma</i>	
	Insect	<i>Leptoferonia</i>	
	Insect	<i>Leptophlebia</i>	
	Insect	<i>Limnophyes</i>	
	Insect	<i>Linepithema humile</i>	Argentine Ant
	Insect	<i>Lonchopteridae</i>	
	Insect	<i>Lygaeidae</i>	Seed Bugs
	Insect	<i>Macrocera</i>	
	Insect	<i>Malenka</i>	
	Insect	<i>Mantis religiosa</i>	Praying Mantis
	Insect	<i>Megaspilidae</i>	
	Insect	<i>Melyridae</i>	Soft-winged Flower Beetles
	Insect	<i>Meringodixa</i>	
	Insect	<i>Micropsectra</i>	
	Insect	<i>Microtendipes rydalensis</i>	
	Insect	<i>Miridae</i>	Plant Bugs
	Insect	<i>Monomorium ergatogyna</i>	
	Insect	<i>Musca domestica</i>	Housefly
	Insect	<i>Mycetophagidae</i>	hairy fungus beetles
	Insect	<i>Mycetophila fungorum</i>	
	Insect	<i>Mycetophila parvimaculata</i>	
	Insect	<i>Mycetophiloidea</i>	
	Insect	<i>Mycomya echinata</i>	
	Insect	<i>Mycomya marginalis</i>	
	Insect	<i>Mymaridae</i>	fairy wasps
	Insect	<i>Mystacides</i>	
	Insect	<i>Nanocladius</i>	
	Insect	<i>Narpus</i>	
	Insect	<i>Neophylax rickeri</i>	
	Insect	<i>Neoplasta</i>	
	Insect	<i>Nomada</i>	Nomad Bees
	Insect	<i>Ochrotrichia</i>	
	Insect	<i>Onocosmoecus</i>	
	Insect	<i>Optioservus divergens</i>	
	Insect	<i>Optioservus quadrimaculatus</i>	
	Insect	<i>Ordobrevia nubifera</i>	Escarabajo acuático
	Insect	<i>Oreodytes obesus</i>	
	Insect	<i>Orfelina angustata</i>	

Taxa observed during the 2014 GGNP BioBlitz- nomenclature source is iNaturalist.			
Denotes subspecies	Category of Taxa	Scientific Name	Common Name
	Insect	<i>Orthocladus</i>	
	Insect	<i>Osmia</i>	Mason Bees
	Insect	<i>Papilio rutulus</i>	Western Tiger Swallowtail
	Insect	<i>Papilio zelicaon</i>	Anise Swallowtail
	Insect	<i>Parachaetocladus</i>	
	Insect	<i>Parakiefferiella</i>	
	Insect	<i>Paraleptophlebia</i>	
	Insect	<i>Parametrioctenus</i>	
	Insect	<i>Paraperla</i>	
	Insect	<i>Paratanytarsus</i>	
	Insect	<i>Parthina</i>	
	Insect	<i>Pentaneura</i>	
	Insect	<i>Perizoma custodiata</i>	
	Insect	<i>Phaenopsectra</i>	
	Insect	<i>Phoridae</i>	humpbacked flies
	Insect	<i>Phytomyza tiarella</i>	
	Insect	<i>Pieris rapae</i>	Cabbage White
	Insect	<i>Pipunculidae</i>	big-headed flies
	Insect	<i>Platycerus oregonensis</i>	
	Insect	<i>Platygastridae</i>	
	Insect	<i>Platynus ovipennis</i>	
	Insect	<i>Plebejus acmon</i>	Acmon Blue
	Insect	<i>Plebejus icarioides missionensis</i>	Mission Blue Butterfly
	Insect	<i>Poanes melane</i>	Umber Skipper
	Insect	<i>Polycentropus</i>	
	Insect	<i>Polypedilum</i>	
	Insect	<i>Pontania californica</i>	Willow Apple Gall Sawfly
	Insect	<i>Potthastia gaedii</i>	
	Insect	<i>Prenolepis imparis</i>	Small Honey Ant
	Insect	<i>Proctotrupidae</i>	
	Insect	<i>Promecognathus crassus</i>	
	Insect	<i>Promecognathus laevis</i>	
	Insect	<i>Psocodea</i>	Barklice, Booklice, and Parasitic Lice
	Insect	<i>Psychodidae</i>	Moth Flies
	Insect	<i>Psychoglypha</i>	
	Insect	<i>Psyllidae</i>	Jumping Plant Lice
	Insect	<i>Pyrgus communis</i>	Common Checkered-Skipper

Taxa observed during the 2014 GGNP BioBlitz- nomenclature source is iNaturalist.			
Denotes subspecies	Category of Taxa	Scientific Name	Common Name
	Insect	<i>Pyrochroidae</i>	fire-colored beetles
	Insect	<i>Reticulitermes flavipes</i>	Eastern Subterranean Termite
	Insect	<i>Rheocricotopus</i>	
	Insect	<i>Rheotanytarsus</i>	
	Insect	<i>Rhithrogena</i>	
	Insect	<i>Rhopalomyia californica</i>	Coyote Brush Bud Gall Midge
	Insect	<i>Rhopalomyia floccosa</i>	
	Insect	<i>Rhyacophila angelita</i>	
	Insect	<i>Rhyacophila betteni</i>	
	Insect	<i>Rhyacophila sibirica</i>	
	Insect	<i>Robsonomyia</i>	
	Insect	<i>Saldidae</i>	Shore Bugs
	Insect	<i>Sanfilippodytes</i>	
	Insect	<i>Sarcophagidae</i>	Flesh Flies
	Insect	<i>Scaeva pyrastris</i>	Halbmondschwebfliege
	Insect	<i>Scaphinotus cristatus</i>	
	Insect	<i>Scaphinotus interruptus</i>	
	Insect	<i>Scaphinotus striatopunctatus</i>	Pore-winged Snail-eating Beetle
	Insect	<i>Scatopsidae</i>	Minute Black Scavenger Flies
	Insect	<i>Scelionidae</i>	
	Insect	<i>Sceptonia johannseni</i>	
	Insect	<i>Sciaridae</i>	Dark-winged Fungus Gnats
	Insect	<i>Scolytinae</i>	bark beetles
	Insect	<i>Serratella</i>	
	Insect	<i>Sialis</i>	
	Insect	<i>Simulium</i>	
	Insect	<i>Sphaeroceridae</i>	
	Insect	<i>Spilosoma vagans</i>	Wandering Tiger Moth
	Insect	<i>Staphylinidae</i>	Rove Beetles
	Insect	<i>Stempellinella</i>	
	Insect	<i>Stenamma diecki</i>	
	Insect	<i>Stenochironomus</i>	
	Insect	<i>Stenopelmatus fuscus</i>	Jerusalem Cricket
	Insect	<i>Strymon melinus</i>	Gray Hairstreak
	Insect	<i>Suwallia</i>	
	Insect	<i>Sweltsa</i>	
	Insect	<i>Sympetrum illotum</i>	Cardinal Meadowhawk

Taxa observed during the 2014 GGNP BioBlitz- nomenclature source is iNaturalist.			
Denotes subspecies	Category of Taxa	Scientific Name	Common Name
	Insect	<i>Synorthocladus</i>	
	Insect	<i>Tachinidae</i>	Tachinids
	Insect	<i>Tanytarsus</i>	
	Insect	<i>Tapinoma sessile</i>	odorous house ant
	Insect	<i>Temnothorax andrei</i>	
	Insect	<i>Tephritidae</i>	Fruit Flies
	Insect	<i>Tetrigoidea</i>	
	Insect	<i>Thienemanniella</i>	
	Insect	<i>Thienemannimyia</i>	
	Insect	<i>Thysanoptera</i>	Thrips
	Insect	<i>Tipulidae</i>	Large Crane Flies
	Insect	<i>Torymidae</i>	
	Insect	<i>Trichodezia californiata</i>	
	Insect	<i>Trichogrammatidae</i>	
	Insect	<i>Trichonta</i>	
	Insect	<i>Trypoxylon</i>	
	Insect	<i>Tvetenia bavarica</i>	
	Insect	<i>Vanessa annabella</i>	West Coast Lady
	Insect	<i>Vanessa atalanta</i>	Red Admiral
	Insect	<i>Vanessa cardui</i>	Painted Lady
	Insect	<i>Vanessa virginiensis</i>	American Lady
	Insect	<i>Vespula pensylvanica</i>	Western Yellowjacket
	Insect	<i>Xanthorhoe defensaria</i>	
	Insect	<i>Zaitzevia parvula</i>	Escarabajo acuñítico
	Insect	<i>Zapada frigida</i>	
	Insect	<i>Zavreliomyia</i>	
	Insect	<i>Zootermopsis</i>	
	Insect	<i>Zygomyia</i>	
	Insect	<i>Tinea occidentella</i>	
	Insect	<i>Pero occidentalis</i>	
	Insect	<i>Pseudorthodes puerilis</i>	
	Insect	<i>Spilosoma vestalis</i>	
	Mammal	<i>Arctocephalus townsendi</i>	Guadalupe Fur Seal
	Mammal	<i>Bos taurus</i>	Domesticated Cattle
	Mammal	<i>Canis familiaris</i>	Domestic Dog
	Mammal	<i>Canis latrans</i>	Coyote
	Mammal	<i>Capra hircus</i>	Domestic Goat
	Mammal	<i>Didelphis virginiana</i>	Virginia Opossum

Taxa observed during the 2014 GGNP BioBlitz- nomenclature source is iNaturalist.			
Denotes subspecies	Category of Taxa	Scientific Name	Common Name
	Mammal	<i>Equus caballus</i>	Domestic Horse
	Mammal	<i>Eschrichtius robustus</i>	Gray Whale
	Mammal	<i>Felis catus</i>	Domestic Cat
	Mammal	<i>Homo sapiens</i>	Human
	Mammal	<i>Lagenorhynchus obliquidens</i>	Pacific White-sided Dolphin
	Mammal	<i>Lama glama</i>	Llama
	Mammal	<i>Lasionycteris noctivagans</i>	Silver-haired Bat
	Mammal	<i>Lasiurus blossevillii</i>	Western Red Bat
	Mammal	<i>Lasiurus cinereus</i>	Hoary Bat
	Mammal	<i>Lepus californicus</i>	Black-tailed Jack Rabbit
	Mammal	<i>Lontra canadensis</i>	Northern River Otter
	Mammal	<i>Lynx rufus</i>	Bobcat
	Mammal	<i>Mephitis mephitis</i>	Striped Skunk
	Mammal	<i>Microtus californicus</i>	California Vole
	Mammal	<i>Mirounga angustirostris</i>	Northern Elephant Seal
	Mammal	<i>Myotis californicus</i>	California Myotis
	Mammal	<i>Myotis thysanodes</i>	Fringed Myotis
	Mammal	<i>Myotis volans</i>	Long-legged Myotis
	Mammal	<i>Neotoma fuscipes</i>	Dusky-footed Woodrat
	Mammal	<i>Odocoileus hemionus</i>	Mule Deer
subspecies	Mammal	<i>Odocoileus hemionus columbianus</i>	Black-tailed Deer
	Mammal	<i>Otospermophilus beecheyi</i>	California Ground Squirrel
	Mammal	<i>Peromyscus maniculatus</i>	Deer Mouse
	Mammal	<i>Phoca vitulina</i>	Harbor Seal
	Mammal	<i>Phocoena phocoena</i>	Common Porpoise
	Mammal	<i>Procyon lotor</i>	Common Raccoon
	Mammal	<i>Puma concolor</i>	Mountain Lion
	Mammal	<i>Rattus rattus</i>	Black Rat
	Mammal	<i>Sus domesticus</i>	Domestic Pig
	Mammal	<i>Sylvilagus bachmani</i>	Brush Rabbit
	Mammal	<i>Tadarida brasiliensis</i>	Mexican Free-tailed Bat
	Mammal	<i>Tamias sonomae</i>	Sonoma Chipmunk
	Mammal	<i>Taxidea taxus</i>	American Badger
	Mammal	<i>Thomomys bottae</i>	Botta's Pocket Gopher
	Mammal	<i>Tursiops truncatus</i>	Bottlenose Dolphin
	Mammal	<i>Urocyon cinereoargenteus</i>	Gray Fox
	Mammal	<i>Vicugna pacos</i>	Alpaca
	Mammal	<i>Zalophus californianus</i>	California Sea Lion

Taxa observed during the 2014 GGNP BioBlitz- nomenclature source is iNaturalist.			
Denotes subspecies	Category of Taxa	Scientific Name	Common Name
	Non-vascular Plant	<i>Ahnfeltia fastigiata</i>	
	Non-vascular Plant	<i>Ahnfeltiopsis linearis</i>	
	Non-vascular Plant	<i>Alsia californica</i>	
	Non-vascular Plant	<i>Blidingia</i>	
	Non-vascular Plant	<i>Bossiella dichotoma</i>	
	Non-vascular Plant	<i>Callithamnion pikeanum</i>	
	Non-vascular Plant	<i>Chondracanthus canaliculatus</i>	Lawn alga
	Non-vascular Plant	<i>Chondracanthus exasperatus</i>	turkish towel
	Non-vascular Plant	<i>Cladophora columbiana</i>	Green pin-cushion alga
	Non-vascular Plant	<i>Corallina vancouveriensis</i>	
	Non-vascular Plant	<i>Cryptopleura ruprechtiana</i>	
	Non-vascular Plant	<i>Cryptopleura violacea</i>	
	Non-vascular Plant	<i>Cryptosiphonia woodii</i>	
	Non-vascular Plant	<i>Dicranoweisia cirrata</i>	
	Non-vascular Plant	<i>Dicranum tauricum</i>	
	Non-vascular Plant	<i>Endocladia muricata</i>	Scouring-pad alga
	Non-vascular Plant	<i>Endophyton</i>	
	Non-vascular Plant	<i>Frullania nisquallensis</i>	
	Non-vascular Plant	<i>Gracilariopsis andersonii</i>	
	Non-vascular Plant	<i>Hildenbrandia occidentalis</i>	
	Non-vascular Plant	<i>Hypnum circinale</i>	
	Non-vascular Plant	<i>Isothecium cristatum</i>	
	Non-vascular Plant	<i>Isothecium stoloniferum</i>	
	Non-vascular Plant	<i>Mastocarpus agardhii</i>	
	Non-vascular Plant	<i>Mastocarpus jardinii</i>	
	Non-vascular Plant	<i>Mastocarpus papillatus</i>	
	Non-vascular Plant	<i>Mazzaella affinis</i>	
	Non-vascular Plant	<i>Mazzaella flaccida</i>	
	Non-vascular Plant	<i>Mazzaella splendens</i>	
	Non-vascular Plant	<i>Melobesia</i>	
	Non-vascular Plant	<i>Membranoptera</i>	
	Non-vascular Plant	<i>Microcladia borealis</i>	
	Non-vascular Plant	<i>Microcladia coulteri</i>	
	Non-vascular Plant	<i>Neogastroclonium subarticulatum</i>	
	Non-vascular Plant	<i>Neoptilota californica</i>	
	Non-vascular Plant	<i>Neorhodomela larix</i>	black pine
	Non-vascular Plant	<i>Odonthalia floccosa</i>	
	Non-vascular Plant	<i>Orthodontium gracile</i>	

Taxa observed during the 2014 GGNP BioBlitz- nomenclature source is iNaturalist.			
Denotes subspecies	Category of Taxa	Scientific Name	Common Name
	Non-vascular Plant	<i>Orthotrichum</i>	
	Non-vascular Plant	<i>Osmundea spectabilis</i>	
	Non-vascular Plant	<i>Plocamium oregonum</i>	
	Non-vascular Plant	<i>Plocamium violaceum</i>	
	Non-vascular Plant	<i>Polyneura latissima</i>	
	Non-vascular Plant	<i>Polysiphonia paniculata</i>	
	Non-vascular Plant	<i>Porella navicularis</i>	
	Non-vascular Plant	<i>Porphyra lanceolata</i>	
	Non-vascular Plant	<i>Prionitis lanceolata</i>	
	Non-vascular Plant	<i>Prionitis lyallii</i>	
	Non-vascular Plant	<i>Prionitis sternbergii</i>	
	Non-vascular Plant	<i>Pterochondria woodii</i>	
	Non-vascular Plant	<i>Pterosiphonia bipinnata</i>	
	Non-vascular Plant	<i>Pyropia perforata</i>	
	Non-vascular Plant	<i>Radula bolanderi</i>	
	Non-vascular Plant	<i>Trentepohlia aurea</i>	
	Non-vascular Plant	<i>Ulva intestinalis</i>	
	Other Non-vertebrates	<i>Aglaophenia latirostris</i>	
	Other Non-vertebrates	<i>Amaeana occidentalis</i>	
	Other Non-vertebrates	<i>Ampharete labrops</i>	
	Other Non-vertebrates	<i>Amphiodia</i>	
	Other Non-vertebrates	<i>Amphipholis squamata</i>	Dwarf Brittle Star
	Other Non-vertebrates	<i>Anthopleura artemisia</i>	Moonglow Anemone
	Other Non-vertebrates	<i>Anthopleura elegantissima</i>	Aggregating Anemone
	Other Non-vertebrates	<i>Anthopleura sola</i>	Starburst Anemone
	Other Non-vertebrates	<i>Anthopleura xanthogrammica</i>	Giant Green Anemone
	Other Non-vertebrates	<i>Aplidium californicum</i>	
	Other Non-vertebrates	<i>Aplidium stellatum</i>	
	Other Non-vertebrates	<i>Boccardia proboscidea</i>	
	Other Non-	<i>Botrylloides diegensis</i>	

Taxa observed during the 2014 GGNP BioBlitz- nomenclature source is iNaturalist.			
Denotes subspecies	Category of Taxa	Scientific Name	Common Name
	vertebrates		
	Other Non-vertebrates	<i>Botrylloides violaceus</i>	
	Other Non-vertebrates	<i>Botryllus schlosseri</i>	Golden Star Tunicate
	Other Non-vertebrates	<i>Brachycybe</i>	
	Other Non-vertebrates	<i>Bugula californica</i>	
	Other Non-vertebrates	<i>Bugula pacifica</i>	
	Other Non-vertebrates	<i>Celleporella hyalina</i>	
	Other Non-vertebrates	<i>Ciona savignyi</i>	
	Other Non-vertebrates	<i>Clavelina huntsmani</i>	Lightbulb Tunicate
	Other Non-vertebrates	<i>Clinocardium nuttallii</i>	Nuttall's Cockle
	Other Non-vertebrates	<i>Clypeasteroida</i>	Sand Dollars
	Other Non-vertebrates	<i>Collembola</i>	Springtails and Allies
	Other Non-vertebrates	<i>Corella inflata</i>	
	Other Non-vertebrates	<i>Corynactis californica</i>	Strawberry Anemone
	Other Non-vertebrates	<i>Dermasterias imbricata</i>	Leather Star
	Other Non-vertebrates	<i>Diadumene franciscana</i>	
	Other Non-vertebrates	<i>Didemnum lahillei</i>	
	Other Non-vertebrates	<i>Didemnum vexillum</i>	
	Other Non-vertebrates	<i>Distaplia occidentalis</i>	
	Other Non-vertebrates	<i>Doryteuthis opalescens</i>	California Market Squid
	Other Non-vertebrates	<i>Echiniscoides sigismundi</i>	
	Other Non-vertebrates	<i>Edwardsia juliae</i>	
	Other Non-vertebrates	<i>Epiactis prolifera</i>	brooding anemone
	Other Non-	<i>Eudistylia vancouveri</i>	

Taxa observed during the 2014 GGNP BioBlitz- nomenclature source is iNaturalist.			
Denotes subspecies	Category of Taxa	Scientific Name	Common Name
	vertebrates		
	Other Non-vertebrates	<i>Eutonina indicans</i>	
	Other Non-vertebrates	<i>Gemma gemma</i>	amethyst gem clam
	Other Non-vertebrates	<i>Geophilomorpha</i>	Soil Centipedes
	Other Non-vertebrates	<i>Glycinde picta</i>	
	Other Non-vertebrates	<i>Halichondriidae</i>	
	Other Non-vertebrates	<i>Haliclona</i>	
	Other Non-vertebrates	<i>Halosydna brevisetosa</i>	
	Other Non-vertebrates	<i>Harmothoe imbricata</i>	Fifteen-scaled Worm
	Other Non-vertebrates	<i>Harmothoe praeclara</i>	
	Other Non-vertebrates	<i>Harpaphe haydeniana</i>	Yellow-spotted Millipede
	Other Non-vertebrates	<i>Hemipodus simplex</i>	
	Other Non-vertebrates	<i>Henricia pumila</i>	
	Other Non-vertebrates	<i>Hiatella arctica</i>	
	Other Non-vertebrates	<i>Leptasterias sp.</i>	Six-rayed Star
	Other Non-vertebrates	<i>Leptochiton dentiens</i>	
	Other Non-vertebrates	<i>Leukoma staminea</i>	Pacific Littleneck Clam
	Other Non-vertebrates	<i>Macoma nasuta</i>	Bent-nosed Clam
	Other Non-vertebrates	<i>Macrobiotus</i>	
	Other Non-vertebrates	<i>Malmgrenia</i>	
	Other Non-vertebrates	<i>Mediomastus</i>	
	Other Non-vertebrates	<i>Metridium senile</i>	Plumose anemone
	Other Non-vertebrates	<i>Micronephthys</i>	
	Other Non-	<i>Milnesium</i>	

Taxa observed during the 2014 GGNP BioBlitz- nomenclature source is iNaturalist.			
Denotes subspecies	Category of Taxa	Scientific Name	Common Name
	vertebrates		
	Other Non-vertebrates	<i>Modiolus rectus</i>	
	Other Non-vertebrates	<i>Mopalia ciliata</i>	
	Other Non-vertebrates	<i>Mopalia muscosa</i>	Mossy Chiton
	Other Non-vertebrates	<i>Mytilus californianus</i>	California Mussel
	Other Non-vertebrates	<i>Mytilus edulis</i>	Blue Mussel
	Other Non-vertebrates	<i>Mytilus galloprovincialis</i>	Mediterranean mussel
	Other Non-vertebrates	<i>Mytilus trossulus</i>	
	Other Non-vertebrates	<i>Nematomorpha</i>	Horsehair Worms
	Other Non-vertebrates	<i>Nephtys caecoides</i>	Fire Worm
	Other Non-vertebrates	<i>Nereiphylla</i>	
	Other Non-vertebrates	<i>Notoplana</i>	
	Other Non-vertebrates	<i>Nuttallina californica</i>	California Spiny Chiton
	Other Non-vertebrates	<i>Oligochaeta</i>	earthworms
	Other Non-vertebrates	<i>Ostrea conchaphila</i>	Olympia Oyster
	Other Non-vertebrates	<i>Ostrea lurida</i>	Olympia Oyster
	Other Non-vertebrates	<i>Owenia collaris</i>	
	Other Non-vertebrates	<i>Paraprionospio alata</i>	
	Other Non-vertebrates	<i>Patiria miniata</i>	Bat Star
	Other Non-vertebrates	<i>Phascolosoma agassizii</i>	
	Other Non-vertebrates	<i>Pherusa neopapillata</i>	
	Other Non-vertebrates	<i>Pholadidae</i>	Piddocks and Angelwings
	Other Non-vertebrates	<i>Phragmatopoma californica</i>	Sandcastle Worm
	Other Non-	<i>Pisaster ochraceus</i>	Ochre Sea Star

Taxa observed during the 2014 GGNP BioBlitz- nomenclature source is iNaturalist.			
Denotes subspecies	Category of Taxa	Scientific Name	Common Name
	vertebrates		
	Other Non-vertebrates	<i>Pisidium</i>	pill clams
	Other Non-vertebrates	<i>Pista wui</i>	
	Other Non-vertebrates	<i>Planaria</i>	
	Other Non-vertebrates	<i>Pleurobrachia bachei</i>	Pacific Sea Gooseberry
	Other Non-vertebrates	<i>Plumularia</i>	
	Other Non-vertebrates	<i>Pododesmus macrochisma</i>	Alaska Jingle
	Other Non-vertebrates	<i>Pogonognathellus nigrinus</i>	
	Other Non-vertebrates	<i>Polyorchis penicillatus</i>	Red-eye medusa
	Other Non-vertebrates	<i>Rochefortia coani</i>	
	Other Non-vertebrates	<i>Rochefortia tumida</i>	
	Other Non-vertebrates	<i>Schizobranchia insignis</i>	
	Other Non-vertebrates	<i>Schizoporella</i>	
	Other Non-vertebrates	<i>Scrippsia pacifica</i>	
	Other Non-vertebrates	<i>Serpula columbiana</i>	
	Other Non-vertebrates	<i>Siliqua patula</i>	Pacific razor clam
	Other Non-vertebrates	<i>Strongylocentrotus purpuratus</i>	Purple Sea Urchin
	Other Non-vertebrates	<i>Styela clava</i>	Stalked Sea Squirt
	Other Non-vertebrates	<i>Stylatula elongata</i>	Slender Sea Pen
	Other Non-vertebrates	<i>Tellina modesta</i>	
	Other Non-vertebrates	<i>Tonicella lineata</i>	Lined chiton
	Other Non-vertebrates	<i>Tonicella lokii</i>	
	Other Non-vertebrates	<i>Tylobolus</i>	
	Other Non-	<i>Watersipora subtorquata</i>	

Taxa observed during the 2014 GGNP BioBlitz- nomenclature source is iNaturalist.			
Denotes subspecies	Category of Taxa	Scientific Name	Common Name
	vertebrates		
	Other Non-vertebrates	<i>Xystocheir dissecta</i>	
	Protozoa	<i>Ammonia tepida</i>	
	Protozoa	<i>Bolivina striatula</i>	
	Protozoa	<i>Bolivina vughani</i>	
	Protozoa	<i>Buccella frigida</i>	
	Protozoa	<i>Bulimina denudata</i>	
	Protozoa	<i>Buliminella elegantissima</i>	
	Protozoa	<i>Centropyxis constricta</i>	
	Protozoa	<i>Elphidiella hannah</i>	
	Protozoa	<i>Elphidium excavatum</i>	
	Protozoa	<i>Elphidium gunteri</i>	
	Protozoa	<i>Elphidium magellanicum</i>	
	Protozoa	<i>Entzia macrescens</i>	
	Protozoa	<i>Fissurina lucida</i>	
	Protozoa	<i>Fursenkoina pontoni</i>	
	Protozoa	<i>Globigerina quinqueloba</i>	
	Protozoa	<i>Haplophragmoides subinvolutum</i>	
	Protozoa	<i>Haynesina germanica</i>	
	Protozoa	<i>Miliammina fusca</i>	
	Protozoa	<i>Nonionella basispinata</i>	
	Protozoa	<i>Nonionella stella</i>	
	Protozoa	<i>Oolina melo</i>	
	Protozoa	<i>Quinqueloculina</i>	
	Protozoa	<i>Rotorbinella campanulata</i>	
	Protozoa	<i>Trochammina hadai</i>	
	Protozoa	<i>Trochammina inflata</i>	
	Protozoa	<i>Trochammina kelletae</i>	
	Protozoa	<i>Trochammina pacifica</i>	
	Reptile	<i>Charina bottae</i>	Northern Rubber Boa
	Reptile	<i>Elgaria coerulea</i>	Northern Alligator Lizard
subspecies	Reptile	<i>Elgaria coerulea coerulea</i>	San Francisco Alligator Lizard
	Reptile	<i>Pituophis catenifer</i>	Gopher Snake
	Reptile	<i>Sceloporus occidentalis</i>	Western Fence Lizard
subspecies	Reptile	<i>Sceloporus occidentalis bocourtii</i>	Coast Range Fence Lizard
	Reptile	<i>Thamnophis atratus</i>	Aquatic Garter Snake
subspecies	Reptile	<i>Thamnophis atratus atratus</i>	Santa Cruz Aquatic Garter Snake

Taxa observed during the 2014 GGNP BioBlitz- nomenclature source is iNaturalist.			
Denotes subspecies	Category of Taxa	Scientific Name	Common Name
	Reptile	<i>Thamnophis elegans</i>	Western Terrestrial Garter Snake
subspecies	Reptile	<i>Thamnophis elegans terrestris</i>	Coast Gartersnake
subspecies	Reptile	<i>Thamnophis sirtalis infernalis</i>	California Red-sided Garter Snake
	Reptile	<i>Thamnophis sirtalis tetrataenia</i>	San Francisco Garter Snake
	Reptile	<i>Trachemys scripta</i>	Pond Slider
subspecies	Reptile	<i>Trachemys scripta elegans</i>	Red-eared Slider
	Slug/Snail	<i>Acanthinucella punctulata</i>	Spotted Unicorn
	Slug/Snail	<i>Acanthinucella spirata</i>	angular unicorn
	Slug/Snail	<i>Aeolidia papillosa</i>	Papillate Sea Slug
	Slug/Snail	<i>Alia carinata</i>	
	Slug/Snail	<i>Amphissa versicolor</i>	
	Slug/Snail	<i>Ariolimax californicus</i>	California Banana Slug
	Slug/Snail	<i>Ariolimax columbianus</i>	Pacific Banana Slug
	Slug/Snail	<i>Cadlina modesta</i>	
	Slug/Snail	<i>Calliostoma ligatum</i>	
	Slug/Snail	<i>Chlorostoma brunnea</i>	Brown Turban Snail
	Slug/Snail	<i>Chlorostoma funebris</i>	Black Turban Snail
	Slug/Snail	<i>Dendronotus frondosus</i>	Branched Dendronotus
	Slug/Snail	<i>Dendronotus venustus</i>	
	Slug/Snail	<i>Diaulula sandiegensis</i>	San Diego Dorid
	Slug/Snail	<i>Dirona picta</i>	Colorful Dirona
	Slug/Snail	<i>Doriopsilla albopunctata</i>	
	Slug/Snail	<i>Doris montereyensis</i>	
	Slug/Snail	<i>Doto kya</i>	
	Slug/Snail	<i>Eubranchius rustyus</i>	Homely Aeolid
	Slug/Snail	<i>Flabellina trilineata</i>	Three-lined Aeolid
	Slug/Snail	<i>Granulina margaritula</i>	
	Slug/Snail	<i>Haplotrema minimum</i>	California Lancetooth
	Slug/Snail	<i>Heliconoides</i>	
	Slug/Snail	<i>Helix aspersa</i>	Garden Snail
	Slug/Snail	<i>Helminthoglypta</i>	
	Slug/Snail	<i>Hermisenda crassicornis</i>	Opalescent Nudibranch
	Slug/Snail	<i>Hima mendica</i>	
	Slug/Snail	<i>Hygromiidae</i>	
	Slug/Snail	<i>Littorina scutulata</i>	Checkered Periwinkle
	Slug/Snail	<i>Lottia austrodigitalis</i>	
	Slug/Snail	<i>Lottia digitalis</i>	Ribbed Limpet

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Denotes subspecies	Category of Taxa	Scientific Name	Common Name
	Slug/Snail	<i>Lottia gigantea</i>	Owl Limpet
	Slug/Snail	<i>Lottia paradigitalis</i>	
	Slug/Snail	<i>Lottia pelta</i>	Shield Limpet
	Slug/Snail	<i>Lottia scabra</i>	Rough Limpet
	Slug/Snail	<i>Lottia scutum</i>	
	Slug/Snail	<i>Lymnaea</i>	
	Slug/Snail	<i>Nucella canaliculata</i>	channeled dog winkle
	Slug/Snail	<i>Nucella emarginata</i>	Striped Dogwinkle
	Slug/Snail	<i>Onchidoris bilamellata</i>	
	Slug/Snail	<i>Peltodoris nobilis</i>	Sea Lemon
	Slug/Snail	<i>Phidiana hiltoni</i>	Hilton's Aeolid
	Slug/Snail	<i>Physella gyrina</i>	Tadpole Physa
	Slug/Snail	<i>Planorbella trivolvis</i>	
	Slug/Snail	<i>Promenetes umbilicatellus</i>	
	Slug/Snail	<i>Rostanga pulchra</i>	Red Dorid
	Slug/Snail	<i>Stagnicola elodes</i>	
	Slug/Snail	<i>Trimusculus reticulatus</i>	
	Slug/Snail	<i>Triopha maculata</i>	Spotted Dorid
	Spider/Scorpion	<i>Antrodiaetus riversi</i>	
	Spider/Scorpion	<i>Araneus andrewsi</i>	
	Spider/Scorpion	<i>Atractides</i>	
	Spider/Scorpion	<i>Badumna longinqua</i>	Grey House Spider
	Spider/Scorpion	<i>Cybaeus</i>	
	Spider/Scorpion	<i>Cyclosa</i>	trashline orbweavers
	Spider/Scorpion	<i>Dermacentor occidentalis</i>	Pacific Coast Tick
	Spider/Scorpion	<i>Dermacentor variabilis</i>	American Dog Tick
	Spider/Scorpion	<i>Dysdera crocata</i>	Woodlouse Spider
	Spider/Scorpion	<i>Hygrobates</i>	
	Spider/Scorpion	<i>Ixodes pacificus</i>	Western Blacklegged Tick
	Spider/Scorpion	<i>Ixodes spinipalpis</i>	
	Spider/Scorpion	<i>Latrodectus hesperus</i>	Western Black Widow
	Spider/Scorpion	<i>Lebertia</i>	
	Spider/Scorpion	<i>Linyphiidae</i>	Sheetweb and Dwarf Weavers
	Spider/Scorpion	<i>Meta</i>	Cave Orbweavers
	Spider/Scorpion	<i>Metellina</i>	
	Spider/Scorpion	<i>Misumena</i>	Flower Crab Spiders
	Spider/Scorpion	<i>Oribatida</i>	
	Spider/Scorpion	<i>Pardosa</i>	Thin legged wolf spiders

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	Spider/Scorpion	<i>Phalangium opilio</i>	European Harvestman
	Spider/Scorpion	<i>Phidippus johnsoni</i>	Johnson Jumper
	Spider/Scorpion	<i>Protzia</i>	
	Spider/Scorpion	<i>Pseudoscorpiones</i>	Pseudoscorpions
	Spider/Scorpion	<i>Sperchon</i>	
	Spider/Scorpion	<i>Sperchonopsis</i>	
	Spider/Scorpion	<i>Steatoda grossa</i>	False Black Widow
	Spider/Scorpion	<i>Tengellidae</i>	Tengellid Spiders
	Spider/Scorpion	<i>Tibellus</i>	slender crab spiders
	Spider/Scorpion	<i>Torrenticola</i>	
	Spider/Scorpion	<i>Uroctonus mordax</i>	Western forest scorpion
	Vascular Plant	<i>Abronia latifolia</i>	Yellow Sand Verbena
	Vascular Plant	<i>Abronia umbellata</i>	Pink Sand Verbena
subspecies	Vascular Plant	<i>Abronia umbellata umbellata</i>	Pink Sand Verbena
	Vascular Plant	<i>Acacia dealbata</i>	silver wattle
	Vascular Plant	<i>Acacia longifolia</i>	Sydney Golden Wattle
	Vascular Plant	<i>Acacia melanoxylon</i>	Tasmanian blackwood
	Vascular Plant	<i>Acacia retinodes</i>	Silver Wattle
	Vascular Plant	<i>Acacia verticillata</i>	star acacia
	Vascular Plant	<i>Acaena pinnatifida</i>	Argentinian biddy biddy
subspecies	Vascular Plant	<i>Acaena pinnatifida californica</i>	California sheepburr
	Vascular Plant	<i>Acanthus mollis</i>	bear's breeches
	Vascular Plant	<i>Acer macrophyllum</i>	bigleaf maple
	Vascular Plant	<i>Acer negundo</i>	Box Elder
	Vascular Plant	<i>Achillea millefolium</i>	common yarrow
	Vascular Plant	<i>Acmispon glaber</i>	Common Deerweed
subspecies	Vascular Plant	<i>Acmispon glaber glaber</i>	California Broom
	Vascular Plant	<i>Acmispon heermannii</i>	Heermann's Lotus
	Vascular Plant	<i>Acmispon parviflorus</i>	desert deervetch
	Vascular Plant	<i>Acmispon strigosus</i>	desert lotus
	Vascular Plant	<i>Acmispon wrangelianus</i>	Chile trefoil
	Vascular Plant	<i>Adenocaulon bicolor</i>	American trailplant
	Vascular Plant	<i>Adenostoma fasciculatum</i>	chamise
	Vascular Plant	<i>Adiantum aleuticum</i>	five-fingered fern
	Vascular Plant	<i>Adiantum jordanii</i>	California Maidenhair Fern
	Vascular Plant	<i>Aeonium arboreum</i>	tree aeonium
	Vascular Plant	<i>Aeonium cuneatum</i>	
	Vascular Plant	<i>Aesculus californica</i>	California Buckeye

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Denotes subspecies	Category of Taxa	Scientific Name	Common Name
	Vascular Plant	<i>Aesculus hippocastanum</i>	Horse-Chestnut
	Vascular Plant	<i>Agapanthus praecox</i>	Lily of the Nile
	Vascular Plant	<i>Agastache</i>	Hyssop
	Vascular Plant	<i>Agave americana</i>	Century Plant
	Vascular Plant	<i>Agave attenuata</i>	Swan-neck Agave
	Vascular Plant	<i>Agave colorata</i>	Mezcal ceniza
	Vascular Plant	<i>Agave parryi</i>	Parry's agave
	Vascular Plant	<i>Agave victoriae-reginae</i>	maguey noa
	Vascular Plant	<i>Ageratina adenophora</i>	Mexican devil
	Vascular Plant	<i>Agoseris grandiflora</i>	bigflower agoseris
	Vascular Plant	<i>Agrostis pallens</i>	seashore bentgrass
	Vascular Plant	<i>Agrostis stolonifera</i>	creeping bent
	Vascular Plant	<i>Aira caryophyllea</i>	silver hairgrass
	Vascular Plant	<i>Albizia lophantha</i>	plume acacia
	Vascular Plant	<i>Alisma lanceolatum</i>	Narrow-leaved Water-plantain
	Vascular Plant	<i>Alisma triviale</i>	northern water plantain
	Vascular Plant	<i>Allium triquetrum</i>	Three-cornered Leek
	Vascular Plant	<i>Alnus rhombifolia</i>	white alder
	Vascular Plant	<i>Alnus rubra</i>	red alder
	Vascular Plant	<i>Aloe camperi</i>	
	Vascular Plant	<i>Aloe ferox</i>	Cape Aloe
	Vascular Plant	<i>Aloe perfoliata</i>	Rubble Aloe
	Vascular Plant	<i>Aloe polyphylla</i>	Spiral aloe
	Vascular Plant	<i>Aloe saponaria</i>	Soap Aloe
	Vascular Plant	<i>Aloe vera</i>	Aloe vera
	Vascular Plant	<i>Aloysia triphylla</i>	Lemon Verbena
	Vascular Plant	<i>Alyogyne huegelii</i>	blue hibiscus
	Vascular Plant	<i>Amaryllis belladonna</i>	Belladonna Lily
	Vascular Plant	<i>Ambrosia chamissonis</i>	silver burr ragweed
	Vascular Plant	<i>Amelanchier utahensis</i>	Utah serviceberry
	Vascular Plant	<i>Amsinckia spectabilis</i>	woolly breeches
subspecies	Vascular Plant	<i>Amsinckia spectabilis spectabilis</i>	seaside fiddleneck
	Vascular Plant	<i>Anagallis arvensis</i>	Scarlet Pimpernel
	Vascular Plant	<i>Anaphalis margaritacea</i>	pearly everlasting
	Vascular Plant	<i>Anemone oregana</i>	Oregon anemone
subspecies	Vascular Plant	<i>Anemone oregana oregana</i>	
	Vascular Plant	<i>Angelica californica</i>	
	Vascular Plant	<i>Angelica hendersonii</i>	Henderson's angelica

Taxa observed during the 2014 GGNP BioBlitz- nomenclature source is iNaturalist.			
Denotes subspecies	Category of Taxa	Scientific Name	Common Name
	Vascular Plant	<i>Anisocarpus madioides</i>	woodland mardia
	Vascular Plant	<i>Anthoxanthum occidentale</i>	california sweet grass
	Vascular Plant	<i>Anthriscus caucalis</i>	burr chervil
	Vascular Plant	<i>Aphanes arvensis</i>	Field Parsley Piert
	Vascular Plant	<i>Aphanes occidentalis</i>	Parsley-piert
	Vascular Plant	<i>Aptenia cordifolia</i>	baby sun-rose
	Vascular Plant	<i>Aquilegia formosa</i>	Western Columbine
	Vascular Plant	<i>Arabis blepharophylla</i>	coast rock cress
	Vascular Plant	<i>Aralia californica</i>	California Spikenard
	Vascular Plant	<i>Araucaria heterophylla</i>	Norfolk Island Pine
	Vascular Plant	<i>Arbutus menziesii</i>	Pacific Madrone
	Vascular Plant	<i>Arbutus unedo</i>	Strawberry Tree
	Vascular Plant	<i>Arctostaphylos canescens</i>	hoary manzanita
	Vascular Plant	<i>Arctostaphylos crustacea</i>	brittle leaf manzanita
	Vascular Plant	<i>Arctostaphylos franciscana</i>	Franciscan manzanita
	Vascular Plant	<i>Arctostaphylos glandulosa</i>	Eastwood's manzanita
	Vascular Plant	<i>Arctostaphylos montana</i>	Mt. Tamalpais manzanita
subspecies	Vascular Plant	<i>Arctostaphylos montana ravenii</i>	Presidio manzanita
	Vascular Plant	<i>Arctostaphylos montaraensis</i>	Montara manzanita
	Vascular Plant	<i>Arctostaphylos regismontana</i>	Kings Mountain manzanita
	Vascular Plant	<i>Arctostaphylos sensitiva</i>	
	Vascular Plant	<i>Arctostaphylos virgata</i>	Marin manzanita
	Vascular Plant	<i>Arctotheca calendula</i>	Capeweed
	Vascular Plant	<i>Arctotheca prostrata</i>	prostrate capeweed
	Vascular Plant	<i>Arenaria paludicola</i>	marsh sandwort
	Vascular Plant	<i>Aristolochia californica</i>	California Dutchman's Pipe
	Vascular Plant	<i>Armeria maritima</i>	sea thrift
subspecies	Vascular Plant	<i>Armeria maritima californica</i>	California thrift
	Vascular Plant	<i>Artemisia californica</i>	California sagebrush
	Vascular Plant	<i>Artemisia douglasiana</i>	Mugwort
	Vascular Plant	<i>Artemisia pycnocephala</i>	beach wormwood
	Vascular Plant	<i>Arum italicum</i>	Italian arum
	Vascular Plant	<i>Asarum caudatum</i>	Western wild ginger
	Vascular Plant	<i>Astragalus gambelianus</i>	gambel milkvetch
	Vascular Plant	<i>Astragalus nuttallii</i>	Nuttall's Milkvetch
	Vascular Plant	<i>Athyrium filix-femina</i>	Lady Fern
	Vascular Plant	<i>Atriplex californica</i>	California orache
	Vascular Plant	<i>Atriplex leucophylla</i>	beach saltbush

Taxa observed during the 2014 GGNP BioBlitz- nomenclature source is iNaturalist.			
Denotes subspecies	Category of Taxa	Scientific Name	Common Name
	Vascular Plant	<i>Atriplex prostrata</i>	fat-hen
	Vascular Plant	<i>Aurinia saxatilis</i>	Gold-dust
	Vascular Plant	<i>Avena barbata</i>	slender wild oat
	Vascular Plant	<i>Avena fatua</i>	wild oat
	Vascular Plant	<i>Azolla filiculoides</i>	Water Fern
	Vascular Plant	<i>Baccharis glutinosa</i>	marsh baccharis
	Vascular Plant	<i>Baccharis pilularis</i>	Coyote Brush
subspecies	Vascular Plant	<i>Baccharis pilularis consanguinea</i>	
subspecies	Vascular Plant	<i>Baccharis pilularis pilularis</i>	
	Vascular Plant	<i>Barbarea vulgaris</i>	Garden yellowrocket
	Vascular Plant	<i>Bellis perennis</i>	English daisy
	Vascular Plant	<i>Berberis nervosa</i>	
	Vascular Plant	<i>Berberis pinnata</i>	California barberry
	Vascular Plant	<i>Bergenia cordifolia</i>	heartleaf bergenia
	Vascular Plant	<i>Blennosperma nanum nanum</i>	
	Vascular Plant	<i>Borago officinalis</i>	Borage
	Vascular Plant	<i>Boykinia occidentalis</i>	coastal brookfoam
	Vascular Plant	<i>Brachypodium distachyon</i>	purple false brome
	Vascular Plant	<i>Brassica nigra</i>	Black Mustard
	Vascular Plant	<i>Brassica oleracea</i>	Wild Mustard
	Vascular Plant	<i>Brassica rapa</i>	Field Mustard
	Vascular Plant	<i>Briza maxima</i>	Big quaking grass
	Vascular Plant	<i>Briza minor</i>	Little Quaking-grass
	Vascular Plant	<i>Bromus carinatus</i>	California brome
subspecies	Vascular Plant	<i>Bromus carinatus carinatus</i>	
	Vascular Plant	<i>Bromus catharticus</i>	Prairie Grass
	Vascular Plant	<i>Bromus diandrus</i>	ripgut brome
	Vascular Plant	<i>Bromus hordeaceus</i>	soft brome
	Vascular Plant	<i>Bromus laevipes</i>	Chinook brome
	Vascular Plant	<i>Bromus maritimus</i>	seaside brome
	Vascular Plant	<i>Buddleja davidii</i>	Butterfly Bush
	Vascular Plant	<i>Cakile edentula</i>	American Searocket
	Vascular Plant	<i>Cakile maritima</i>	European Searocket
	Vascular Plant	<i>Calamagrostis nutkaensis</i>	
	Vascular Plant	<i>Calandrinia ciliata</i>	Redmaids
	Vascular Plant	<i>Calendula officinalis</i>	Pot Marigold
	Vascular Plant	<i>Calycadenia multiglandulosa</i>	sticky western rosinweed
	Vascular Plant	<i>Calystegia purpurata</i>	Pacific false bindweed

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Denotes subspecies	Category of Taxa	Scientific Name	Common Name
subspecies	Vascular Plant	<i>Calystegia purpurata purpurata</i>	Pacific false bindweed
subspecies	Vascular Plant	<i>Calystegia purpurata saxicola</i>	coastal bluff morning-glory
	Vascular Plant	<i>Calystegia soldanella</i>	beach morning-glory
	Vascular Plant	<i>Calystegia subacaulis</i>	Hillside False Bindweed
subspecies	Vascular Plant	<i>Calystegia subacaulis subacaulis</i>	hillside false bindweed
	Vascular Plant	<i>Camellia japonica</i>	Japanese Camellia
	Vascular Plant	<i>Camissonia strigulosa</i>	sandysoil suncup
	Vascular Plant	<i>Camissoniopsis cheiranthifolia</i>	Beach Suncup
subspecies	Vascular Plant	<i>Camissoniopsis cheiranthifolia cheiranthifolia</i>	Beach evening-primrose
	Vascular Plant	<i>Camissoniopsis micrantha</i>	Miniature Suncup
	Vascular Plant	<i>Cardamine californica</i>	Milkmaids
	Vascular Plant	<i>Cardamine oligosperma</i>	little western bittercress
	Vascular Plant	<i>Cardionema ramosissimum</i>	sandcarpet
	Vascular Plant	<i>Carduus pycnocephalus</i>	Italian thistle
	Vascular Plant	<i>Carduus tenuiflorus</i>	Slender Thistle
	Vascular Plant	<i>Carex barbarae</i>	Santa Barbara sedge
	Vascular Plant	<i>Carex densa</i>	dense sedge
	Vascular Plant	<i>Carex globosa</i>	round-fruited sedge
	Vascular Plant	<i>Carex harfordii</i>	Harford's sedge
	Vascular Plant	<i>Carex leptopoda</i>	slender-footed sedge
	Vascular Plant	<i>Carex obnupta</i>	slough sedge
	Vascular Plant	<i>Carex pellita</i>	woolly sedge
	Vascular Plant	<i>Carex praegracilis</i>	field sedge
	Vascular Plant	<i>Carex subbracteata</i>	small-bracted sedge
	Vascular Plant	<i>Carex tumulicola</i>	foothill sedge
	Vascular Plant	<i>Carpobrotus chilensis</i>	Sea Fig
	Vascular Plant	<i>Carpobrotus edulis</i>	Hottentot-Fig
	Vascular Plant	<i>Castilleja affinis</i>	Coast Indian Paintbrush
subspecies	Vascular Plant	<i>Castilleja affinis affinis</i>	coast Indian paintbrush
subspecies	Vascular Plant	<i>Castilleja affinis neglecta</i>	Tiburon paintbrush
	Vascular Plant	<i>Castilleja foliolosa</i>	Woolly Indian Paintbrush
	Vascular Plant	<i>Castilleja subinclusa</i>	longleaf Indian paintbrush
subspecies	Vascular Plant	<i>Castilleja subinclusa franciscana</i>	longleaf Indian paintbrush
	Vascular Plant	<i>Castilleja wightii</i>	Wight's Paint Brush
	Vascular Plant	<i>Ceanothus cuneatus</i>	Buckbrush
subspecies	Vascular Plant	<i>Ceanothus cuneatus ramulosus</i>	
	Vascular Plant	<i>Ceanothus foliosus foliosus</i>	wavyleaf ceanothus

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Denotes subspecies	Category of Taxa	Scientific Name	Common Name
	Vascular Plant	<i>Ceanothus gloriosus exaltatus</i>	glory brush
	Vascular Plant	<i>Ceanothus masonii</i>	Mason's ceanothus
	Vascular Plant	<i>Ceanothus thyrsiflorus</i>	blueblossom
subspecies	Vascular Plant	<i>Ceanothus thyrsiflorus thyrsiflorus</i>	blue blossom
	Vascular Plant	<i>Centaurea calcitrapa</i>	purple star-thistle
	Vascular Plant	<i>Centaurea melitensis</i>	toalote
	Vascular Plant	<i>Centranthus ruber</i>	Red Valerian
	Vascular Plant	<i>Cerastium arvense</i>	field chickweed
	Vascular Plant	<i>Cerastium glomeratum</i>	sticky mouse-ear chickweed
	Vascular Plant	<i>Cerastium viride</i>	western field mouse-ear chickweed
	Vascular Plant	<i>Ceratostigma plumbaginoides</i>	
	Vascular Plant	<i>Cestrum parqui</i>	Green Cestrum
	Vascular Plant	<i>Chaenomeles</i>	flowering quince
	Vascular Plant	<i>Chamaesyce albomarginata</i>	Rattlesnake Weed
	Vascular Plant	<i>Chamerion angustifolium</i>	Fireweed
	Vascular Plant	<i>Chasmanthe bicolor</i>	Two-colour Cobra Lily
	Vascular Plant	<i>Chasmanthe floribunda</i>	African flag
	Vascular Plant	<i>Chenopodium californicum</i>	California goosefoot
	Vascular Plant	<i>Chlorogalum pomeridianum</i>	Wavy-leafed Soap Plant
subspecies	Vascular Plant	<i>Chlorogalum pomeridianum divaricatum</i>	
subspecies	Vascular Plant	<i>Chlorogalum pomeridianum pomeridianum</i>	amole
	Vascular Plant	<i>Chorizanthe cuspidata</i>	San Francisco spineflower
subspecies	Vascular Plant	<i>Chorizanthe cuspidata cuspidata</i>	San Francisco bay spineflower
	Vascular Plant	<i>Chrysolepis chrysophylla</i>	Giant chinquapin
	Vascular Plant	<i>Cicendia quadrangularis</i>	timwort
	Vascular Plant	<i>Cicuta douglasii</i>	
	Vascular Plant	<i>Cirsium andrewsii</i>	Franciscan thistle
	Vascular Plant	<i>Cirsium brevistylum</i>	clustered thistle
	Vascular Plant	<i>Cirsium occidentale</i>	cobwebby thistle
subspecies	Vascular Plant	<i>Cirsium occidentale venustum</i>	venus thistle
	Vascular Plant	<i>Cirsium quercetorum</i>	Alameda thistle
	Vascular Plant	<i>Cirsium vulgare</i>	Bull Thistle
	Vascular Plant	<i>Cistus purpureus</i>	
	Vascular Plant	<i>Cistus salviifolius</i>	Sage-leaved Rock Rose
	Vascular Plant	<i>Clarkia franciscana</i>	Presidio clarkia
	Vascular Plant	<i>Clarkia rubicunda</i>	ruby chalice clarkia

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Denotes subspecies	Category of Taxa	Scientific Name	Common Name
	Vascular Plant	<i>Claytonia exigua</i>	serpentine springbeauty
	Vascular Plant	<i>Claytonia perfoliata</i>	Miner's Lettuce
subspecies	Vascular Plant	<i>Claytonia perfoliata intermontana</i>	miner's lettuce
	Vascular Plant	<i>Clematis ligusticifolia</i>	western virgin's bower
	Vascular Plant	<i>Clinopodium douglasii</i>	yerba buena
	Vascular Plant	<i>Clintonia andrewsiana</i>	Andrew's clintonia
	Vascular Plant	<i>Clivia miniata</i>	Natal Lily
	Vascular Plant	<i>Conicosia pugioniformis</i>	Pig's-root
	Vascular Plant	<i>Conium maculatum</i>	Poison Hemlock
	Vascular Plant	<i>Convolvulus arvensis</i>	Field Bindweed
	Vascular Plant	<i>Coprosma repens</i>	Mirror bush
	Vascular Plant	<i>Cordylanthus pilosus</i>	hairy bird's beak
	Vascular Plant	<i>Cordyline australis</i>	New Zealand cabbage tree
	Vascular Plant	<i>Coreopsis grandiflora</i>	Large-flowered Tickseed
	Vascular Plant	<i>Cornus sericea</i>	Red Osier Dogwood
	Vascular Plant	<i>Cortaderia jubata</i>	Purple Pampas Grass
	Vascular Plant	<i>Cortaderia selloana</i>	Pampas Grass
	Vascular Plant	<i>Corylus cornuta</i>	beaked hazel
subspecies	Vascular Plant	<i>Corylus cornuta californica</i>	California hazelnut
	Vascular Plant	<i>Cotoneaster franchetii</i>	Franchet's Cotoneaster
	Vascular Plant	<i>Cotoneaster lacteus</i>	late cotoneaster
	Vascular Plant	<i>Cotoneaster pannosus</i>	silverleaf cotoneaster
	Vascular Plant	<i>Cotula coronopifolia</i>	brass buttons
	Vascular Plant	<i>Crassula connata</i>	pygmy stonecrop
	Vascular Plant	<i>Crataegus monogyna</i>	Common Hawthorn
	Vascular Plant	<i>Croton californicus</i>	California Croton
	Vascular Plant	<i>Croton setigerus</i>	Turkey Mullein
	Vascular Plant	<i>Cryptantha leiocarpa</i>	beach cryptantha
	Vascular Plant	<i>Cupressus macrocarpa</i>	Monterey Cypress
	Vascular Plant	<i>Cynodon dactylon</i>	Bermuda Grass
	Vascular Plant	<i>Cynoglossum grande</i>	Pacific Hound's Tongue
	Vascular Plant	<i>Cynosurus echinatus</i>	bristly dogtail grass
	Vascular Plant	<i>Cyperus eragrostis</i>	Tall Flatsedge
	Vascular Plant	<i>Cytisus scoparius</i>	Broom
	Vascular Plant	<i>Dactylis glomerata</i>	orchard grass
	Vascular Plant	<i>Danthonia californica</i>	California oat grass
	Vascular Plant	<i>Daucus carota</i>	Queen Anne's Lace
	Vascular Plant	<i>Daucus pusillus</i>	rattlesnake weed

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Denotes subspecies	Category of Taxa	Scientific Name	Common Name
	Vascular Plant	<i>Delairea odorata</i>	Cape ivy
	Vascular Plant	<i>Delphinium californicum</i>	California larkspur
subspecies	Vascular Plant	<i>Delphinium californicum californicum</i>	
	Vascular Plant	<i>Delphinium decorum</i>	coastal larkspur
	Vascular Plant	<i>Deschampsia cespitosa</i>	tufted hair grass
	Vascular Plant	<i>Dianthus plumarius</i>	Pink
	Vascular Plant	<i>Dicentra formosa</i>	Pacific Bleeding Heart
	Vascular Plant	<i>Dichelostemma capitatum</i>	Blue Dicks
subspecies	Vascular Plant	<i>Dichelostemma capitatum capitatum</i>	blue dicks
	Vascular Plant	<i>Dichelostemma congestum</i>	Ookow
	Vascular Plant	<i>Dichondra donnelliana</i>	
	Vascular Plant	<i>Digitalis purpurea</i>	Purple Foxglove
	Vascular Plant	<i>Dipsacus fullonum</i>	Fuller's teasel
	Vascular Plant	<i>Dipsacus sativus</i>	Indian teasel
	Vascular Plant	<i>Distichlis spicata</i>	Seashore Saltgrass
	Vascular Plant	<i>Dodecatheon hendersonii</i>	Henderson's shooting star
	Vascular Plant	<i>Drosanthemum floribundum</i>	Pale Dewplant
	Vascular Plant	<i>Dryocallis glandulosa</i>	sticky cinquefoil
	Vascular Plant	<i>Dryopteris arguta</i>	coastal woodfern
	Vascular Plant	<i>Dudleya farinosa</i>	powdery liveforever
	Vascular Plant	<i>Dysphania multifida</i>	Cut leaved goosefoot
	Vascular Plant	<i>Echeveria agavoides</i>	Conchita maguey
	Vascular Plant	<i>Echeveria pulvinata</i>	lengua de conejo
	Vascular Plant	<i>Echeveria subrigida</i>	
	Vascular Plant	<i>Echium candicans</i>	Pride of Madeira
	Vascular Plant	<i>Echium pininana</i>	tower of jewels
	Vascular Plant	<i>Ehrharta erecta</i>	panic veldt grass
	Vascular Plant	<i>Eichhornia crassipes</i>	Common Water Hyacinth
	Vascular Plant	<i>Eleocharis macrostachya</i>	pale spikerush
	Vascular Plant	<i>Elodea canadensis</i>	common waterweed
	Vascular Plant	<i>Elymus californicus</i>	california bottle-brush grass
	Vascular Plant	<i>Elymus glaucus</i>	blue wild rye
subspecies	Vascular Plant	<i>Elymus glaucus glaucus</i>	blue wild rye
	Vascular Plant	<i>Elymus triticoides</i>	beardless wild rye
	Vascular Plant	<i>Epilobium brachycarpum</i>	panicled willowherb
	Vascular Plant	<i>Epilobium ciliatum</i>	fringed willowherb
subspecies	Vascular Plant	<i>Epilobium ciliatum ciliatum</i>	coast willowweed
subspecies	Vascular Plant	<i>Epilobium ciliatum watsonii</i>	Watson's willowherb

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Denotes subspecies	Category of Taxa	Scientific Name	Common Name
	Vascular Plant	<i>Equisetum arvense</i>	Field Horsetail
	Vascular Plant	<i>Equisetum hyemale</i>	Rough Horsetail
subspecies	Vascular Plant	<i>Equisetum hyemale affine</i>	Western Scouring Rush
	Vascular Plant	<i>Equisetum telmateia</i>	giant horsetail
subspecies	Vascular Plant	<i>Equisetum telmateia braunii</i>	giant horsetail
	Vascular Plant	<i>Erechtites</i>	
	Vascular Plant	<i>Erica canaliculata</i>	Hairy grey heather
	Vascular Plant	<i>Erica lusitanica</i>	Portuguese Heath
	Vascular Plant	<i>Ericameria ericoides</i>	California Goldenbush
	Vascular Plant	<i>Erigeron canadensis</i>	Horseweed
	Vascular Plant	<i>Erigeron glaucus</i>	Seaside Daisy
	Vascular Plant	<i>Erigeron sumatrensis</i>	tropical horseweed
	Vascular Plant	<i>Eriodictyon californicum</i>	Yerba Santa
	Vascular Plant	<i>Eriogonum grande</i>	flor de borrego
subspecies	Vascular Plant	<i>Eriogonum grande rubescens</i>	red-flowered buckwheat
	Vascular Plant	<i>Eriogonum latifolium</i>	seaside buckwheat
	Vascular Plant	<i>Eriogonum nudum</i>	naked buckwheat
	Vascular Plant	<i>Eriophyllum confertiflorum</i>	golden yarrow
	Vascular Plant	<i>Eriophyllum lanatum</i>	common woolly sunflower
	Vascular Plant	<i>Eriophyllum staechadifolium</i>	Seaside Woolly Sunflower
	Vascular Plant	<i>Erodium botrys</i>	Long-beaked Stork's Bill
	Vascular Plant	<i>Erodium cicutarium</i>	Redstem Filaree
	Vascular Plant	<i>Erodium moschatum</i>	Musky Storksbill
	Vascular Plant	<i>Eruca vesicaria</i>	rocketsalad
subspecies	Vascular Plant	<i>Eruca vesicaria sativa</i>	Arugula
	Vascular Plant	<i>Erysimum franciscanum</i>	San Francisco wallflower
	Vascular Plant	<i>Eschscholzia californica</i>	California Poppy
	Vascular Plant	<i>Eucalyptus globulus</i>	Tasmanian Blue Gum
	Vascular Plant	<i>Euonymus japonica</i>	
	Vascular Plant	<i>Euonymus occidentalis</i>	western burning bush
	Vascular Plant	<i>Euphorbia peplus</i>	Petty Spurge
	Vascular Plant	<i>Euphorbia spathulata</i>	Reticulate-seeded Spurge
	Vascular Plant	<i>Euphorbia tirucalli</i>	Fire stick
	Vascular Plant	<i>Euryops pectinatus</i>	
	Vascular Plant	<i>Euthamia occidentalis</i>	Western Goldenrod
	Vascular Plant	<i>Fallopia baldschuanica</i>	bukhara fleecflower
	Vascular Plant	<i>Felicia amelloides</i>	Blue Daisy
	Vascular Plant	<i>Festuca arundinacea</i>	Tall Fescue

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Denotes subspecies	Category of Taxa	Scientific Name	Common Name
	Vascular Plant	<i>Festuca californica</i>	California fescue
	Vascular Plant	<i>Festuca idahoensis</i>	idaho fescue
	Vascular Plant	<i>Festuca rubra</i>	red fescue
	Vascular Plant	<i>Ficus carica</i>	Common Fig
	Vascular Plant	<i>Filago pyramidata</i>	Broad-leaved Cudweed
subspecies	Vascular Plant	<i>Filago pyramidata pyramidata</i>	broadleaf cottonrose
	Vascular Plant	<i>Foeniculum vulgare</i>	Sweet Fennel
	Vascular Plant	<i>Fragaria ananassa</i>	Garden Strawberry
	Vascular Plant	<i>Fragaria chiloensis</i>	Beach strawberry
	Vascular Plant	<i>Fragaria vesca</i>	woodland strawberry
subspecies	Vascular Plant	<i>Fragaria vesca americana</i>	Wild Strawberry
	Vascular Plant	<i>Frangula californica</i>	coffeeberry
subspecies	Vascular Plant	<i>Frangula californica californica</i>	
	Vascular Plant	<i>Frankenia salina</i>	alkali seaheath
	Vascular Plant	<i>Fraxinus latifolia</i>	Oregon ash
	Vascular Plant	<i>Fritillaria affinis</i>	checker lily
subspecies	Vascular Plant	<i>Fritillaria affinis tristulis</i>	
	Vascular Plant	<i>Fritillaria liliacea</i>	fragrant fritillary
	Vascular Plant	<i>Fuchsia magellanica</i>	Hardy Fuchsia
	Vascular Plant	<i>Fuchsia paniculata</i>	
	Vascular Plant	<i>Fuchsia splendens</i>	
	Vascular Plant	<i>Fumaria capreolata</i>	white ramping fumitory
	Vascular Plant	<i>Fumaria officinalis</i>	Common Fumitory
	Vascular Plant	<i>Fumaria parviflora</i>	fineleaf fumitory
	Vascular Plant	<i>Galium aparine</i>	Catchweed bedstraw
	Vascular Plant	<i>Galium porrigens</i>	graceful bedstraw
subspecies	Vascular Plant	<i>Galium porrigens porrigens</i>	
	Vascular Plant	<i>Galium triflorum</i>	sweet-scented bedstraw
	Vascular Plant	<i>Gamochaeta ustulata</i>	featherweed
	Vascular Plant	<i>Garrya elliptica</i>	coast silk tassel
	Vascular Plant	<i>Gaultheria shallon</i>	Salal
	Vascular Plant	<i>Gazania rigens</i>	Treasureflower
	Vascular Plant	<i>Genista monspessulana</i>	French broom
	Vascular Plant	<i>Geranium core-core</i>	
	Vascular Plant	<i>Geranium dissectum</i>	Cut-leaved Crane's-bill
	Vascular Plant	<i>Geranium maderense</i>	Giant Herb-Robert
	Vascular Plant	<i>Geranium molle</i>	Dove's Foot Cranesbill
	Vascular Plant	<i>Geranium purpureum</i>	Little-Robin

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Denotes subspecies	Category of Taxa	Scientific Name	Common Name
	Vascular Plant	<i>Geranium robertianum</i>	Herb robert
	Vascular Plant	<i>Gilia capitata</i>	bluehead gilia
subspecies	Vascular Plant	<i>Gilia capitata chamissonis</i>	blue coast gilia
	Vascular Plant	<i>Gilia clivorum</i>	purplespot gilia
	Vascular Plant	<i>Gomphrena decumbens</i>	amor seco
	Vascular Plant	<i>Goodyera oblongifolia</i>	Western rattlesnake plantain
	Vascular Plant	<i>Grevillea robusta</i>	Australian silver oak
	Vascular Plant	<i>Grindelia hirsutula</i>	hairy gumweed
	Vascular Plant	<i>Grindelia stricta</i>	Oregon gumplant
subspecies	Vascular Plant	<i>Grindelia stricta angustifolia</i>	marsh gumplant
subspecies	Vascular Plant	<i>Grindelia stricta platyphylla</i>	
	Vascular Plant	<i>Gutierrezia californica</i>	California matchweed
	Vascular Plant	<i>Hedera helix</i>	English ivy
	Vascular Plant	<i>Helenium puberulum</i>	Rosilla
	Vascular Plant	<i>Helianthemum scoparium</i>	peak rushrose
	Vascular Plant	<i>Heliotropium arborescens</i>	Cherry-pie
	Vascular Plant	<i>Heliotropium curassavicum</i>	seaside heliotrope
	Vascular Plant	<i>Helminthotheca echioides</i>	Bristly Ox-Tongue
	Vascular Plant	<i>Hemizonia congesta lutescens</i>	
	Vascular Plant	<i>Heracleum maximum</i>	cow parsnip
	Vascular Plant	<i>Hesperevax sparsiflora</i>	erect evax
	Vascular Plant	<i>Hesperocnide tenella</i>	Western nettle
	Vascular Plant	<i>Hesperolinon congestum</i>	Marin dwarf-flax
	Vascular Plant	<i>Heteromeles arbutifolia</i>	Toyon
	Vascular Plant	<i>Heterotheca sessiliflora</i>	sessileflower false goldenaster
subspecies	Vascular Plant	<i>Heterotheca sessiliflora bolanderi</i>	Bolander's goldenaster
	Vascular Plant	<i>Heuchera micrantha</i>	Crevice Alumroot
	Vascular Plant	<i>Heuchera pilosissima</i>	seaside alumroot
	Vascular Plant	<i>Hieracium albiflorum</i>	White Hawkweed
	Vascular Plant	<i>Hirschfeldia incana</i>	shortpod mustard
	Vascular Plant	<i>Hoita macrostachya</i>	large leatherroot
	Vascular Plant	<i>Holcus lanatus</i>	Yorkshire fog
	Vascular Plant	<i>Holodiscus discolor</i>	ocean spray
	Vascular Plant	<i>Hordeum brachyantherum</i>	Meadow barley
	Vascular Plant	<i>Hordeum jubatum</i>	foxtail barley
	Vascular Plant	<i>Hordeum marinum</i>	Salt Barley Grass
subspecies	Vascular Plant	<i>Hordeum marinum gussoneanum</i>	mediterranean barley
	Vascular Plant	<i>Hordeum murinum</i>	wall barley

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Denotes subspecies	Category of Taxa	Scientific Name	Common Name
subspecies	Vascular Plant	<i>Hordeum murinum leporinum</i>	hare barley
	Vascular Plant	<i>Hordeum vulgare</i>	Barley
	Vascular Plant	<i>Horkelia californica</i>	California horkelia
subspecies	Vascular Plant	<i>Horkelia californica californica</i>	
	Vascular Plant	<i>Horkelia cuneata</i>	wedgeleaf horkelia
subspecies	Vascular Plant	<i>Horkelia cuneata sericea</i>	kellogg's horkelia
	Vascular Plant	<i>Hosackia gracilis</i>	witch's-teeth
	Vascular Plant	<i>Hyacinthoides hispanica</i>	Spanish Bluebell
	Vascular Plant	<i>Hydrangea quercifolia</i>	oakleaf hydrangea
	Vascular Plant	<i>Hydrocotyle</i>	
	Vascular Plant	<i>Hypericum anagalloides</i>	Bog St. John's-wort
	Vascular Plant	<i>Hypochaeris glabra</i>	smooth cat's ear
	Vascular Plant	<i>Hypochaeris radicata</i>	False Dandelion
	Vascular Plant	<i>Iberis sempervirens</i>	Perennial Candytuft
	Vascular Plant	<i>Ilex aquifolium</i>	European holly
	Vascular Plant	<i>Impatiens sodenii</i>	Shrub Balsam
	Vascular Plant	<i>Ipomoea tricolor</i>	Morning Glory
	Vascular Plant	<i>Iris douglasiana</i>	Douglas iris
	Vascular Plant	<i>Iris germanica</i>	Bearded Iris
	Vascular Plant	<i>Iris longipetala</i>	Central Coast iris
	Vascular Plant	<i>Isolepis cernua</i>	
	Vascular Plant	<i>Jaumea carnosa</i>	Marsh Jaumea
	Vascular Plant	<i>Juglans nigra</i>	eastern black walnut
	Vascular Plant	<i>Juncus arcticus</i>	Arctic rush
	Vascular Plant	<i>Juncus balticus</i>	Baltic rush
	Vascular Plant	<i>Juncus bufonius</i>	toad rush
	Vascular Plant	<i>Juncus effusus</i>	Soft rush
subspecies	Vascular Plant	<i>Juncus effusus pacificus</i>	pacific rush
	Vascular Plant	<i>Juncus falcatus</i>	
subspecies	Vascular Plant	<i>Juncus falcatus falcatus</i>	sickleleaved rush
	Vascular Plant	<i>Juncus lesueurii</i>	San Francisco rush
	Vascular Plant	<i>Juncus patens</i>	spreading rush
	Vascular Plant	<i>Juncus phaeocephalus</i>	Brown-headed Rush
	Vascular Plant	<i>Juncus xiphioides</i>	irisleaf rush
	Vascular Plant	<i>Kniphofia uvaria</i>	Red Hot Poker
	Vascular Plant	<i>Koeleria macrantha</i>	june grass
	Vascular Plant	<i>Lactuca sativa</i>	Lettuce
	Vascular Plant	<i>Lactuca virosa</i>	Bitter lettuce

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Denotes subspecies	Category of Taxa	Scientific Name	Common Name
	Vascular Plant	<i>Lagurus ovatus</i>	Hare's Tail Grass
	Vascular Plant	<i>Lamium amplexicaule</i>	Henbit Deadnettle
	Vascular Plant	<i>Lamium purpureum</i>	Red Deadnettle
	Vascular Plant	<i>Lampranthus</i>	
	Vascular Plant	<i>Lasthenia californica</i>	California Goldfields
	Vascular Plant	<i>Lathyrus latifolius</i>	Broad-leaved Everlasting-pea
	Vascular Plant	<i>Lathyrus vestitus</i>	Pacific pea
subspecies	Vascular Plant	<i>Lathyrus vestitus vestitus</i>	common pacific pea
	Vascular Plant	<i>Lavandula angustifolia</i>	Common Lavender
	Vascular Plant	<i>Layia platyglossa</i>	Tidy Tips
	Vascular Plant	<i>Lemna minor</i>	Common Duckweed
	Vascular Plant	<i>Leonotis leonurus</i>	Wild Dagga
	Vascular Plant	<i>Leontodon taraxacoides</i>	lesser hawkbit
	Vascular Plant	<i>Lepechinia calycina</i>	California pitcher sage
	Vascular Plant	<i>Lepidium didymum</i>	Lesser Swine-cress
	Vascular Plant	<i>Lepidium latifolium</i>	broadleaved pepperweed
	Vascular Plant	<i>Lepidium nitidum</i>	shining pepperweed
	Vascular Plant	<i>Leptospermum laevigatum</i>	Australian Tea Tree
	Vascular Plant	<i>Lessingia germanorum</i>	San Francisco lessingia
	Vascular Plant	<i>Leymus mollis</i>	American dune grass
	Vascular Plant	<i>Ligusticum apiifolium</i>	Celery Leaf Lovage
	Vascular Plant	<i>Ligustrum japonicum</i>	Japanese Privet
	Vascular Plant	<i>Lilium pardalinum</i>	Leopard Lily
	Vascular Plant	<i>Limonium californicum</i>	Western Marsh Rosemary
	Vascular Plant	<i>Limonium perezii</i>	Perez's sea lavender
	Vascular Plant	<i>Limonium ramosissimum</i>	Algerian sea lavender
	Vascular Plant	<i>Linum bienne</i>	Pale Flax
	Vascular Plant	<i>Lobelia excelsa</i>	
	Vascular Plant	<i>Lobularia maritima</i>	Sweet Alyssum
	Vascular Plant	<i>Logfia gallica</i>	daggerleaf cottonrose
	Vascular Plant	<i>Lolium perenne</i>	perennial ryegrass
	Vascular Plant	<i>Lomatium caruifolium</i>	alkali desertparsley
	Vascular Plant	<i>Lomatium dasycarpum</i>	woollyfruit desertparsley
	Vascular Plant	<i>Lomatium utriculatum</i>	Foothill desert-parsley
	Vascular Plant	<i>Lonicera hispidula</i>	Pink Honeysuckle
	Vascular Plant	<i>Lonicera involucrata</i>	Twinberry
subspecies	Vascular Plant	<i>Lonicera involucrata ledebourii</i>	
	Vascular Plant	<i>Lonicera japonica</i>	Japanese Honeysuckle

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Denotes subspecies	Category of Taxa	Scientific Name	Common Name
	Vascular Plant	<i>Lotus corniculatus</i>	Common Bird's-foot-trefoil
	Vascular Plant	<i>Ludwigia hexapetala</i>	water primrose
	Vascular Plant	<i>Ludwigia peploides</i>	floating primrose-willow
subspecies	Vascular Plant	<i>Ludwigia peploides montevidensis</i>	
	Vascular Plant	<i>Lunaria annua</i>	Moneyplant
	Vascular Plant	<i>Lupinus albifrons</i>	Silver Lupine
subspecies	Vascular Plant	<i>Lupinus albifrons albifrons</i>	Silver Bush Lupine
subspecies	Vascular Plant	<i>Lupinus albifrons collinus</i>	Silver Lupine
	Vascular Plant	<i>Lupinus arboreus</i>	Yellow Bush Lupine
subspecies	Vascular Plant	<i>Lupinus arboreus eximius</i>	
	Vascular Plant	<i>Lupinus bicolor</i>	Miniature Lupine
	Vascular Plant	<i>Lupinus chamissonis</i>	Chamisso Bush Lupine
	Vascular Plant	<i>Lupinus nanus</i>	Sky lupine
	Vascular Plant	<i>Lupinus succulentus</i>	Arroyo Lupine
	Vascular Plant	<i>Lupinus variicolor</i>	Varied Lupine
	Vascular Plant	<i>Luzula comosa</i>	Pacific woodrush
	Vascular Plant	<i>Luzula subsessilis</i>	
	Vascular Plant	<i>Lychnis coronaria</i>	Rose Campion
	Vascular Plant	<i>Lythrum hyssopifolia</i>	Hyssop loosestrife
	Vascular Plant	<i>Madia sativa</i>	coast tarweed
	Vascular Plant	<i>Maianthemum racemosum</i>	False Solomon's Seal
subspecies	Vascular Plant	<i>Maianthemum racemosum amplexicaule</i>	
	Vascular Plant	<i>Maianthemum stellatum</i>	Star-flowered Lily-of-the-valley
	Vascular Plant	<i>Malus</i>	Apples
	Vascular Plant	<i>Malva nicaeensis</i>	bull mallow
	Vascular Plant	<i>Malva parviflora</i>	cheeseweed mallow
	Vascular Plant	<i>Marah fabacea</i>	California manroot
	Vascular Plant	<i>Marah oregana</i>	coast man-root
	Vascular Plant	<i>Matricaria discoidea</i>	Pineapple Weed
	Vascular Plant	<i>Matthiola incana</i>	Hoary Stock
	Vascular Plant	<i>Medicago arabica</i>	Spotted Medick
	Vascular Plant	<i>Medicago lupulina</i>	black medick
	Vascular Plant	<i>Medicago polymorpha</i>	Bur Clover
	Vascular Plant	<i>Melica californica</i>	California melic
	Vascular Plant	<i>Melica imperfecta</i>	smallflower melicgrass
	Vascular Plant	<i>Melica subulata</i>	
	Vascular Plant	<i>Melica torreyana</i>	Torrey's melicgrass

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Denotes subspecies	Category of Taxa	Scientific Name	Common Name
	Vascular Plant	<i>Melilotus indicus</i>	sweet clover
	Vascular Plant	<i>Melilotus officinalis</i>	Yellow Sweet Clover
	Vascular Plant	<i>Melissa officinalis</i>	lemon balm
	Vascular Plant	<i>Mentha pulegium</i>	Pennyroyal
	Vascular Plant	<i>Metasequoia glyptostroboides</i>	Dawn Redwood
	Vascular Plant	<i>Microseris douglasii</i>	
	Vascular Plant	<i>Mimulus aurantiacus</i>	Orange Bush Monkeyflower
	Vascular Plant	<i>Mimulus guttatus</i>	Seep Monkeyflower
	Vascular Plant	<i>Modiola caroliniana</i>	modiola
	Vascular Plant	<i>Monardella purpurea</i>	serpentine monardella
	Vascular Plant	<i>Monardella villosa</i>	coyote mint
subspecies	Vascular Plant	<i>Monardella villosa franciscana</i>	San Francisco coyote mint
	Vascular Plant	<i>Moraea collina</i>	Cape Tulip
	Vascular Plant	<i>Morella californica</i>	California Wax Myrtle
	Vascular Plant	<i>Muehlenbeckia complexa</i>	Scrambling Pohuehue
	Vascular Plant	<i>Myoporum laetum</i>	Ngaio
	Vascular Plant	<i>Myosotis latifolia</i>	broadleaf forget-me-not
	Vascular Plant	<i>Myriophyllum aquaticum</i>	parrot's feather
	Vascular Plant	<i>Narcissus pseudonarcissus</i>	Wild Daffodil
	Vascular Plant	<i>Nassella lepida</i>	foothill needle grass
	Vascular Plant	<i>Nassella pulchra</i>	purple needlegrass
	Vascular Plant	<i>Nasturtium officinale</i>	Watercress
	Vascular Plant	<i>Nemophila parviflora</i>	small-flowered nemophila
	Vascular Plant	<i>Nemophila pedunculata</i>	littlefoot nemophila
	Vascular Plant	<i>Nicotiana glauca</i>	jasmine tobacco
	Vascular Plant	<i>Notholithocarpus densiflorus</i>	Tanoak
subspecies	Vascular Plant	<i>Notholithocarpus densiflorus densiflorus</i>	
	Vascular Plant	<i>Nuttallanthus canadensis</i>	Canada toadflax
	Vascular Plant	<i>Nuttallanthus texanus</i>	blue toadflax
	Vascular Plant	<i>Oemleria cerasiformis</i>	osoberry
	Vascular Plant	<i>Oenanthe sarmentosa</i>	water parsley
	Vascular Plant	<i>Oenothera fruticosa</i>	Narrow-leaved Sundrops
	Vascular Plant	<i>Osmorhiza berteroi</i>	mountain sweet cicely
	Vascular Plant	<i>Osteospermum fruticosum</i>	Dimorphotheca
	Vascular Plant	<i>Oxalis corniculata</i>	Creeping Woodsorrel
	Vascular Plant	<i>Oxalis incarnata</i>	Pale Pink-sorrel
	Vascular Plant	<i>Oxalis oregana</i>	Redwood-sorrel

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Denotes subspecies	Category of Taxa	Scientific Name	Common Name
	Vascular Plant	<i>Oxalis pes-caprae</i>	Bermuda Buttercup
	Vascular Plant	<i>Oxalis pilosa</i>	Hairy Wood Sorrel
	Vascular Plant	<i>Parietaria judaica</i>	Pellitory Of The Wall
	Vascular Plant	<i>Paronychia franciscana</i>	Chilean nailwort
	Vascular Plant	<i>Parthenocissus tricuspidata</i>	Japanese creeper
	Vascular Plant	<i>Pedicularis densiflora</i>	Indian Warrior
	Vascular Plant	<i>Pelargonium peltatum</i>	ivy geranium
	Vascular Plant	<i>Pelargonium quercifolium</i>	
	Vascular Plant	<i>Pennisetum clandestinum</i>	kikuyu grass
	Vascular Plant	<i>Penstemon centranthifolius</i>	scarlet bugler
	Vascular Plant	<i>Pentagramma triangularis</i>	Goldback Fern
	Vascular Plant	<i>Perideridia kelloggii</i>	Kellogg's yampah
	Vascular Plant	<i>Persicaria hydropiperoides</i>	mild water-pepper
	Vascular Plant	<i>Persicaria maculosa</i>	Redshank
	Vascular Plant	<i>Persicaria punctata</i>	dotted knotweed
	Vascular Plant	<i>Petasites frigidus</i>	Arctic Sweet Coltsfoot
subspecies	Vascular Plant	<i>Petasites frigidus palmatus</i>	western sweet coltsfoot
	Vascular Plant	<i>Phacelia californica</i>	California phacelia
	Vascular Plant	<i>Phacelia distans</i>	Distant Phacelia
	Vascular Plant	<i>Phacelia malvifolia</i>	stinging phacelia
	Vascular Plant	<i>Phalaris aquatica</i>	harding grass
	Vascular Plant	<i>Phalaris californica</i>	California canarygrass
	Vascular Plant	<i>Phlomis purpurea</i>	
	Vascular Plant	<i>Phoenix canariensis</i>	Canary Island palm
	Vascular Plant	<i>Phyllospadix scouleri</i>	Scouler's surf grass
	Vascular Plant	<i>Phyllospadix torreyi</i>	Surf Grass
	Vascular Plant	<i>Pickeringia montana</i>	chaparral pea
	Vascular Plant	<i>Pinus pinea</i>	stone pine
	Vascular Plant	<i>Pinus radiata</i>	Monterey Pine
	Vascular Plant	<i>Piperia elegans</i>	Elegant rein orchid
	Vascular Plant	<i>Piptochaetium setosum</i>	bristly needle grass
	Vascular Plant	<i>Pittosporum crassifolium</i>	Karo
	Vascular Plant	<i>Pittosporum tenuifolium</i>	Kohuhu
	Vascular Plant	<i>Pittosporum tobira</i>	japanese pittosporum
	Vascular Plant	<i>Plantago coronopus</i>	minutina
	Vascular Plant	<i>Plantago erecta</i>	dotseed plantain
	Vascular Plant	<i>Plantago lanceolata</i>	English Plantain
	Vascular Plant	<i>Plantago maritima</i>	sea plantain

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Denotes subspecies	Category of Taxa	Scientific Name	Common Name
	Vascular Plant	<i>Plantago subnuda</i>	tall coastal plantain
	Vascular Plant	<i>Platystemon californicus</i>	creamcups
	Vascular Plant	<i>Poa annua</i>	Annual meadow grass
	Vascular Plant	<i>Poa douglasii</i>	sanddune bluegrass
	Vascular Plant	<i>Poa pratensis</i>	Kentucky Bluegrass
	Vascular Plant	<i>Poa secunda</i>	Pine bluegrass
subspecies	Vascular Plant	<i>Poa secunda secunda</i>	one-sided bluegrass
	Vascular Plant	<i>Polygala californica</i>	California milkwort
	Vascular Plant	<i>Polygonum paronychia</i>	beach knotweed
	Vascular Plant	<i>Polypodium californicum</i>	California Polypody
	Vascular Plant	<i>Polypodium calirhiza</i>	Nested Polypody
	Vascular Plant	<i>Polypodium glycyrrhiza</i>	Licorice Fern
	Vascular Plant	<i>Polypodium scolieri</i>	Leathery Polypody
	Vascular Plant	<i>Polypogon interruptus</i>	ditch beard grass
	Vascular Plant	<i>Polystichum munitum</i>	Western Swordfern
	Vascular Plant	<i>Potentilla anserina</i>	common silverweed
subspecies	Vascular Plant	<i>Potentilla anserina pacifica</i>	pacific silverweed
	Vascular Plant	<i>Potentilla argentea</i>	Silverleaf Cinquefoil
	Vascular Plant	<i>Potentilla hickmanii</i>	Hickman's cinquefoil
	Vascular Plant	<i>Potentilla indica</i>	Indian strawberry
	Vascular Plant	<i>Prosartes hookeri</i>	drops-of-gold
	Vascular Plant	<i>Prosartes smithii</i>	largeflower fairybells
	Vascular Plant	<i>Prunella vulgaris</i>	common selfheal
	Vascular Plant	<i>Prunus cerasifera</i>	Cherry-plum
	Vascular Plant	<i>Pseudognaphalium biolettii</i>	
	Vascular Plant	<i>Pseudognaphalium californicum</i>	California Cudweed
	Vascular Plant	<i>Pseudognaphalium luteoalbum</i>	Jersey cudweed
	Vascular Plant	<i>Pseudognaphalium ramosissimum</i>	pink everlasting
	Vascular Plant	<i>Pseudognaphalium stramineum</i>	wooly cudweed
	Vascular Plant	<i>Pseudotsuga menziesii</i>	Common Douglas-Fir
subspecies	Vascular Plant	<i>Pseudotsuga menziesii menziesii</i>	Coast Douglas-Fir
	Vascular Plant	<i>Pteridium aquilinum</i>	Bracken
subspecies	Vascular Plant	<i>Pteridium aquilinum pubescens</i>	Hairy brackenfern
	Vascular Plant	<i>Pterostegia drymarioides</i>	woodland pterostegia
	Vascular Plant	<i>Pyracantha angustifolia</i>	slender or woolly firethorn
	Vascular Plant	<i>Quercus agrifolia</i>	Coast Live Oak
	Vascular Plant	<i>Quercus chrysolepis</i>	Canyon Live Oak
	Vascular Plant	<i>Quercus kelloggii</i>	California Black Oak

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Denotes subspecies	Category of Taxa	Scientific Name	Common Name
	Vascular Plant	<i>Quercus parvula</i>	coast oak
subspecies	Vascular Plant	<i>Quercus parvula shrevei</i>	Shreve oak
	Vascular Plant	<i>Ranunculus californicus</i>	California buttercup
	Vascular Plant	<i>Ranunculus muricatus</i>	Rough-fruited Buttercup
	Vascular Plant	<i>Ranunculus repens</i>	Creeping Buttercup
	Vascular Plant	<i>Raphanus raphanistrum</i>	wild radish
	Vascular Plant	<i>Raphanus sativus</i>	Wild Radish
	Vascular Plant	<i>Rhamnus alaternus</i>	Mediterranean buckthorn
	Vascular Plant	<i>Rheum rhabarbarum</i>	Rhubarb
	Vascular Plant	<i>Rhododendron macrophyllum</i>	Pacific rhododendron
	Vascular Plant	<i>Rhododendron occidentale</i>	western azalea
	Vascular Plant	<i>Ribes californicum</i>	hillside gooseberry
	Vascular Plant	<i>Ribes divaricatum</i>	Wild gooseberry
	Vascular Plant	<i>Ribes menziesii</i>	canyon gooseberry
subspecies	Vascular Plant	<i>Ribes menziesii leptosmum</i>	canyon gooseberry
	Vascular Plant	<i>Ribes sanguineum</i>	Red-flowering Currant
subspecies	Vascular Plant	<i>Ribes sanguineum glutinosum</i>	
	Vascular Plant	<i>Romneya coulteri</i>	Coulter's matilija poppy
	Vascular Plant	<i>Romulea rosea</i>	rosy sandcrocus
subspecies	Vascular Plant	<i>Romulea rosea australis</i>	
	Vascular Plant	<i>Rosa californica</i>	California wild rose
	Vascular Plant	<i>Rosa gymnocarpa</i>	Baldhip rose
	Vascular Plant	<i>Rosa odorata</i>	rosa
	Vascular Plant	<i>Rosa rubiginosa</i>	Sweet-brier
	Vascular Plant	<i>Rosa rugosa</i>	Rugosa Rose
	Vascular Plant	<i>Rosmarinus officinalis</i>	Rosemary
	Vascular Plant	<i>Rubus armeniacus</i>	Himalayan Blackberry
	Vascular Plant	<i>Rubus idaeus</i>	European Raspberry
	Vascular Plant	<i>Rubus parviflorus</i>	Thimbleberry
	Vascular Plant	<i>Rubus ursinus</i>	California blackberry
	Vascular Plant	<i>Rumex acetosella</i>	Sheep's Sorrel
	Vascular Plant	<i>Rumex conglomeratus</i>	Clustered Dock
	Vascular Plant	<i>Rumex crassus</i>	Willow leaved dock
	Vascular Plant	<i>Rumex crispus</i>	Curly dock
	Vascular Plant	<i>Rumex occidentalis</i>	western dock
	Vascular Plant	<i>Rumex pulcher</i>	fiddle dock
	Vascular Plant	<i>Rumex salicifolius</i>	willow dock
	Vascular Plant	<i>Rytidosperma penicillatum</i>	hairy oat grass

Taxa observed during the 2014 GGNP BioBlitz- nomenclature source is iNaturalist.			
Denotes subspecies	Category of Taxa	Scientific Name	Common Name
	Vascular Plant	<i>Salicornia pacifica</i>	Pacific Swampfire
	Vascular Plant	<i>Salix lasiandra</i>	Pacific Willow
	Vascular Plant	<i>Salix lasiolepis</i>	Arroyo Willow
	Vascular Plant	<i>Salix lucida</i>	Pacific Willow
	Vascular Plant	<i>Salix sitchensis</i>	sitka willow
	Vascular Plant	<i>Salvia chiapensis</i>	
	Vascular Plant	<i>Salvia elegans</i>	Pineapple Sage
	Vascular Plant	<i>Salvia leucantha</i>	Mexican Bush Sage
	Vascular Plant	<i>Sambucus nigra</i>	Black Elderberry
subspecies	Vascular Plant	<i>Sambucus nigra cerulea</i>	
	Vascular Plant	<i>Sambucus racemosa</i>	Red Elderberry
subspecies	Vascular Plant	<i>Sambucus racemosa racemosa</i>	red elderberry
	Vascular Plant	<i>Sanicula arctopoides</i>	Footsteps of spring
	Vascular Plant	<i>Sanicula bipinnatifida</i>	purple sanicle
	Vascular Plant	<i>Sanicula crassicaulis</i>	snakeroot
	Vascular Plant	<i>Sanicula tuberosa</i>	turkey pea
	Vascular Plant	<i>Scabiosa atropurpurea</i>	Sweet scabious
	Vascular Plant	<i>Schoenoplectus acutus</i>	Tule
subspecies	Vascular Plant	<i>Schoenoplectus acutus occidentalis</i>	common tule
	Vascular Plant	<i>Schoenoplectus americanus</i>	Olney's three-square bulrush
	Vascular Plant	<i>Schoenoplectus californicus</i>	California bulrush
	Vascular Plant	<i>Schoenoplectus maritimus</i>	sea clubrush
	Vascular Plant	<i>Schoenoplectus pungens</i>	Common Three-Square
	Vascular Plant	<i>Scirpus microcarpus</i>	panicked bulrush
	Vascular Plant	<i>Scoliopus bigelovii</i>	California fetid adderstongue
	Vascular Plant	<i>Scrophularia californica</i>	California figwort
	Vascular Plant	<i>Sedum praealtum</i>	green cockscomb
	Vascular Plant	<i>Sedum spathulifolium</i>	Colorado Stonecrop
	Vascular Plant	<i>Senecio aronicoides</i>	rayless ragwort
	Vascular Plant	<i>Senecio elegans</i>	red-purple ragwort
	Vascular Plant	<i>Senecio glomeratus</i>	Cutleaf burnweed
	Vascular Plant	<i>Senecio minimus</i>	coastal burnweed
	Vascular Plant	<i>Senecio sylvaticus</i>	Heath Groundsel
	Vascular Plant	<i>Senecio vulgaris</i>	Common Groundsel
	Vascular Plant	<i>Sequoia sempervirens</i>	Coast Redwood
	Vascular Plant	<i>Sherardia arvensis</i>	field madder
	Vascular Plant	<i>Sidalcea malviflora</i>	Dwarf Checkermallow
subspecies	Vascular Plant	<i>Sidalcea malviflora malviflora</i>	dwarf checkerbloom

Taxa observed during the 2014 GGNP BioBlitz- nomenclature source is iNaturalist.			
Denotes subspecies	Category of Taxa	Scientific Name	Common Name
	Vascular Plant	<i>Silene gallica</i>	common catchfly
	Vascular Plant	<i>Silene verecunda</i>	San Francisco campion
subspecies	Vascular Plant	<i>Silene verecunda verecunda</i>	San Francisco campion
	Vascular Plant	<i>Silybum marianum</i>	Milk Thistle
	Vascular Plant	<i>Sisymbrium officinale</i>	hedge mustard
	Vascular Plant	<i>Sisyrinchium bellum</i>	Western Blue-eyed Grass
	Vascular Plant	<i>Sisyrinchium californicum</i>	golden blue-eyed grass
	Vascular Plant	<i>Solanum americanum</i>	American nightshade
	Vascular Plant	<i>Solanum douglasii</i>	Greenspot Nightshade
	Vascular Plant	<i>Solanum furcatum</i>	forked nightshade
	Vascular Plant	<i>Solanum marginatum</i>	white-margined nightshade
	Vascular Plant	<i>Solanum nigrum</i>	Black Nightshade
	Vascular Plant	<i>Solanum umbelliferum</i>	bluewitch nightshade
	Vascular Plant	<i>Solidago spathulata</i>	coast goldenrod
	Vascular Plant	<i>Soliva sessilis</i>	common soliva
	Vascular Plant	<i>Sonchus asper</i>	spiny sow thistle
	Vascular Plant	<i>Sonchus oleraceus</i>	common sowthistle
	Vascular Plant	<i>Sparaxis tricolor</i>	Harlequin Flower
	Vascular Plant	<i>Spartina foliosa</i>	California Cordgrass
	Vascular Plant	<i>Spergula arvensis</i>	Corn Spurrey
	Vascular Plant	<i>Spergularia arvensis</i>	
	Vascular Plant	<i>Spergularia macrotheca</i>	sticky sand-spurrey
subspecies	Vascular Plant	<i>Spergularia macrotheca macrotheca</i>	
	Vascular Plant	<i>Spergularia marina</i>	saltmarsh sand-spurrey
	Vascular Plant	<i>Spergularia rubra</i>	red sand spurrey
	Vascular Plant	<i>Spiranthes romanzoffiana</i>	Irish Lady's-tresses
	Vascular Plant	<i>Sporobolus airoides</i>	alkali sacaton
	Vascular Plant	<i>Stachys ajugoides</i>	bugle hedgenettle
	Vascular Plant	<i>Stachys bullata</i>	California Hedge Nettle
	Vascular Plant	<i>Stachys chamissonis</i>	coastal hedgenettle
	Vascular Plant	<i>Stachys rigida</i>	rigid hedgenettle
subspecies	Vascular Plant	<i>Stachys rigida quercetorum</i>	
	Vascular Plant	<i>Stellaria littoralis</i>	beach starwort
	Vascular Plant	<i>Stellaria media</i>	common chickweed
	Vascular Plant	<i>Stellaria pallida</i>	lesser chickweed
	Vascular Plant	<i>Stipa manicata</i>	andean tussockgrass
	Vascular Plant	<i>Streptanthus glandulosus</i>	bristly jewelflower
	Vascular Plant	<i>Symphoricarpos albus</i>	common snowberry

Taxa observed during the 2014 GGNP BioBlitz- nomenclature source is iNaturalist.			
Denotes subspecies	Category of Taxa	Scientific Name	Common Name
subspecies	Vascular Plant	<i>Symphoricarpos albus laevigatus</i>	snowberry
	Vascular Plant	<i>Symphoricarpos mollis</i>	creeping snowberry
	Vascular Plant	<i>Symphyotrichum chilense</i>	Pacific aster
	Vascular Plant	<i>Syringa vulgaris</i>	Common Lilac
	Vascular Plant	<i>Tanacetum bipinnatum</i>	dune tansy
	Vascular Plant	<i>Taraxacum officinale</i>	common dandelion
	Vascular Plant	<i>Taraxia ovata</i>	sun cup
	Vascular Plant	<i>Tellima grandiflora</i>	fringe cups
	Vascular Plant	<i>Tetragonia tetragonoides</i>	New Zealand spinach
	Vascular Plant	<i>Thalictrum fendleri</i>	Fendler's meadow-rue
subspecies	Vascular Plant	<i>Thalictrum fendleri polycarpum</i>	meadow-rue
	Vascular Plant	<i>Tibouchina urvilleana</i>	glory bush
	Vascular Plant	<i>Torilis arvensis</i>	common hedge parsley
	Vascular Plant	<i>Torreya californica</i>	California Nutmeg
	Vascular Plant	<i>Toxicodendron diversilobum</i>	Pacific Poison Oak
	Vascular Plant	<i>Toxicoscordion fremontii</i>	Fremont's Deathcamas
	Vascular Plant	<i>Tragopogon porrifolius</i>	Salsify
	Vascular Plant	<i>Trientalis latifolia</i>	Western Star Flower
	Vascular Plant	<i>Trifolium depauperatum</i>	cowbag clover
	Vascular Plant	<i>Trifolium dubium</i>	lesser hop trefoil
	Vascular Plant	<i>Trifolium gracilentum</i>	pinpoint clover
	Vascular Plant	<i>Trifolium hirtum</i>	Rose Clover
	Vascular Plant	<i>Trifolium microdon</i>	thimble clover
	Vascular Plant	<i>Trifolium repens</i>	White Clover
	Vascular Plant	<i>Trifolium subterraneum</i>	subterranean clover
	Vascular Plant	<i>Trifolium wormskioldii</i>	coast clover
	Vascular Plant	<i>Triglochin concinna</i>	
subspecies	Vascular Plant	<i>Triglochin concinna concinna</i>	seaside arrow-grass
	Vascular Plant	<i>Triglochin maritima</i>	Common Arrowgrass
	Vascular Plant	<i>Trillium chloropetalum</i>	Giant Wakerobin
	Vascular Plant	<i>Trillium ovatum</i>	Pacific trillium
subspecies	Vascular Plant	<i>Trillium ovatum ovatum</i>	
	Vascular Plant	<i>Triticum aestivum</i>	Bread Wheat
	Vascular Plant	<i>Tropaeolum majus</i>	Nasturtium
	Vascular Plant	<i>Tulbaghia violacea</i>	Society Garlic
	Vascular Plant	<i>Turritis glabra</i>	tower mustard
	Vascular Plant	<i>Typha angustifolia</i>	narrow-leaved cattail
	Vascular Plant	<i>Typha latifolia</i>	Common Cattail

Taxa observed during the 2014 GGNP BioBlitz- nomenclature source is iNaturalist.			
Denotes subspecies	Category of Taxa	Scientific Name	Common Name
	Vascular Plant	<i>Umbellularia californica</i>	California Bay
	Vascular Plant	<i>Uncinia brevicaulis</i>	short-stemmed sedge
	Vascular Plant	<i>Uropappus lindleyi</i>	silverpuffs
	Vascular Plant	<i>Urtica dioica</i>	Stinging Nettle
subspecies	Vascular Plant	<i>Urtica dioica holosericea</i>	stinging nettle
	Vascular Plant	<i>Urtica urens</i>	Dwarf nettle
	Vascular Plant	<i>Vaccinium ovatum</i>	California Huckleberry
	Vascular Plant	<i>Verbena bonariensis</i>	Purpletop vervain
	Vascular Plant	<i>Veronica americana</i>	American brooklime
	Vascular Plant	<i>Vicia americana</i>	American Vetch
	Vascular Plant	<i>Vicia benghalensis</i>	purple vetch
	Vascular Plant	<i>Vicia faba</i>	Fava Bean
	Vascular Plant	<i>Vicia gigantea</i>	giant vetch
	Vascular Plant	<i>Vicia sativa</i>	Common Vetch
subspecies	Vascular Plant	<i>Vicia sativa nigra</i>	Narrow-leaved Vetch
	Vascular Plant	<i>Vinca major</i>	Periwinkle
	Vascular Plant	<i>Viola adunca</i>	hookedspur violet
	Vascular Plant	<i>Viola glabella</i>	stream violet
	Vascular Plant	<i>Viola ocellata</i>	western heart's ease
	Vascular Plant	<i>Viola sempervirens</i>	redwood violet
	Vascular Plant	<i>Vulpia bromoides</i>	brome fescue
	Vascular Plant	<i>Vulpia microstachys</i>	
	Vascular Plant	<i>Vulpia myuros</i>	rat's-tail fescue
	Vascular Plant	<i>Whipplea modesta</i>	modesty
	Vascular Plant	<i>Woodwardia fimbriata</i>	Giant Chain Fern
	Vascular Plant	<i>Wyethia angustifolia</i>	narrowleaf mule-ears
	Vascular Plant	<i>Wyethia helenioides</i>	gray mule-ears
	Vascular Plant	<i>Xerophyllum tenax</i>	common beargrass
	Vascular Plant	<i>Yucca gloriosa</i>	Spanish Dagger
	Vascular Plant	<i>Zantedeschia aethiopica</i>	Calla Lily
	Vascular Plant	<i>Zostera marina</i>	Eelgrass

Appendix B

Bacteria and Archea species found during the 2014 GGNP BioBlitz

Archea and Bacteria taxa observed during the 2014 GGNP BioBlitz						
Taxa category	Phylum	Class	Order	Family	Genus	Species
Archea	Crenarchaeota	C2	B10	unclassified	sfA	<i>unclassified</i>
Archea	Crenarchaeota	C2	B10	unclassified	sfB	<i>unclassified</i>
Archea	Crenarchaeota	C2	B10	unclassified	sfD	<i>unclassified</i>
Archea	Crenarchaeota	C2	pGrfC26	unclassified	sfA	<i>unclassified</i>
Archea	Crenarchaeota	C2	pGrfC26	unclassified	sfC	<i>unclassified</i>
Archea	Crenarchaeota	pSL4	unclassified	unclassified	sfA	<i>unclassified</i>
Archea	Crenarchaeota	pSL4	unclassified	unclassified	sfE	<i>unclassified</i>
Archea	Crenarchaeota	Sd-NA	unclassified	unclassified	sfA	<i>unclassified</i>
Archea	Crenarchaeota	Sd-NA	unclassified	unclassified	sfB	<i>unclassified</i>
Archea	Crenarchaeota	Thermoprotei	Desulfurococcales	Desulfurococcaceae	Aeropyrum	<i>Aeropyrum pernix</i>
Archea	Crenarchaeota	Thermoprotei	Desulfurococcales	Desulfurococcaceae	Aeropyrum	<i>unclassified</i>
Archea	Crenarchaeota	Thermoprotei	Desulfurococcales	Desulfurococcaceae	unclassified	<i>unclassified</i>
Archea	Crenarchaeota	Thermoprotei	Thermoproteales	Thermoproteaceae	unclassified	<i>unclassified</i>
Archea	Crenarchaeota	Thermoprotei	Thermoproteales	Thermoproteaceae	Vulcanisaeta	<i>unclassified</i>
Archea	Crenarchaeota	Thermoprotei	unclassified	unclassified	sfB	<i>unclassified</i>
Archea	Crenarchaeota	unclassified	unclassified	unclassified	sfA	<i>unclassified</i>
Archea	Crenarchaeota	unclassified	unclassified	unclassified	sfC	<i>unclassified</i>
Archea	Euryarchaeota	Archaeoglobi	Archaeoglobales	Archaeoglobaceae	Archaeoglobus	<i>Archaeoglobus veneficus</i>
Archea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	Methanobacterium	<i>Methanobacterium bryantii</i>
Archea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	Methanobacterium	<i>Methanobacterium formicum</i>

Archaea and Bacteria taxa observed during the 2014 GGNP BioBlitz						
Taxa category	Phylum	Class	Order	Family	Genus	Species
Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	Methanobacterium	<i>Methanobacterium palustre</i>
Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	Methanobacterium	<i>unclassified</i>
Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	Methanobrevibacter	<i>Methanobrevibacter arboriphilus</i>
Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	Methanobrevibacter	<i>unclassified</i>
Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	<i>unclassified</i>	<i>unclassified</i>
Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	pMC1	pMC1A4	<i>unclassified</i>
Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	pMC1	<i>unclassified</i>	<i>unclassified</i>
Archaea	Euryarchaeota	Methanococci	Methanococcales	Methanocaldococcaceae	Methanocaldococcus	<i>unclassified</i>
Archaea	Euryarchaeota	Methanomicrobia	ANME-1	<i>unclassified</i>	sfA	<i>unclassified</i>
Archaea	Euryarchaeota	Methanomicrobia	Methanocellales	Methanocellaceae	Methanocella	<i>Methanocella paludicola</i>
Archaea	Euryarchaeota	Methanomicrobia	Methanocellales	Methanocellaceae	Methanocella	<i>unclassified</i>
Archaea	Euryarchaeota	Methanomicrobia	Methanomicrobiales	Methanolineaceae	Methanolinea	<i>unclassified</i>
Archaea	Euryarchaeota	Methanomicrobia	Methanomicrobiales	Methanomicrobiaceae	Methanoculleus	<i>Methanoculleus bourgensis</i>
Archaea	Euryarchaeota	Methanomicrobia	Methanomicrobiales	Methanomicrobiaceae	Methanoculleus	<i>Methanoculleus thermophilus</i>
Archaea	Euryarchaeota	Methanomicrobia	Methanomicrobiales	Methanomicrobiaceae	Methanoculleus	<i>unclassified</i>
Archaea	Euryarchaeota	Methanomicrobia	Methanomicrobiales	Methanomicrobiaceae	Methanoplanus	<i>unclassified</i>
Archaea	Euryarchaeota	Methanomicrobia	Methanomicrobiales	Methanomicrobiaceae	Methanosphaerula	<i>Methanosphaerula palustris</i>
Archaea	Euryarchaeota	Methanomicrobia	Methanomicrobiales	Methanoregulaceae	Candidatus Methanoregula	<i>Methanoregula boonei</i>
Archaea	Euryarchaeota	Methanomicrobia	Methanomicrobiales	Methanoregulaceae	Candidatus Methanoregula	<i>unclassified</i>
Archaea	Euryarchaeota	Methanomicrobia	Methanomicrobiales	Methanospirillaceae	Methanospirillum	<i>unclassified</i>
Archaea	Euryarchaeota	Methanomicrobia	Methanosarcinales	Methanosaetaceae	Methanosaeta	<i>unclassified</i>

Archea and Bacteria taxa observed during the 2014 GGNP BioBlitz						
Taxa category	Phylum	Class	Order	Family	Genus	Species
Archea	Euryarchaeota	Methanomicrobia	Methanosarcinales	Methanosarcinaceae	Methanolobus	<i>unclassified</i>
Archea	Euryarchaeota	Methanomicrobia	Methanosarcinales	Methanosarcinaceae	Methanosarcina	<i>Methanosarcina barkeri</i>
Archea	Euryarchaeota	Methanomicrobia	Methanosarcinales	Methanosarcinaceae	Methanosarcina	<i>Methanosarcina mazei</i>
Archea	Euryarchaeota	Methanomicrobia	Methanosarcinales	Methanosarcinaceae	Methanosarcina	<i>unclassified</i>
Archea	Euryarchaeota	Methanomicrobia	Methanosarcinales	Methanosarcinaceae	<i>unclassified</i>	<i>unclassified</i>
Archea	Euryarchaeota	Methanomicrobia	Methanosarcinales	<i>unclassified</i>	sfC	<i>unclassified</i>
Archea	Euryarchaeota	Methanomicrobia	Methanosarcinales	<i>unclassified</i>	sfD	<i>unclassified</i>
Archea	Euryarchaeota	Methanomicrobia	Methanosarcinales	<i>unclassified</i>	sfF	<i>unclassified</i>
Archea	Euryarchaeota	Thermoplasmata	E2	Marine group II	<i>unclassified</i>	<i>unclassified</i>
Archea	Euryarchaeota	Thermoplasmata	E2	pMC2A33	<i>unclassified</i>	<i>unclassified</i>
Archea	Euryarchaeota	Thermoplasmata	E2	<i>unclassified</i>	sfC	<i>unclassified</i>
Archea	Euryarchaeota	Thermoplasmata	E2	WCHD3-02	<i>unclassified</i>	<i>unclassified</i>
Archea	Euryarchaeota	Thermoplasmata	Thermoplasmatales	Aciduliprofundaceae	<i>unclassified</i>	<i>unclassified</i>
Archea	pMC2A15	<i>unclassified</i>	<i>unclassified</i>	<i>unclassified</i>	sfB	<i>unclassified</i>
Archea	Thaumarchaeota	Thaumarchaeota	Cenarchaeales	Cenarchaeaceae	Cenarchaeum	<i>Cenarchaeum symbiosum</i>
Archea	Thaumarchaeota	Thaumarchaeota	Cenarchaeales	Cenarchaeaceae	Cenarchaeum	<i>unclassified</i>
Archea	Thaumarchaeota	Thaumarchaeota	Cenarchaeales	Cenarchaeaceae	Nitrosopumilus	<i>Nitrosopumilus maritimus</i>
Archea	Thaumarchaeota	Thaumarchaeota	Cenarchaeales	Cenarchaeaceae	Nitrosopumilus	<i>pIVWA5</i>
Archea	Thaumarchaeota	Thaumarchaeota	Cenarchaeales	Cenarchaeaceae	Nitrosopumilus	<i>unclassified</i>
Archea	Thaumarchaeota	Thaumarchaeota	Cenarchaeales	Cenarchaeaceae	<i>unclassified</i>	<i>unclassified</i>
Archea	Thaumarchaeota	Thaumarchaeota	Cenarchaeales	SAGMA-X	<i>unclassified</i>	<i>unclassified</i>
Archea	Thaumarchaeota	Thaumarchaeota	Fhm2A82	<i>unclassified</i>	sfA	<i>unclassified</i>
Archea	Thaumarchaeota	Thaumarchaeota	Nitrososphaerales	Nitrososphaeraceae	Candidatus Nitrososphaera	<i>Candidatus Nitrososphaera gargensis</i>

Archea and Bacteria taxa observed during the 2014 GGNP BioBlitz						
Taxa category	Phylum	Class	Order	Family	Genus	Species
Archea	Thaumarchaeota	Thaumarchaeota	Nitrososphaerales	Nitrososphaeraceae	Candidatus Nitrososphaera	SCA1145
Archea	Thaumarchaeota	Thaumarchaeota	Nitrososphaerales	Nitrososphaeraceae	Candidatus Nitrososphaera	SCA1170
Archea	Thaumarchaeota	Thaumarchaeota	Nitrososphaerales	Nitrososphaeraceae	Candidatus Nitrososphaera	<i>unclassified</i>
Archea	Thaumarchaeota	Thaumarchaeota	SWA11	<i>unclassified</i>	sfA	<i>unclassified</i>
Bacteria	ABY1_OD1	<i>unclassified</i>	<i>unclassified</i>	<i>unclassified</i>	sfI	<i>unclassified</i>
Bacteria	ABY1_OD1	<i>unclassified</i>	<i>unclassified</i>	<i>unclassified</i>	sfJ	<i>unclassified</i>
Bacteria	Acidobacteria	Acidobacteria	Acidobacteriales	Acidobacteriaceae	Acidobacterium	<i>unclassified</i>
Bacteria	Acidobacteria	Acidobacteria	Acidobacteriales	Acidobacteriaceae	Candidatus Koribacter	<i>unclassified</i>
Bacteria	Acidobacteria	Acidobacteria	Acidobacteriales	Acidobacteriaceae	<i>unclassified</i>	<i>unclassified</i>
Bacteria	Acidobacteria	Acidobacteria-5	<i>unclassified</i>	<i>unclassified</i>	sfA	<i>unclassified</i>
Bacteria	Acidobacteria	BPC102	<i>unclassified</i>	<i>unclassified</i>	sfF	<i>unclassified</i>
Bacteria	Acidobacteria	Chloracidobacteria	<i>unclassified</i>	<i>unclassified</i>	sfA	<i>unclassified</i>
Bacteria	Acidobacteria	Chloracidobacteria	<i>unclassified</i>	<i>unclassified</i>	sfB	<i>unclassified</i>
Bacteria	Acidobacteria	Chloracidobacteria	<i>unclassified</i>	<i>unclassified</i>	sfC	<i>unclassified</i>
Bacteria	Acidobacteria	Chloracidobacteria	<i>unclassified</i>	<i>unclassified</i>	sfF	<i>unclassified</i>
Bacteria	Acidobacteria	Holophagae	Acanthopleuribacterales	Acanthopleuribacteraceae	Acanthopleuribacter	<i>unclassified</i>
Bacteria	Acidobacteria	Holophagae	Holophagales	Holophagaceae	Geothrix	<i>unclassified</i>
Bacteria	Acidobacteria	Holophagae	Holophagales	Holophagaceae	<i>unclassified</i>	<i>unclassified</i>
Bacteria	Acidobacteria	iii1-8	32-20	<i>unclassified</i>	sfA	<i>unclassified</i>
Bacteria	Acidobacteria	iii1-8	DS-18	<i>unclassified</i>	sfA	<i>unclassified</i>
Bacteria	Acidobacteria	iii1-8	SJA-36	<i>unclassified</i>	sfA	<i>unclassified</i>
Bacteria	Acidobacteria	MVS-40	<i>unclassified</i>	<i>unclassified</i>	sfA	<i>unclassified</i>
Bacteria	Acidobacteria	PAUC37f	<i>unclassified</i>	<i>unclassified</i>	sfA	<i>unclassified</i>

Archea and Bacteria taxa observed during the 2014 GGNP BioBlitz						
Taxa category	Phylum	Class	Order	Family	Genus	Species
Bacteria	Acidobacteria	RB25	unclassified	unclassified	sfA	<i>unclassified</i>
Bacteria	Acidobacteria	RB25	unclassified	unclassified	sfB	<i>unclassified</i>
Bacteria	Acidobacteria	RB25	unclassified	unclassified	sfF	<i>unclassified</i>
Bacteria	Acidobacteria	RB25	unclassified	unclassified	sfH	<i>unclassified</i>
Bacteria	Acidobacteria	Solibacteres	Solibacterales	Solibacteraceae	Candidatus Solibacter	<i>Candidatus Solibacter usitatus</i>
Bacteria	Acidobacteria	Solibacteres	Solibacterales	Solibacteraceae	Candidatus Solibacter	<i>unclassified</i>
Bacteria	Acidobacteria	Sva0725	Sva0725	unclassified	sfA	<i>unclassified</i>
Bacteria	Acidobacteria	Sva0725	Sva0725	unclassified	sfB	<i>unclassified</i>
Bacteria	Acidobacteria	Sva0725	Sva0725	unclassified	sfD	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	0319-7L14	unclassified	sfA	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	0319-7L14	unclassified	sfB	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Acidimicrobiales	Acidimicrobiaceae	unclassified	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Acidimicrobiales	CL500-29	unclassified	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Acidimicrobiales	EB1017	unclassified	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Acidimicrobiales	lamiaceae	lamia	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Acidimicrobiales	lamiaceae	unclassified	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Acidimicrobiales	ntu14	unclassified	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Acidimicrobiales	SC3-41	unclassified	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Acidimicrobiales	TK06	unclassified	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Acidimicrobiales	ZA3409c	unclassified	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Acidimicrobiales	ZA3612c	unclassified	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	ACK-M1	unclassified	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Actinomyces	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinopolysporaceae	Actinopolyspora	<i>unclassified</i>

Archea and Bacteria taxa observed during the 2014 GGNP BioBlitz						
Taxa category	Phylum	Class	Order	Family	Genus	Species
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Brevibacteriaceae	Brevibacterium	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Cellulomonadaceae	unclassified	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium	<i>Corynebacterium pseudogenitalium</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Frankiaceae	Frankia	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Frankiaceae	unclassified	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Geodermatophilaceae	Blastococcus	<i>Blastococcus aggregatus</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Geodermatophilaceae	Geodermatophilus	<i>Geodermatophilus obscurus</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Geodermatophilaceae	Geodermatophilus	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Geodermatophilaceae	unclassified	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Intrasporangiaceae	Knoellia	<i>Knoellia subterranea</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Intrasporangiaceae	Ornithinococcus	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Intrasporangiaceae	Phycococcus	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Intrasporangiaceae	unclassified	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Kineosporiaceae	Kineococcus	<i>Kineococcus radiotolerans</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Kineosporiaceae	unclassified	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Microbacteriaceae	Agromyces	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Microbacteriaceae	Microbacterium	<i>Microbacterium aurum</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Microbacteriaceae	Microbacterium	<i>Microbacterium chocolatum</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Microbacteriaceae	Microbacterium	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Microbacteriaceae	Microcella	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Microbacteriaceae	unclassified	<i>unclassified</i>

Archea and Bacteria taxa observed during the 2014 GGNP BioBlitz						
Taxa category	Phylum	Class	Order	Family	Genus	Species
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Micrococcaceae	Arthrobacter	<i>Arthrobacter chlorophenolicus</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Micrococcaceae	Arthrobacter	<i>Arthrobacter ureafaciens</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Micrococcaceae	Arthrobacter	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Micrococcaceae	Kocuria	<i>Kocuria marina</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Micrococcaceae	Kocuria	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Micrococcaceae	unclassified	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Micromonosporaceae	Actinoplanes	<i>Actinoplanes ferrugineus</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Micromonosporaceae	Actinoplanes	<i>Actinoplanes italicus</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Micromonosporaceae	Actinoplanes	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Micromonosporaceae	Catellatospora	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Micromonosporaceae	Dactylosporangium	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Micromonosporaceae	Luedemannella	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Micromonosporaceae	Micromonospora	<i>Micromonospora aurantiaca</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Micromonosporaceae	Micromonospora	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Micromonosporaceae	unclassified	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Micromonosporaceae	Virgisporangium	<i>Virgisporangium ochraceum</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium	<i>Mycobacterium stomatepiae</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Nakamurellaceae	unclassified	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Nocardiaceae	Nocardia	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Nocardiaceae	Rhodococcus	<i>Rhodococcus rhodochromus</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Nocardiaceae	Rhodococcus	<i>unclassified</i>

Archea and Bacteria taxa observed during the 2014 GGNP BioBlitz						
Taxa category	Phylum	Class	Order	Family	Genus	Species
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Nocardiodaceae	Friedmanniella	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Nocardiodaceae	Nocardioides	<i>Nocardioides lentus</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Nocardiodaceae	Nocardioides	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Nocardiodaceae	Propionicimonas	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Nocardiodaceae	unclassified	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Nocardioipsaceae	Nocardioipsis	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Propionibacteriaceae	Luteococcus	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Propionibacteriaceae	Microlunatus	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Propionibacteriaceae	Propionibacterium	<i>Propionibacterium acnes</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Propionibacteriaceae	Tessaracoccus	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Propionibacteriaceae	unclassified	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Pseudonocardaceae	Actinomycetospora	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Pseudonocardaceae	Amycolatopsis	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Pseudonocardaceae	Pseudonocardia	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Pseudonocardaceae	Saccharopolyspora	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Sanguibacteraceae	Sanguibacter	<i>Sanguibacter inulinus</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Sanguibacteraceae	Sanguibacter	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Sporichthyaceae	Sporichthya	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Streptomycetaceae	Streptomyces	<i>Streptomyces acidiscabies</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Streptomycetaceae	Streptomyces	<i>Streptomyces flavotricini</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Streptomycetaceae	Streptomyces	<i>Streptomyces flavoviridis</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Streptomycetaceae	Streptomyces	<i>Streptomyces lanatus</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Streptomycetaceae	Streptomyces	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Streptomycetaceae	unclassified	<i>unclassified</i>

Archaea and Bacteria taxa observed during the 2014 GGNP BioBlitz						
Taxa category	Phylum	Class	Order	Family	Genus	Species
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Streptosporangiaceae	Microbispora	<i>Microbispora rosea</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Streptosporangiaceae	Nonomuraea	<i>Nonomuraea salmonea</i>
Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Thermomonosporaceae	Actinocorallia	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Bifidobacteriales	Bifidobacteriaceae	Bifidobacterium	<i>Bifidobacterium adolescentis</i>
Bacteria	Actinobacteria	Actinobacteria	Coriobacteriales	Coriobacteriaceae	Adlercreutzia	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Coriobacteriales	Coriobacteriaceae	Collinsella	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Coriobacteriales	Coriobacteriaceae	Slackia	<i>Slackia exigua</i>
Bacteria	Actinobacteria	Actinobacteria	Coriobacteriales	Coriobacteriaceae	Slackia	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Coriobacteriales	Coriobacteriaceae	unclassified	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	koll13	unclassified	sfA	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	koll13	unclassified	sfB	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	koll13	unclassified	sfD	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	koll13	unclassified	sfE	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	MC47	unclassified	sfA	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Rubrobacterales	Rubrobacteraceae	Rubrobacter	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Solirubrobacterales	Conexibacteraceae	unclassified	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Solirubrobacterales	Patulibacteraceae	Patulibacter	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Solirubrobacterales	Patulibacteraceae	unclassified	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	Solirubrobacterales	Solirubrobacteraceae	unclassified	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	unclassified	unclassified	sfA	<i>unclassified</i>
Bacteria	Actinobacteria	Actinobacteria	unclassified	unclassified	sfB	<i>unclassified</i>
Bacteria	Armatimonadetes	Armatimonadia	Armatimonadales	Armatimonadaceae	Armatimonas	<i>unclassified</i>
Bacteria	Armatimonadetes	Armatimonadia	Armatimonadales	WD294	unclassified	<i>unclassified</i>
Bacteria	Armatimonadetes	CH21	unclassified	unclassified	sfA	<i>unclassified</i>

Archea and Bacteria taxa observed during the 2014 GGNP BioBlitz						
Taxa category	Phylum	Class	Order	Family	Genus	Species
Bacteria	Armatimonadetes	Chthonomonadetes	Chthonomonadales	Chthonomonadaceae	unclassified	<i>unclassified</i>
Bacteria	Armatimonadetes	S1a-1H	unclassified	unclassified	sfA	<i>unclassified</i>
Bacteria	Armatimonadetes	SJA-176	unclassified	unclassified	sfA	<i>unclassified</i>
Bacteria	Armatimonadetes	SJA-176	unclassified	unclassified	sfC	<i>unclassified</i>
Bacteria	Armatimonadetes	unclassified	unclassified	unclassified	sfA	<i>unclassified</i>
Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Bacteroidaceae	Bacteroides	<i>unclassified</i>
Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Marinilabiaceae	unclassified	<i>unclassified</i>
Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Porphyromonadaceae	Parabacteroides	<i>unclassified</i>
Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Porphyromonadaceae	Porphyromonas	<i>Porphyromonas levii</i>
Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Porphyromonadaceae	unclassified	<i>unclassified</i>
Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella	<i>unclassified</i>
Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Rikenellaceae	Alistipes	<i>unclassified</i>
Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Rikenellaceae	unclassified	<i>unclassified</i>
Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Rikenellaceae	unclassified	<i>unclassified</i>
Bacteria	Bacteroidetes	Flavobacteria	Flavobacteriales	Blattabacteriaceae	unclassified	<i>unclassified</i>
Bacteria	Bacteroidetes	Flavobacteria	Flavobacteriales	Corymorphaceae	unclassified	<i>unclassified</i>
Bacteria	Bacteroidetes	Flavobacteria	Flavobacteriales	Cryomorphaceae	Fluviicola	<i>unclassified</i>
Bacteria	Bacteroidetes	Flavobacteria	Flavobacteriales	Cryomorphaceae	unclassified	<i>unclassified</i>
Bacteria	Bacteroidetes	Flavobacteria	Flavobacteriales	Flavobacteriaceae	ALC-1	<i>unclassified</i>
Bacteria	Bacteroidetes	Flavobacteria	Flavobacteriales	Flavobacteriaceae	Aquimarina	<i>unclassified</i>
Bacteria	Bacteroidetes	Flavobacteria	Flavobacteriales	Flavobacteriaceae	Arenibacter	<i>unclassified</i>
Bacteria	Bacteroidetes	Flavobacteria	Flavobacteriales	Flavobacteriaceae	Capnocytophaga	<i>unclassified</i>
Bacteria	Bacteroidetes	Flavobacteria	Flavobacteriales	Flavobacteriaceae	Chryseobacterium	<i>Chryseobacterium daecheongense</i>
Bacteria	Bacteroidetes	Flavobacteria	Flavobacteriales	Flavobacteriaceae	Chryseobacterium	<i>unclassified</i>

Archea and Bacteria taxa observed during the 2014 GGNP BioBlitz						
Taxa category	Phylum	Class	Order	Family	Genus	Species
Bacteria	Bacteroidetes	Flavobacteria	Flavobacteriales	Flavobacteriaceae	Flavobacterium	<i>Flavobacterium columnare</i>
Bacteria	Bacteroidetes	Flavobacteria	Flavobacteriales	Flavobacteriaceae	Flavobacterium	<i>Flavobacterium succinicans</i>
Bacteria	Bacteroidetes	Flavobacteria	Flavobacteriales	Flavobacteriaceae	Flavobacterium	<i>Flavobacterium xanthum</i>
Bacteria	Bacteroidetes	Flavobacteria	Flavobacteriales	Flavobacteriaceae	Flavobacterium	<i>unclassified</i>
Bacteria	Bacteroidetes	Flavobacteria	Flavobacteriales	Flavobacteriaceae	Gelidibacter	<i>unclassified</i>
Bacteria	Bacteroidetes	Flavobacteria	Flavobacteriales	Flavobacteriaceae	Muricauda	<i>unclassified</i>
Bacteria	Bacteroidetes	Flavobacteria	Flavobacteriales	Flavobacteriaceae	Oleya	<i>unclassified</i>
Bacteria	Bacteroidetes	Flavobacteria	Flavobacteriales	Flavobacteriaceae	Polaribacter	<i>Polaribacter irgensii</i>
Bacteria	Bacteroidetes	Flavobacteria	Flavobacteriales	Flavobacteriaceae	Polaribacter	<i>unclassified</i>
Bacteria	Bacteroidetes	Flavobacteria	Flavobacteriales	Flavobacteriaceae	Psychroserpens	<i>unclassified</i>
Bacteria	Bacteroidetes	Flavobacteria	Flavobacteriales	Flavobacteriaceae	Robiginitalea	<i>Robiginitalea biformata</i>
Bacteria	Bacteroidetes	Flavobacteria	Flavobacteriales	Flavobacteriaceae	Salinimicrobium	<i>unclassified</i>
Bacteria	Bacteroidetes	Flavobacteria	Flavobacteriales	Flavobacteriaceae	Sediminicola	<i>unclassified</i>
Bacteria	Bacteroidetes	Flavobacteria	Flavobacteriales	Flavobacteriaceae	Tenacibaculum	<i>unclassified</i>
Bacteria	Bacteroidetes	Flavobacteria	Flavobacteriales	Flavobacteriaceae	unclassified	<i>unclassified</i>
Bacteria	Bacteroidetes	Sphingobacteria	Sphingobacteriales	Chitinophagaceae	Flavisolibacter	<i>unclassified</i>
Bacteria	Bacteroidetes	Sphingobacteria	Sphingobacteriales	Chitinophagaceae	Niastella	<i>unclassified</i>
Bacteria	Bacteroidetes	Sphingobacteria	Sphingobacteriales	Chitinophagaceae	Segetibacter	<i>unclassified</i>
Bacteria	Bacteroidetes	Sphingobacteria	Sphingobacteriales	Chitinophagaceae	unclassified	<i>unclassified</i>
Bacteria	Bacteroidetes	Sphingobacteria	Sphingobacteriales	Cyclobacteriaceae	Algoriphagus	<i>Algoriphagus antarcticus</i>
Bacteria	Bacteroidetes	Sphingobacteria	Sphingobacteriales	Cyclobacteriaceae	Algoriphagus	<i>unclassified</i>
Bacteria	Bacteroidetes	Sphingobacteria	Sphingobacteriales	Cyclobacteriaceae	unclassified	<i>unclassified</i>
Bacteria	Bacteroidetes	Sphingobacteria	Sphingobacteriales	Flammeovirgaceae	Flammeovirga	<i>unclassified</i>
Bacteria	Bacteroidetes	Sphingobacteria	Sphingobacteriales	Flammeovirgaceae	Sporocytophaga	<i>unclassified</i>

Archea and Bacteria taxa observed during the 2014 GGNP BioBlitz						
Taxa category	Phylum	Class	Order	Family	Genus	Species
Bacteria	Bacteroidetes	Sphingobacteria	Sphingobacteriales	Flammeovirgaceae	unclassified	<i>unclassified</i>
Bacteria	Bacteroidetes	Sphingobacteria	Sphingobacteriales	Flexibacteraceae	Cytophaga	<i>unclassified</i>
Bacteria	Bacteroidetes	Sphingobacteria	Sphingobacteriales	Flexibacteraceae	Dyadobacter	<i>unclassified</i>
Bacteria	Bacteroidetes	Sphingobacteria	Sphingobacteriales	Flexibacteraceae	Hymenobacter	<i>unclassified</i>
Bacteria	Bacteroidetes	Sphingobacteria	Sphingobacteriales	Flexibacteraceae	Pontibacter	<i>Pontibacter korlensis</i>
Bacteria	Bacteroidetes	Sphingobacteria	Sphingobacteriales	Flexibacteraceae	Pontibacter	<i>unclassified</i>
Bacteria	Bacteroidetes	Sphingobacteria	Sphingobacteriales	Flexibacteraceae	unclassified	<i>unclassified</i>
Bacteria	Bacteroidetes	Sphingobacteria	Sphingobacteriales	Rhodothermaceae	Salinibacter	<i>unclassified</i>
Bacteria	Bacteroidetes	Sphingobacteria	Sphingobacteriales	Rhodothermaceae	unclassified	<i>unclassified</i>
Bacteria	Bacteroidetes	Sphingobacteria	Sphingobacteriales	Saprospiraceae	Candidatus Aquirestis	<i>unclassified</i>
Bacteria	Bacteroidetes	Sphingobacteria	Sphingobacteriales	Saprospiraceae	Lewinella	<i>Lewinella cohaerens</i>
Bacteria	Bacteroidetes	Sphingobacteria	Sphingobacteriales	Saprospiraceae	Lewinella	<i>unclassified</i>
Bacteria	Bacteroidetes	Sphingobacteria	Sphingobacteriales	Saprospiraceae	unclassified	<i>unclassified</i>
Bacteria	Bacteroidetes	Sphingobacteria	Sphingobacteriales	Sphingobacteriaceae	Pedobacter	<i>unclassified</i>
Bacteria	Bacteroidetes	Sphingobacteria	Sphingobacteriales	Sphingobacteriaceae	Sphingobacterium	<i>unclassified</i>
Bacteria	Bacteroidetes	Sphingobacteria	Sphingobacteriales	Sphingobacteriaceae	unclassified	<i>unclassified</i>
Bacteria	Bacteroidetes	Sphingobacteria	Spingobacteriales	Flammeovirgaceae	Candidatus Amoebophilus	<i>unclassified</i>
Bacteria	Bacteroidetes	Sphingobacteria	Spingobacteriales	Flammeovirgaceae	Candidatus Cardinium	<i>unclassified</i>
Bacteria	BH1	unclassified	unclassified	unclassified	sfA	<i>unclassified</i>
Bacteria	BRC1	09D2Y74	unclassified	unclassified	sfC	<i>unclassified</i>
Bacteria	BRC1	unclassified	unclassified	unclassified	sfA	<i>unclassified</i>
Bacteria	CD12	unclassified	unclassified	unclassified	sfA	<i>unclassified</i>
Bacteria	Chlorobi	Chlorobia	Chlorobiales	BSV19	unclassified	<i>unclassified</i>
Bacteria	Chlorobi	Chlorobia	Chlorobiales	Chlorobiaceae	Chlorobaculum	<i>Chlorobaculum parvum</i>

Archaea and Bacteria taxa observed during the 2014 GGNP BioBlitz						
Taxa category	Phylum	Class	Order	Family	Genus	Species
Bacteria	Chlorobi	Chlorobia	Chlorobiales	OPB56/SM1B09	unclassified	<i>unclassified</i>
Bacteria	Chlorobi	Chlorobia	Chlorobiales	OPB56	unclassified	<i>unclassified</i>
Bacteria	Chlorobi	Ignavibacteria	Ignavibacteriales	Ignavibacteriaceae	unclassified	<i>unclassified</i>
Bacteria	Chloroflexi	Anaerolineae	Anaerolineales	Anaerolinaceae	A4b	<i>unclassified</i>
Bacteria	Chloroflexi	Anaerolineae	Anaerolineales	Anaerolinaceae	CFB-26	<i>unclassified</i>
Bacteria	Chloroflexi	Anaerolineae	Anaerolineales	Anaerolinaceae	DRC31	<i>unclassified</i>
Bacteria	Chloroflexi	Anaerolineae	Anaerolineales	Anaerolinaceae	envOPS12	<i>unclassified</i>
Bacteria	Chloroflexi	Anaerolineae	Anaerolineales	Anaerolinaceae	OPB11	<i>unclassified</i>
Bacteria	Chloroflexi	Anaerolineae	Anaerolineales	Anaerolinaceae	S0208	<i>unclassified</i>
Bacteria	Chloroflexi	Anaerolineae	Anaerolineales	Anaerolinaceae	SHA-20	<i>unclassified</i>
Bacteria	Chloroflexi	Bljii12	AKYG885	Dolo_23	unclassified	<i>unclassified</i>
Bacteria	Chloroflexi	Bljii12	B07_WMSP1	FFCH4570	unclassified	<i>unclassified</i>
Bacteria	Chloroflexi	Caldilineae	Caldilineales	Caldilineaceae	Caldilinea	<i>unclassified</i>
Bacteria	Chloroflexi	Caldilineae	Caldilineales	Caldilineaceae	unclassified	<i>unclassified</i>
Bacteria	Chloroflexi	Chloroflexi	Chloroflexales	Chloroflexaceae	Roseiflexus	<i>unclassified</i>
Bacteria	Chloroflexi	Chloroflexi	Chloroflexales	Chloroflexaceae	unclassified	<i>unclassified</i>
Bacteria	Chloroflexi	Chloroflexi-4	unclassified	unclassified	sfA	<i>unclassified</i>
Bacteria	Chloroflexi	Chloroflexi-4	unclassified	unclassified	sfB	<i>unclassified</i>
Bacteria	Chloroflexi	Chloroflexi-4	unclassified	unclassified	sfJ	<i>unclassified</i>
Bacteria	Chloroflexi	Dehalococcoidetes	Dehalococcoidales	Dehalococcoidaceae	unclassified	<i>unclassified</i>
Bacteria	Chloroflexi	Dehalococcoidetes	Dehalogenimonales	Dehalogenimonaceae	Dehalogenimonas	<i>unclassified</i>
Bacteria	Chloroflexi	Dehalococcoidetes	TK17	S085	unclassified	<i>unclassified</i>
Bacteria	Chloroflexi	Ktedonobacteria	Ktedonobacteriales	Ktedonobacteraceae	Ktedonobacter	<i>unclassified</i>
Bacteria	Chloroflexi	SOGA31	unclassified	unclassified	sfA	<i>unclassified</i>
Bacteria	Chloroflexi	SOGA31	unclassified	unclassified	sfB	<i>unclassified</i>

Archea and Bacteria taxa observed during the 2014 GGNP BioBlitz						
Taxa category	Phylum	Class	Order	Family	Genus	Species
Bacteria	Chloroflexi	Thermobacula	Thermobaculales	Thermobaculaceae	Thermobaculum	<i>unclassified</i>
Bacteria	Chloroflexi	Thermomicrobia	Sphaerobacterales	Sphaerobacterineae	HN1-15	<i>unclassified</i>
Bacteria	Chloroflexi	Thermomicrobia	Sphaerobacterales	Sphaerobacterineae	unclassified	<i>unclassified</i>
Bacteria	Chloroflexi	TK17	mle1-48	unclassified	sfB	<i>unclassified</i>
Bacteria	Chloroflexi	TK17	TK18	unclassified	sfA	<i>unclassified</i>
Bacteria	Chloroflexi	TK17	TK18	unclassified	sfB	<i>unclassified</i>
Bacteria	Cyanobacteria	4C0d-2	SM1D11	unclassified	sfA	<i>unclassified</i>
Bacteria	Cyanobacteria	4C0d-2	YS2	unclassified	sfA	<i>unclassified</i>
Bacteria	Cyanobacteria	Chloroplast	Chlorophyta	Mamiellaceae	unclassified	<i>unclassified</i>
Bacteria	Cyanobacteria	Chloroplast	Chlorophyta	Trebouxiophyceae	unclassified	<i>unclassified</i>
Bacteria	Cyanobacteria	Chloroplast	Chlorophyta	Ulvophyceae	unclassified	<i>unclassified</i>
Bacteria	Cyanobacteria	Chloroplast	Chlorophyta	unclassified	sfA	<i>unclassified</i>
Bacteria	Cyanobacteria	Chloroplast	Cryptophyta	unclassified	sfA	<i>unclassified</i>
Bacteria	Cyanobacteria	Chloroplast	Euglenozoa	unclassified	sfA	<i>unclassified</i>
Bacteria	Cyanobacteria	Chloroplast	Euglenozoa	unclassified	sfJ	<i>unclassified</i>
Bacteria	Cyanobacteria	Chloroplast	Euglenozoa	unclassified	sfK	<i>unclassified</i>
Bacteria	Cyanobacteria	Chloroplast	Haptophyceae	unclassified	sfA	<i>unclassified</i>
Bacteria	Cyanobacteria	Chloroplast	Stramenopiles	unclassified	sfA	<i>unclassified</i>
Bacteria	Cyanobacteria	Chloroplast	Stramenopiles	unclassified	sfB	<i>unclassified</i>
Bacteria	Cyanobacteria	Chloroplast	Stramenopiles	unclassified	sfD	<i>unclassified</i>
Bacteria	Cyanobacteria	Chloroplast	Streptophyta	unclassified	sfA	<i>unclassified</i>
Bacteria	Cyanobacteria	Chloroplast	unclassified	unclassified	sfA	<i>unclassified</i>
Bacteria	Cyanobacteria	Chloroplast	unclassified	unclassified	sfE	<i>unclassified</i>
Bacteria	Cyanobacteria	Nostocophycideae	Nostocales	Nostocaceae	Dolichospermum	<i>unclassified</i>
Bacteria	Cyanobacteria	Nostocophycideae	Nostocales	Nostocaceae	Nodularia	<i>Nodularia sphaerocarpa</i>

Archea and Bacteria taxa observed during the 2014 GGNP BioBlitz						
Taxa category	Phylum	Class	Order	Family	Genus	Species
Bacteria	Cyanobacteria	Nostocophycideae	Nostocales	Nostocaceae	Nostoc	<i>Nostoc punctiforme</i>
Bacteria	Cyanobacteria	Nostocophycideae	Nostocales	Nostocaceae	Nostoc	<i>unclassified</i>
Bacteria	Cyanobacteria	Nostocophycideae	Nostocales	Nostocaceae	Sphaerospermopsis	<i>unclassified</i>
Bacteria	Cyanobacteria	Nostocophycideae	Nostocales	Nostocaceae	<i>unclassified</i>	<i>unclassified</i>
Bacteria	Cyanobacteria	Oscillatoriophycideae	Chroococcales	Gomphosphaeriaceae	<i>unclassified</i>	<i>unclassified</i>
Bacteria	Cyanobacteria	Oscillatoriophycideae	Chroococcales	Microcystaceae	Microcystis	<i>unclassified</i>
Bacteria	Cyanobacteria	Oscillatoriophycideae	Chroococcales	Microcystaceae	<i>unclassified</i>	<i>unclassified</i>
Bacteria	Cyanobacteria	Oscillatoriophycideae	Chroococcales	Synechococcaceae	Synechococcus	<i>unclassified</i>
Bacteria	Cyanobacteria	Oscillatoriophycideae	Chroococcales	<i>unclassified</i>	sfB	<i>unclassified</i>
Bacteria	Cyanobacteria	Oscillatoriophycideae	Oscillatoriales	Gomontiellaceae	<i>unclassified</i>	<i>unclassified</i>
Bacteria	Cyanobacteria	Oscillatoriophycideae	Oscillatoriales	Phormidiaceae	Microcoleus	<i>Microcoleus chthonoplastes</i>
Bacteria	Cyanobacteria	Oscillatoriophycideae	Oscillatoriales	Phormidiaceae	Microcoleus	<i>unclassified</i>
Bacteria	Cyanobacteria	Oscillatoriophycideae	Oscillatoriales	Phormidiaceae	Phormidium	<i>unclassified</i>
Bacteria	Cyanobacteria	Oscillatoriophycideae	<i>unclassified</i>	<i>unclassified</i>	sfB	<i>unclassified</i>
Bacteria	Cyanobacteria	Synechococcophycideae	Pseudanabaenales	Pseudanabaenaceae	Leptolyngbya	<i>Leptolyngbya frigida</i>
Bacteria	Cyanobacteria	Synechococcophycideae	Pseudanabaenales	Pseudanabaenaceae	Leptolyngbya	<i>unclassified</i>
Bacteria	Cyanobacteria	Synechococcophycideae	Pseudanabaenales	Pseudanabaenaceae	<i>unclassified</i>	<i>unclassified</i>
Bacteria	Cyanobacteria	Synechococcophycideae	Synechococcales	Synechococcaceae	Prochlorococcus	<i>unclassified</i>
Bacteria	Dictyoglomi	Dictyoglomia	Dictyoglomales	Dictyoglomaceae	Dictyoglomus	<i>Dictyoglomus turgidum</i>
Bacteria	Elusimicrobia	Elusimicrobia	Elusimicrobiales	<i>unclassified</i>	sfA	<i>unclassified</i>
Bacteria	Elusimicrobia	Elusimicrobia	Elusimicrobiales	<i>unclassified</i>	sfC	<i>unclassified</i>
Bacteria	Elusimicrobia	Endomicrobia	<i>unclassified</i>	<i>unclassified</i>	sfA	<i>unclassified</i>
Bacteria	Fibrobacteres	Fibrobacteres	Fibrobacterales	Fibrobacteraceae	Fibrobacter	<i>Fibrobacter succinogenes</i>

Archaea and Bacteria taxa observed during the 2014 GGNP BioBlitz						
Taxa category	Phylum	Class	Order	Family	Genus	Species
Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Anoxybacillus	<i>Anoxybacillus kestanbolensis</i>
Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus	<i>Bacillus amyloliquefaciens</i>
Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus	<i>Bacillus cytotoxicus</i>
Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus	<i>Bacillus fumarioli</i>
Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus	<i>Bacillus hwajinpoensis</i>
Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus	<i>Bacillus muralis</i>
Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus	<i>Bacillus pocheonensis</i>
Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus	<i>unclassified</i>
Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Geobacillus	<i>unclassified</i>
Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Halolactibacillus	<i>unclassified</i>
Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	unclassified	<i>unclassified</i>
Bacteria	Firmicutes	Bacilli	Bacillales	Paenibacillaceae	Paenibacillus	<i>Paenibacillus borealis</i>
Bacteria	Firmicutes	Bacilli	Bacillales	Paenibacillaceae	Paenibacillus	<i>Paenibacillus macquariensis</i>
Bacteria	Firmicutes	Bacilli	Bacillales	Paenibacillaceae	Paenibacillus	<i>unclassified</i>
Bacteria	Firmicutes	Bacilli	Bacillales	Planococcaceae	Bacillus	<i>Bacillus psychrodurans</i>
Bacteria	Firmicutes	Bacilli	Bacillales	Planococcaceae	Lysinibacillus	<i>unclassified</i>
Bacteria	Firmicutes	Bacilli	Bacillales	Planococcaceae	Sporosarcina	<i>Sporosarcina aquimarina</i>
Bacteria	Firmicutes	Bacilli	Bacillales	Planococcaceae	unclassified	<i>unclassified</i>
Bacteria	Firmicutes	Bacilli	Bacillales	Staphylococcaceae	Macrococcus	<i>unclassified</i>
Bacteria	Firmicutes	Bacilli	Bacillales	Staphylococcaceae	Staphylococcus	<i>Staphylococcus epidermidis</i>
Bacteria	Firmicutes	Bacilli	Bacillales	Staphylococcaceae	Staphylococcus	<i>unclassified</i>
Bacteria	Firmicutes	Bacilli	Bacillales	unclassified	sfA	<i>unclassified</i>
Bacteria	Firmicutes	Bacilli	Exiguobacterales	Exiguobacteraceae	Exiguobacterium	<i>unclassified</i>

Archea and Bacteria taxa observed during the 2014 GGNP BioBlitz						
Taxa category	Phylum	Class	Order	Family	Genus	Species
Bacteria	Firmicutes	Bacilli	Lactobacillales	Aerococcaceae	unclassified	<i>unclassified</i>
Bacteria	Firmicutes	Bacilli	Lactobacillales	Carnobacteriaceae	Alkalibacterium	<i>unclassified</i>
Bacteria	Firmicutes	Bacilli	Lactobacillales	Carnobacteriaceae	Marinilactibacillus	<i>Marinilactibacillus psychrotolerans</i>
Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus	<i>Lactobacillus agilis</i>
Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus	<i>Lactobacillus farraginis</i>
Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus	<i>unclassified</i>
Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Pediococcus	<i>Pediococcus ethanolidurans</i>
Bacteria	Firmicutes	Bacilli	Lactobacillales	Leuconostocaceae	Leuconostoc	<i>unclassified</i>
Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus	<i>Streptococcus salivarius</i>
Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus	<i>unclassified</i>
Bacteria	Firmicutes	Bacilli	Thermicanales	Thermicanaceae	Thermicanus	<i>unclassified</i>
Bacteria	Firmicutes	Clostridia	1B07	unclassified	sfB	<i>unclassified</i>
Bacteria	Firmicutes	Clostridia	Clostridiales	Catabacteriaceae	unclassified	<i>unclassified</i>
Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium	<i>Clostridium bowmanii</i>
Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium	<i>Clostridium kluyveri</i>
Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium	<i>unclassified</i>
Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	unclassified	<i>unclassified</i>
Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiales Family XI. Incertae Sedis	Anaerococcus	<i>unclassified</i>
Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiales Family XI. Incertae Sedis	Peptoniphilus	<i>unclassified</i>
Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiales Family XI. Incertae Sedis	unclassified	<i>unclassified</i>
Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiales Family XII. Incertae Sedis	unclassified	<i>unclassified</i>

Archea and Bacteria taxa observed during the 2014 GGNP BioBlitz						
Taxa category	Phylum	Class	Order	Family	Genus	Species
Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiales Family XIII. Incertae Sedis	Eubacterium	<i>unclassified</i>
Bacteria	Firmicutes	Clostridia	Clostridiales	Dehalobacteriaceae	Dehalobacterium	<i>unclassified</i>
Bacteria	Firmicutes	Clostridia	Clostridiales	Eubacteriaceae	unclassified	<i>unclassified</i>
Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Blautia	<i>Ruminococcus obeum</i>
Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Blautia	<i>unclassified</i>
Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Butyrivibrio	<i>unclassified</i>
Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Clostridium	<i>unclassified</i>
Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Coprococcus	<i>unclassified</i>
Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Epulopiscium	<i>unclassified</i>
Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Roseburia	<i>Eubacterium rectale</i>
Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Ruminococcus	<i>unclassified</i>
Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	unclassified	<i>unclassified</i>
Bacteria	Firmicutes	Clostridia	Clostridiales	Peptococcaceae	Desulfosporosinus	<i>Desulfosporosinus meridiei</i>
Bacteria	Firmicutes	Clostridia	Clostridiales	Peptococcaceae	Desulfotomaculum	<i>unclassified</i>
Bacteria	Firmicutes	Clostridia	Clostridiales	Peptococcaceae	unclassified	<i>unclassified</i>
Bacteria	Firmicutes	Clostridia	Clostridiales	Ruminococcaceae	Clostridium	<i>unclassified</i>
Bacteria	Firmicutes	Clostridia	Clostridiales	Ruminococcaceae	Faecalibacterium	<i>unclassified</i>
Bacteria	Firmicutes	Clostridia	Clostridiales	Ruminococcaceae	Oscillospira	<i>unclassified</i>
Bacteria	Firmicutes	Clostridia	Clostridiales	Ruminococcaceae	Ruminococcus	<i>Ruminococcus flavefaciens</i>
Bacteria	Firmicutes	Clostridia	Clostridiales	Ruminococcaceae	Ruminococcus	<i>unclassified</i>
Bacteria	Firmicutes	Clostridia	Clostridiales	Ruminococcaceae	unclassified	<i>unclassified</i>
Bacteria	Firmicutes	Clostridia	Clostridiales	Sulfobacillaceae	YNPFFP6	<i>unclassified</i>
Bacteria	Firmicutes	Clostridia	Clostridiales	Syntrophomonadaceae	Syntrophomonas	<i>unclassified</i>

Archaea and Bacteria taxa observed during the 2014 GGNP BioBlitz						
Taxa category	Phylum	Class	Order	Family	Genus	Species
Bacteria	Firmicutes	Clostridia	Clostridiales	Thermoanaerobacterales Family III. Incertae Sedis	Thermoanaerobacterium	<i>Thermoanaerobacterium saccharolyticum</i>
Bacteria	Firmicutes	Clostridia	Clostridiales	Veillonellaceae	Desulfosporomusa	<i>unclassified</i>
Bacteria	Firmicutes	Clostridia	Clostridiales	Veillonellaceae	Selenomonas	<i>unclassified</i>
Bacteria	Firmicutes	Clostridia	Clostridiales	Veillonellaceae	unclassified	<i>unclassified</i>
Bacteria	Firmicutes	Clostridia	Clostridiales	Veillonellaceae	Veillonella	<i>unclassified</i>
Bacteria	Firmicutes	Clostridia	Halanaerobiales	Halanaerobiaceae	unclassified	<i>unclassified</i>
Bacteria	Firmicutes	Clostridia	Natranaerobiales	ML1228J-1	unclassified	<i>unclassified</i>
Bacteria	Firmicutes	Clostridia	OPB54	unclassified	sfB	<i>unclassified</i>
Bacteria	Firmicutes	Clostridia	SHA-98	unclassified	sfA	<i>unclassified</i>
Bacteria	Firmicutes	Clostridia	SHA-98	unclassified	sfC	<i>unclassified</i>
Bacteria	Firmicutes	Clostridia	Thermoanaerobacterales	Thermoanaerobacteraceae	Ammonifex	<i>unclassified</i>
Bacteria	Firmicutes	Clostridia	Thermoanaerobacterales	Thermoanaerobacteraceae	Moorella	<i>unclassified</i>
Bacteria	Firmicutes	Clostridia	Thermoanaerobacterales	Thermoanaerobacterales Family III. Incertae Sedis	Thermovenabulum	<i>unclassified</i>
Bacteria	Firmicutes	Clostridia	Thermoanaerobacterales	unclassified	sfC	<i>unclassified</i>
Bacteria	Fusobacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	Fusobacterium	<i>unclassified</i>
Bacteria	Fusobacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	Leptotrichia	<i>Leptotrichia trevisanii</i>
Bacteria	Fusobacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	Leptotrichia	<i>unclassified</i>
Bacteria	Fusobacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	Propionigenium	<i>Propionigenium maris</i>
Bacteria	Fusobacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	Propionigenium	<i>unclassified</i>
Bacteria	Fusobacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	u114	<i>unclassified</i>
Bacteria	Gemmatimonadetes	Gemmatimonadetes	Gemmatimonadales	Gemmatimonadaceae	Gemmatimonas	<i>unclassified</i>
Bacteria	Gemmatimonadetes	Gemmatimonadetes	Gemmatimonadales	Gemmatimonadaceae	unclassified	<i>unclassified</i>
Bacteria	Gemmatimonadetes	Gemmatimonadetes	unclassified	unclassified	sfA	<i>unclassified</i>
Bacteria	Gemmatimonadetes	Gemmatimonadetes	unclassified	unclassified	sfD	<i>unclassified</i>

Archaea and Bacteria taxa observed during the 2014 GGNP BioBlitz						
Taxa category	Phylum	Class	Order	Family	Genus	Species
Bacteria	Gemmatimonadetes	Gemmatimonadetes	unclassified	unclassified	sfF	<i>unclassified</i>
Bacteria	Gemmatimonadetes	Gemmatimonadetes	unclassified	unclassified	sfM	<i>unclassified</i>
Bacteria	Gemmatimonadetes	Gemmatimonadetes	unclassified	unclassified	sfQ	<i>unclassified</i>
Bacteria	GN04	GN15	unclassified	unclassified	sfA	<i>unclassified</i>
Bacteria	GN04	GN15	unclassified	unclassified	sfD	<i>unclassified</i>
Bacteria	GN04	MSB-5A5	unclassified	unclassified	sfA	<i>unclassified</i>
Bacteria	HDBW-WB69	unclassified	unclassified	unclassified	sfB	<i>unclassified</i>
Bacteria	Hyd24-12	unclassified	unclassified	unclassified	sfA	<i>unclassified</i>
Bacteria	KSB1	GW-22	unclassified	unclassified	sfB	<i>unclassified</i>
Bacteria	LCP-89	unclassified	unclassified	unclassified	sfA	<i>unclassified</i>
Bacteria	Lentisphaerae	Lentisphaerae	Lentisphaerales	Lentisphaeraceae	Lentisphaera	<i>unclassified</i>
Bacteria	Lentisphaerae	Lentisphaerae	Lentisphaerales	Lentisphaeraceae	unclassified	<i>unclassified</i>
Bacteria	Lentisphaerae	Lentisphaerae	Victivallales	Victivallaceae	unclassified	<i>unclassified</i>
Bacteria	Lentisphaerae	Lentisphaerae	Z20	unclassified	sfB	<i>unclassified</i>
Bacteria	Lentisphaerae	Lentisphaerae	Z20	unclassified	sfC	<i>unclassified</i>
Bacteria	NC10	42362	JH-WHS47	unclassified	sfA	<i>unclassified</i>
Bacteria	NC10	wb1-A12	unclassified	unclassified	sfA	<i>unclassified</i>
Bacteria	Nitrospirae	Nitrospira	Nitrospirales	FW	42123	<i>unclassified</i>
Bacteria	Nitrospirae	Nitrospira	Nitrospirales	Nitrospiraceae	Nitrospira	<i>unclassified</i>
Bacteria	Nitrospirae	Nitrospira	Nitrospirales	Thermodesulfobivibrionaceae	BD2-6	<i>unclassified</i>
Bacteria	Nitrospirae	Nitrospira	Nitrospirales	Thermodesulfobivibrionaceae	GOUTA19	<i>unclassified</i>
Bacteria	Nitrospirae	Nitrospira	Nitrospirales	Thermodesulfobivibrionaceae	LCP-6	<i>unclassified</i>
Bacteria	NKB19	GN13	unclassified	unclassified	sfA	<i>unclassified</i>
Bacteria	NKB19	unclassified	unclassified	unclassified	sfA	<i>unclassified</i>
Bacteria	NKB19	unclassified	unclassified	unclassified	sfC	<i>unclassified</i>

Archea and Bacteria taxa observed during the 2014 GGNP BioBlitz						
Taxa category	Phylum	Class	Order	Family	Genus	Species
Bacteria	OP1	GAL35	unclassified	unclassified	sfB	<i>unclassified</i>
Bacteria	OP11	OP11-4	RCP1-27	unclassified	sfA	<i>unclassified</i>
Bacteria	OP11	unclassified	unclassified	unclassified	sfB	<i>unclassified</i>
Bacteria	OP3	BD4-9	unclassified	unclassified	sfB	<i>unclassified</i>
Bacteria	OP3	BD4-9	unclassified	unclassified	sfD	<i>unclassified</i>
Bacteria	OP3	koll11	GIF10	kpj58rc	unclassified	<i>unclassified</i>
Bacteria	OP3	PBS-25	unclassified	unclassified	sfA	<i>unclassified</i>
Bacteria	OP3	PBS-25	unclassified	unclassified	sfB	<i>unclassified</i>
Bacteria	OP3	PBS-25	unclassified	unclassified	sfD	<i>unclassified</i>
Bacteria	Planctomycetes	agg27	CL500-15	unclassified	sfA	<i>unclassified</i>
Bacteria	Planctomycetes	agg27	OM190	unclassified	sfA	<i>unclassified</i>
Bacteria	Planctomycetes	agg27	OM190	unclassified	sfB	<i>unclassified</i>
Bacteria	Planctomycetes	C6	unclassified	unclassified	sfC	<i>unclassified</i>
Bacteria	Planctomycetes	C6	unclassified	unclassified	sfD	<i>unclassified</i>
Bacteria	Planctomycetes	FFCH393	unclassified	unclassified	sfC	<i>unclassified</i>
Bacteria	Planctomycetes	Koll-18	unclassified	unclassified	sfB	<i>unclassified</i>
Bacteria	Planctomycetes	Phycisphaerae	Phycisphaerales	unclassified	sfA	<i>unclassified</i>
Bacteria	Planctomycetes	Phycisphaerae	Phycisphaerales	unclassified	sfC	<i>unclassified</i>
Bacteria	Planctomycetes	Planctomycea	Gemmatales	Gemmataceae	Gemmata	<i>unclassified</i>
Bacteria	Planctomycetes	Planctomycea	Gemmatales	Gemmataceae	unclassified	<i>unclassified</i>
Bacteria	Planctomycetes	Planctomycea	Gemmatales	Isosphaeraceae	Isosphaera	<i>unclassified</i>
Bacteria	Planctomycetes	Planctomycea	Gemmatales	Isosphaeraceae	Singulisphaera	<i>Singulisphaera acidiphila</i>
Bacteria	Planctomycetes	Planctomycea	Gemmatales	Isosphaeraceae	unclassified	<i>unclassified</i>
Bacteria	Planctomycetes	Planctomycea	Planctomycetales	Planctomycetaceae	A17	<i>unclassified</i>
Bacteria	Planctomycetes	Planctomycea	Planctomycetales	Planctomycetaceae	Pirellula	<i>unclassified</i>

Archea and Bacteria taxa observed during the 2014 GGNP BioBlitz						
Taxa category	Phylum	Class	Order	Family	Genus	Species
Bacteria	Planctomycetes	Planctomycea	Planctomycetales	Planctomycetaceae	Planctomyces	<i>unclassified</i>
Bacteria	Planctomycetes	Planctomycea	Planctomycetales	Planctomycetaceae	Rhodopirellula	<i>Rhodopirellula baltica</i>
Bacteria	Planctomycetes	Planctomycea	Planctomycetales	Planctomycetaceae	Rhodopirellula	<i>unclassified</i>
Bacteria	Planctomycetes	Planctomycea	Planctomycetales	Planctomycetaceae	<i>unclassified</i>	<i>unclassified</i>
Bacteria	Planctomycetes	vadinHA49	<i>unclassified</i>	<i>unclassified</i>	sfB	<i>unclassified</i>
Bacteria	Planctomycetes	vadinHA49	<i>unclassified</i>	<i>unclassified</i>	sfF	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Caulobacterales	Caulobacteraceae	Asticcacaulis	<i>Asticcacaulis biprosthecium</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Caulobacterales	Caulobacteraceae	Asticcacaulis	<i>Asticcacaulis excentricus</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Caulobacterales	Caulobacteraceae	Brevundimonas	<i>Brevundimonas diminuta</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Caulobacterales	Caulobacteraceae	Brevundimonas	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Caulobacterales	Caulobacteraceae	Caulobacter	<i>Caulobacter henricii</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Caulobacterales	Caulobacteraceae	Caulobacter	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Caulobacterales	Caulobacteraceae	Phenylobacterium	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Caulobacterales	Caulobacteraceae	<i>unclassified</i>	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Magnetococcales	Magnetococcaceae	Magnetococcus	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Parvularculales	Parvularculaceae	Parvularcula	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Aurantimonadaceae	Aurantimonas	<i>Aurantimonas altamirensis</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Beijerinckiaceae	<i>unclassified</i>	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Bradyrhizobiaceae	Afipia	<i>Afipia genosp. 1</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Bradyrhizobiaceae	Afipia	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Bradyrhizobiaceae	Balneimonas	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Bradyrhizobiaceae	Bradyrhizobium	<i>Bradyrhizobium elkanii</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Bradyrhizobiaceae	Bradyrhizobium	<i>Bradyrhizobium yuanmingense</i>

Archaea and Bacteria taxa observed during the 2014 GGNP BioBlitz						
Taxa category	Phylum	Class	Order	Family	Genus	Species
Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Bradyrhizobiaceae	Bradyrhizobium	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Bradyrhizobiaceae	Methylobacterium	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Bradyrhizobiaceae	Nitrobacter	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Bradyrhizobiaceae	Rhodopseudomonas	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Bradyrhizobiaceae	unclassified	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Brucellaceae	Brucella	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Hyphomicrobiaceae	Devosia	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Hyphomicrobiaceae	Hyphomicrobium	<i>Hyphomicrobium facile</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Hyphomicrobiaceae	Hyphomicrobium	<i>Hyphomicrobium sulfonivorans</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Hyphomicrobiaceae	Hyphomicrobium	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Hyphomicrobiaceae	Pedomicrobium	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Hyphomicrobiaceae	Rhodoplanes	<i>Rhodoplanes elegans</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Hyphomicrobiaceae	Rhodoplanes	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Hyphomicrobiaceae	unclassified	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Methylobacteriaceae	Methylobacterium	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Methylocystaceae	unclassified	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Nordellaceae	Nordella	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Phyllobacteriaceae	Ahrensia	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Phyllobacteriaceae	Chelativorans	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Phyllobacteriaceae	Mesorhizobium	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Phyllobacteriaceae	Nitrateductor	<i>Nitrateductor aquibiodomus</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Phyllobacteriaceae	Parvibaculum	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Phyllobacteriaceae	unclassified	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Rhizobiaceae	Agrobacterium	<i>unclassified</i>

Archaea and Bacteria taxa observed during the 2014 GGNP BioBlitz						
Taxa category	Phylum	Class	Order	Family	Genus	Species
Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Rhizobiaceae	Rhizobium	<i>Rhizobium etli</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Rhizobiaceae	Rhizobium	<i>Rhizobium galegae</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Rhizobiaceae	Rhizobium	<i>Rhizobium leguminosarum</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Rhizobiaceae	Rhizobium	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Rhizobiaceae	Shinella	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Rhizobiaceae	<i>unclassified</i>	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Rhodobiaceae	Afifella	<i>Afifella marina</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Rhodobiaceae	<i>unclassified</i>	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	<i>unclassified</i>	sfA	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Xanthobacteraceae	Azorhizobium	<i>Azorhizobium doebereineriae</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Xanthobacteraceae	Labrys	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Hyphomonadaceae	Hyphomonas	<i>Hyphomonas neptunium</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Hyphomonadaceae	Hyphomonas	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Hyphomonadaceae	Maricaulis	<i>Maricaulis virginensis</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Hyphomonadaceae	Oceanicaulis	<i>Oceanicaulis alexandrii</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Hyphomonadaceae	<i>unclassified</i>	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	Amaricoccus	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	Dinoroseobacter	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	Marinovum	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	Marivita	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	Paracoccus	<i>Paracoccus aminovorans</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	Paracoccus	<i>Paracoccus marcusii</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	Paracoccus	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	Phaeobacter	<i>unclassified</i>

Archea and Bacteria taxa observed during the 2014 GGNP BioBlitz						
Taxa category	Phylum	Class	Order	Family	Genus	Species
Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	Pseudoruegeria	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	Rhodobacter	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	Roseivivax	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	Rubellimicrobium	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	Sulfitobacter	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	Thalassobacter	<i>Thalassobacter stenotrophicus</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	Thioclava	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>unclassified</i>	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhodospirillales	Acetobacteraceae	Acidisoma	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhodospirillales	Acetobacteraceae	Acidisphaera	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhodospirillales	Acetobacteraceae	Acidocella	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhodospirillales	Acetobacteraceae	Gluconacetobacter	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhodospirillales	Acetobacteraceae	Gluconobacter	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhodospirillales	Acetobacteraceae	Roseomonas	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhodospirillales	Acetobacteraceae	<i>unclassified</i>	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhodospirillales	Rhodospirillaceae	Azospirillum	<i>Azospirillum brasilense</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhodospirillales	Rhodospirillaceae	Azospirillum	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhodospirillales	Rhodospirillaceae	Inquilinus	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhodospirillales	Rhodospirillaceae	Magnetospirillum	<i>Magnetospirillum sp.</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhodospirillales	Rhodospirillaceae	Nisaea	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhodospirillales	Rhodospirillaceae	Novospirillum	<i>Novospirillum itersonii</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhodospirillales	Rhodospirillaceae	Rhodospirillum	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhodospirillales	Rhodospirillaceae	Skermanella	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rhodospirillales	Rhodospirillaceae	<i>unclassified</i>	<i>unclassified</i>

Archaea and Bacteria taxa observed during the 2014 GGNP BioBlitz						
Taxa category	Phylum	Class	Order	Family	Genus	Species
Bacteria	Proteobacteria	Alphaproteobacteria	Rickettsiales	Anaplasmataceae	Anaplasma	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rickettsiales	Odysseellaceae	Candidatus Odysella	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rickettsiales	Pelagibacteraceae	Candidatus Pelagibacter	<i>Candidatus Pelagibacter ubique</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rickettsiales	Pelagibacteraceae	Candidatus Pelagibacter	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rickettsiales	Rickettsiaceae	Rickettsia	<i>Rickettsia akari</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rickettsiales	Rickettsiaceae	Rickettsia	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Rickettsiales	Rickettsiaceae	Wolbachia	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Sphingomonadales	Erythrobacteraceae	Erythrobacter	<i>Erythrobacter citreus</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Sphingomonadales	Erythrobacteraceae	Erythrobacter	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Sphingomonadales	Erythrobacteraceae	Lutibacterium	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Sphingomonadales	Erythrobacteraceae	Porphyrobacter	<i>Porphyrobacter tepidarius</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Sphingomonadales	Erythrobacteraceae	unclassified	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Sphingomonadales	Sphingomonadaceae	Blastomonas	<i>Blastomonas natatoria</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Sphingomonadales	Sphingomonadaceae	Kaistobacter	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Sphingomonadales	Sphingomonadaceae	Novosphingobium	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Sphingomonadales	Sphingomonadaceae	Sphingobium	<i>Sphingomonas agrestis</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Sphingomonadales	Sphingomonadaceae	Sphingobium	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Sphingomonadales	Sphingomonadaceae	Sphingomonas	<i>Sphingomonas asaccharolytica</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Sphingomonadales	Sphingomonadaceae	Sphingomonas	<i>Sphingomonas wittichii</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Sphingomonadales	Sphingomonadaceae	Sphingomonas	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Sphingomonadales	Sphingomonadaceae	Sphingopyxis	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	Sphingomonadales	Sphingomonadaceae	unclassified	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	unclassified	unclassified	sfA	<i>unclassified</i>

Archea and Bacteria taxa observed during the 2014 GGNP BioBlitz						
Taxa category	Phylum	Class	Order	Family	Genus	Species
Bacteria	Proteobacteria	Alphaproteobacteria	unclassified	unclassified	sfC	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	unclassified	unclassified	sfl	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	unclassified	unclassified	sfO	<i>unclassified</i>
Bacteria	Proteobacteria	Alphaproteobacteria	unclassified	unclassified	sfU	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Alcaligenaceae	Achromobacter	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Alcaligenaceae	Alcaligenes	<i>Alcaligenes faecalis</i>
Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Alcaligenaceae	Azohydromonas	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Alcaligenaceae	Sutterella	<i>Sutterella parvirubra</i>
Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Alcaligenaceae	Sutterella	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Alcaligenaceae	unclassified	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Aquabacteriaceae	Aquabacterium	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Burkholderiaceae	Burkholderia	<i>Burkholderia mallei</i>
Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Burkholderiaceae	Burkholderia	<i>Candidatus Burkholderia kirkii</i>
Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Burkholderiaceae	Burkholderia	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Burkholderiaceae	Cupriavidus	<i>Cupriavidus pauculus</i>
Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Burkholderiaceae	Cupriavidus	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Burkholderiaceae	Pandoraea	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Burkholderiaceae	Polynucleobacter	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Burkholderiaceae	Ralstonia	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Burkholderiaceae	unclassified	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Comamonadaceae	Acidovorax	<i>Acidovorax delafieldii</i>
Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Comamonadaceae	Acidovorax	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Comamonadaceae	Brachymonas	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Comamonadaceae	Comamonas	<i>Comamonas terrigena</i>

Archea and Bacteria taxa observed during the 2014 GGNP BioBlitz						
Taxa category	Phylum	Class	Order	Family	Genus	Species
Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Comamonadaceae	Comamonas	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Comamonadaceae	Delftia	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Comamonadaceae	Diaphorobacter	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Comamonadaceae	Hydrogenophaga	<i>Hydrogenophaga taeniospiralis</i>
Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Comamonadaceae	Hylemonella	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Comamonadaceae	Limnohabitans	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Comamonadaceae	Polaromonas	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Comamonadaceae	Ramlibacter	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Comamonadaceae	Rhodoferax	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Comamonadaceae	Roseateles	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Comamonadaceae	Simplicispira	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Comamonadaceae	<i>unclassified</i>	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Comamonadaceae	Variovorax	<i>Variovorax paradoxus</i>
Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Comamonadaceae	Verminephrobacter	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Comamonadaceae	Verminephrobacter	<i>Verminephrobacter eiseniae</i>
Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Ideonellaceae	Ideonella	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Methylibiaceae	Methylibium	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Oxalobacteraceae	Collimonas	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Oxalobacteraceae	Herbaspirillum	<i>Herbaspirillum seropedicae</i>
Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Oxalobacteraceae	Herbaspirillum	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Oxalobacteraceae	Janthinobacterium	<i>Janthinobacterium lividum</i>
Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Oxalobacteraceae	Janthinobacterium	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Oxalobacteraceae	Massilia	<i>Massilia timonae</i>

Archea and Bacteria taxa observed during the 2014 GGNP BioBlitz						
Taxa category	Phylum	Class	Order	Family	Genus	Species
Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Oxalobacteraceae	Massilia	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Oxalobacteraceae	Oxalobacter	<i>Oxalobacter formigenes</i>
Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Oxalobacteraceae	Oxalobacter	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Oxalobacteraceae	Paucimonas	<i>Paucimonas lemoignei</i>
Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Oxalobacteraceae	unclassified	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Rubrivivaceae	Rubrivivax	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Tepidimonaceae	Tepidimonas	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Thiomonaceae	Thiomonas	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Gallionellales	Gallionellaceae	Gallionella	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Gallionellales	Gallionellaceae	unclassified	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Hydrogenophilales	Hydrogenophilaceae	Thiobacillus	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Hydrogenophilales	Hydrogenophilaceae	unclassified	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Methylophilales	Methylophilaceae	Methylophilus	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Methylophilales	Methylophilaceae	Methylotenera	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Methylophilales	Methylophilaceae	unclassified	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Neisseriales	Neisseriaceae	unclassified	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Neisseriales	Neisseriaceae	Vogesella	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Nitrosomonadales	Nitrosomonadaceae	Nitrosomonas	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Nitrosomonadales	Nitrosomonadaceae	Nitrospira	<i>Nitrospira multiformis</i>
Bacteria	Proteobacteria	Betaproteobacteria	Nitrosomonadales	Nitrosomonadaceae	Nitrosovibrio	<i>Nitrosovibrio tenuis</i>
Bacteria	Proteobacteria	Betaproteobacteria	Nitrosomonadales	Nitrosomonadaceae	unclassified	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Rhodocyclales	Rhodocyclaceae	Aromatoleum	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Rhodocyclales	Rhodocyclaceae	Azoarcus	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Rhodocyclales	Rhodocyclaceae	Azovibrio	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Rhodocyclales	Rhodocyclaceae	Dechloromonas	<i>unclassified</i>

Archaea and Bacteria taxa observed during the 2014 GGNP BioBlitz						
Taxa category	Phylum	Class	Order	Family	Genus	Species
Bacteria	Proteobacteria	Betaproteobacteria	Rhodocyclales	Rhodocyclaceae	Methyloversatilis	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Rhodocyclales	Rhodocyclaceae	Rhodocyclus	<i>Rhodocyclus tenuis</i>
Bacteria	Proteobacteria	Betaproteobacteria	Rhodocyclales	Rhodocyclaceae	unclassified	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Rhodocyclales	Rhodocyclaceae	Zoogloea	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	Rhodocyclales	unclassified	sfA	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	unclassified	unclassified	sfA	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	unclassified	unclassified	sfB	<i>unclassified</i>
Bacteria	Proteobacteria	Betaproteobacteria	unclassified	unclassified	sfH	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	Bdellovibrionales	Bacteriovoracaceae	Bacteriovorax	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	Bdellovibrionales	Bacteriovoracaceae	unclassified	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	Bdellovibrionales	Bdellovibrionaceae	Bdellovibrio	<i>Bdellovibrio bacteriovorus</i>
Bacteria	Proteobacteria	Deltaproteobacteria	Bdellovibrionales	Bdellovibrionaceae	Bdellovibrio	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	Bdellovibrionales	Bdellovibrionaceae	unclassified	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	CTD005-82B-02	unclassified	sfA	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	CTD005-82B-02	unclassified	sfC	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	Desulfobacterales	Desulfobulbaceae	DesulfobacteriumII	<i>Desulfobacterium catecholicum</i>
Bacteria	Proteobacteria	Deltaproteobacteria	Desulfobacterales	Desulfobulbaceae	unclassified	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	Desulfobacterales	Nitrospinaeae	Nitrospina	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	Desulfobacterales	Nitrospinaeae	unclassified	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	Desulfovibrionales	Desulfohalobiaceae	Desulfovermiculus	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	Desulfovibrionales	Desulfovibrionaceae	Desulfovibrio	<i>Desulfovibrio dechloracetivorans</i>
Bacteria	Proteobacteria	Deltaproteobacteria	Desulfovibrionales	Desulfovibrionaceae	Desulfovibrio	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	Desulfuromonadales	Desulfuromonadaceae	unclassified	<i>unclassified</i>

Archaea and Bacteria taxa observed during the 2014 GGNP BioBlitz						
Taxa category	Phylum	Class	Order	Family	Genus	Species
Bacteria	Proteobacteria	Deltaproteobacteria	Desulfuromonadales	Geobacteraceae	Geobacter	<i>Pelobacter propionicus</i>
Bacteria	Proteobacteria	Deltaproteobacteria	Desulfuromonadales	Geobacteraceae	Geobacter	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	Desulfuromonadales	Pelobacteraceae	Pelobacter	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	Entothionellales	Entothionellaceae	Candidatus Entothionella	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	MIZ46	unclassified	sfA	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	Myxococcales	Haliangiaceae	Haliangium	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	Myxococcales	Haliangiaceae	unclassified	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	Myxococcales	Myxococcaceae	Anaeromyxobacter	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	Myxococcales	Myxococcaceae	Corallococcus	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	Myxococcales	Nannocystaceae	Nannocystis	<i>Nannocystis exedens</i>
Bacteria	Proteobacteria	Deltaproteobacteria	Myxococcales	Nannocystaceae	Plesiocystis	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	Myxococcales	Polyangiaceae	Chondromyces	<i>Chondromyces robustus</i>
Bacteria	Proteobacteria	Deltaproteobacteria	Myxococcales	Polyangiaceae	Chondromyces	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	Myxococcales	Polyangiaceae	unclassified	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	Myxococcales	unclassified	sfA	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	Myxococcales	unclassified	sfAC	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	Myxococcales	unclassified	sfAE	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	Myxococcales	unclassified	sfAF	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	Myxococcales	unclassified	sfB	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	Myxococcales	unclassified	sfC	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	Myxococcales	unclassified	sfD	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	Myxococcales	unclassified	sfE	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	Myxococcales	unclassified	sfF	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	Myxococcales	unclassified	sfl	<i>unclassified</i>

Archaea and Bacteria taxa observed during the 2014 GGNP BioBlitz						
Taxa category	Phylum	Class	Order	Family	Genus	Species
Bacteria	Proteobacteria	Deltaproteobacteria	Myxococcales	unclassified	sfJ	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	Myxococcales	unclassified	sfM	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	Myxococcales	unclassified	sfN	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	Myxococcales	unclassified	sfO	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	Myxococcales	unclassified	sfR	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	Myxococcales	unclassified	sfS	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	Myxococcales	unclassified	sfU	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	Myxococcales	unclassified	sfX	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	Myxococcales	unclassified	sfY	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	NB1-j	JTB38	unclassified	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	NB1-j	MND4	unclassified	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	NB1-j	NB1-i	unclassified	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	NB1-j	unclassified	sfA	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	NB1-j	unclassified	sfG	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	Syntrophobacterales	Desulfobacteraceae	unclassified	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	Syntrophobacterales	Syntrophaceae	Desulfobacca	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	Syntrophobacterales	Syntrophaceae	Syntrophus	<i>Syntrophus sp.</i>
Bacteria	Proteobacteria	Deltaproteobacteria	Syntrophobacterales	Syntrophaceae	unclassified	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	Syntrophobacterales	Syntrophobacteraceae	Syntrophobacter	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	Syntrophobacterales	Syntrophobacteraceae	unclassified	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	Syntrophobacterales	Syntrophorhabdaceae	unclassified	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	unclassified	unclassified	sfA	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	unclassified	unclassified	sfAB	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	unclassified	unclassified	sfAK	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	unclassified	unclassified	sfAM	<i>unclassified</i>

Archaea and Bacteria taxa observed during the 2014 GGNP BioBlitz						
Taxa category	Phylum	Class	Order	Family	Genus	Species
Bacteria	Proteobacteria	Deltaproteobacteria	unclassified	unclassified	sfB	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	unclassified	unclassified	sfD	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	unclassified	unclassified	sfE	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	unclassified	unclassified	sfH	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	unclassified	unclassified	sfJ	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	unclassified	unclassified	sfM	<i>unclassified</i>
Bacteria	Proteobacteria	Deltaproteobacteria	unclassified	unclassified	sfT	<i>unclassified</i>
Bacteria	Proteobacteria	Epsilonproteobacteria	Campylobacterales	Campylobacteraceae	Arcobacter	<i>unclassified</i>
Bacteria	Proteobacteria	Epsilonproteobacteria	Campylobacterales	Campylobacteraceae	Sulfurospirillum	<i>unclassified</i>
Bacteria	Proteobacteria	Epsilonproteobacteria	Campylobacterales	Campylobacteraceae	unclassified	<i>unclassified</i>
Bacteria	Proteobacteria	Epsilonproteobacteria	Campylobacterales	Helicobacteraceae	Sulfuricurvum	<i>unclassified</i>
Bacteria	Proteobacteria	Epsilonproteobacteria	Campylobacterales	Helicobacteraceae	Sulfurimonas	<i>unclassified</i>
Bacteria	Proteobacteria	Epsilonproteobacteria	Campylobacterales	Helicobacteraceae	Sulfurovum	<i>unclassified</i>
Bacteria	Proteobacteria	Epsilonproteobacteria	Campylobacterales	Helicobacteraceae	unclassified	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Aeromonadales	Aeromonadaceae	Aeromonas	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Aeromonadales	Succinivibrionaceae	Succinivibrio	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Alteromonadaceae	Agarivorans	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Alteromonadaceae	Alishewanella	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Alteromonadaceae	Glaciecola	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Alteromonadaceae	unclassified	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Chromatiaceae	Rheinheimera	<i>Rheinheimera aquimaris</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Chromatiaceae	Rheinheimera	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Colwelliaceae	Colwellia	<i>Colwellia psychrerythraea</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Colwelliaceae	Colwellia	<i>unclassified</i>

Archea and Bacteria taxa observed during the 2014 GGNP BioBlitz						
Taxa category	Phylum	Class	Order	Family	Genus	Species
Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Colwelliaceae	Thalassomonas	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Colwelliaceae	unclassified	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Ferrimonadaceae	Ferrimonas	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Idiomarinaceae	Idiomarina	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Moritellaceae	Moritella	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	Pseudoalteromonas	<i>Pseudoalteromonas tunicata</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	Pseudoalteromonas	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Psychromonadaceae	Psychromonas	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Shewanellaceae	Shewanella	<i>Shewanella oneidensis</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Shewanellaceae	Shewanella	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Chromatiales	Chromatiaceae	Chromatium	<i>Chromatium okenii</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Chromatiales	Chromatiaceae	Marichromatium	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Chromatiales	Chromatiaceae	unclassified	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Chromatiales	Ectothiorhodospiraceae	unclassified	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Chromatiales	Halothiobacillaceae	unclassified	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Chromatiales	Sinobacteraceae	Steroidobacter	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Chromatiales	Sinobacteraceae	unclassified	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Citrobacter	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Enterobacter	<i>Enterobacter hormaechei</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Erwinia	<i>Pantoea dispersa</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Erwinia	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Klebsiella	<i>Klebsiella oxytoca</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Klebsiella	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Leclercia	<i>unclassified</i>

Archea and Bacteria taxa observed during the 2014 GGNP BioBlitz						
Taxa category	Phylum	Class	Order	Family	Genus	Species
Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Proteus	<i>Proteus mirabilis</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Serratia	<i>Serratia marcescens</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Serratia	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Shigella	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	unclassified	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Legionellales	Coxiellaceae	Aquicella	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Legionellales	Coxiellaceae	Rickettsiella	<i>Rickettsiella grylli</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Legionellales	Coxiellaceae	Rickettsiella	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Legionellales	Coxiellaceae	unclassified	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Legionellales	Legionellaceae	Legionella	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Legionellales	Legionellaceae	Tatlockia	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Legionellales	Legionellaceae	unclassified	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Methylococcales	Crenotrichaceae	Crenothrix	<i>Crenothrix polyspora</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Methylococcales	Crenotrichaceae	Crenothrix	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Methylococcales	Methylococcaceae	Methylocaldum	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Methylococcales	Methylococcaceae	Methylococcus	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Methylococcales	Methylococcaceae	Methylomonas	<i>Methylomonas rubra</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Methylococcales	Methylococcaceae	unclassified	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Oceanospirillales	125ds10	unclassified	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Oceanospirillales	Alcanivoracaceae	Alcanivorax	<i>Alcanivorax venustensis</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Oceanospirillales	Alcanivoracaceae	Alcanivorax	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Oceanospirillales	Alcanivoracaceae	unclassified	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Oceanospirillales	Alteromonadaceae	Candidatus Endobugula	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Oceanospirillales	Alteromonadaceae	Cellvibrio	<i>Cellvibrio japonicus</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Oceanospirillales	Alteromonadaceae	Cellvibrio	<i>unclassified</i>

Archaea and Bacteria taxa observed during the 2014 GGNP BioBlitz						
Taxa category	Phylum	Class	Order	Family	Genus	Species
Bacteria	Proteobacteria	Gammaproteobacteria	Oceanospirillales	Alteromonadaceae	HB2-32-21	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Oceanospirillales	Alteromonadaceae	HTCC2207	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Oceanospirillales	Alteromonadaceae	Marinobacter	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Oceanospirillales	Alteromonadaceae	Simidua	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Oceanospirillales	Alteromonadaceae	<i>unclassified</i>	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Oceanospirillales	Alteromonadaceae	ZD0117	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Oceanospirillales	Endozoicimonaceae	Endozoicimonas	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Oceanospirillales	FCPT525	<i>unclassified</i>	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Oceanospirillales	Halomonadaceae	Candidatus Portiera	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Oceanospirillales	Halomonadaceae	Halomonas	<i>Halomonas muralis</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Oceanospirillales	Halomonadaceae	Halomonas	<i>Halomonas nitritophilus</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Oceanospirillales	Halomonadaceae	Halomonas	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Oceanospirillales	Halomonadaceae	<i>unclassified</i>	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Oceanospirillales	HTCC2089	<i>unclassified</i>	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Oceanospirillales	HTCC2188	<i>unclassified</i>	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Oceanospirillales	J115	<i>unclassified</i>	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Oceanospirillales	Liticolaceae	<i>unclassified</i>	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Oceanospirillales	Oceanospirillaceae	Marinobacterium	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Oceanospirillales	Oceanospirillaceae	Marinomonas	<i>Marinomonas aquimarina</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Oceanospirillales	Oceanospirillaceae	Marinomonas	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Oceanospirillales	Oceanospirillaceae	UMB6E	<i>proteobacterium symbiont of Osedax frankpressi</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Oceanospirillales	Oceanospirillaceae	UMB6E	<i>proteobacterium symbiont of Osedax sp. MB4</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Oceanospirillales	Oceanospirillaceae	<i>unclassified</i>	<i>unclassified</i>

Archea and Bacteria taxa observed during the 2014 GGNP BioBlitz						
Taxa category	Phylum	Class	Order	Family	Genus	Species
Bacteria	Proteobacteria	Gammaproteobacteria	Oceanospirillales	Oleiphilaceae	unclassified	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Oceanospirillales	OM60	Congregibacter	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Oceanospirillales	OM60	unclassified	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Oceanospirillales	Saccharospirillaceae	Reinekea	<i>Reinekea blandensis</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Oceanospirillales	Saccharospirillaceae	Saccharospirillum	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Oceanospirillales	SUP05	unclassified	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Oceanospirillales	ZA3412c	unclassified	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	Haemophilus	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	Nicoletella	<i>Nicoletella semolina</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Moraxellaceae	Acinetobacter	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Moraxellaceae	Alkanindiges	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Pseudomonadaceae	Pseudomonas	<i>Pseudomonas fuscovaginae</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Pseudomonadaceae	Pseudomonas	<i>Pseudomonas oleovorans</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Pseudomonadaceae	Pseudomonas	<i>Pseudomonas stutzeri</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Pseudomonadaceae	Pseudomonas	<i>Pseudomonas umsongensis</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Pseudomonadaceae	Pseudomonas	<i>Pseudomonas veronii</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Pseudomonadaceae	Pseudomonas	<i>Pseudomonas viridiflava</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Pseudomonadaceae	Pseudomonas	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Pseudomonadaceae	unclassified	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Sedimenticolales	Sedimenticolaceae	Sedimenticola	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Thiohalomonales	Thiohalomnaceae	Thiohalomonas	<i>Thiohalomonas denitrificans</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Thiotrichales	Francisellaceae	unclassified	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Thiotrichales	Piscirickettsiaceae	unclassified	<i>unclassified</i>

Archaea and Bacteria taxa observed during the 2014 GGNP BioBlitz						
Taxa category	Phylum	Class	Order	Family	Genus	Species
Bacteria	Proteobacteria	Gammaproteobacteria	Thiotrichales	Thiotrichaceae	Leucothrix	<i>gamma proteobacterium endosymbiont of Siboglinum fiordicum</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Thiotrichales	unclassified	sfA	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Thiotrichales	unclassified	sfC	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	unclassified	unclassified	sfA	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	unclassified	unclassified	sfB	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	unclassified	unclassified	sfC	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	unclassified	unclassified	sfD	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	unclassified	unclassified	sfE	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	unclassified	unclassified	sfF	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	unclassified	unclassified	sfH	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	unclassified	unclassified	sfM	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	Aliivibrio	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	Photobacterium	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	Vibrio	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	Vibrio	<i>Vibrio orientalis</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Xanthomonadales	Sinobacteraceae	Nevskia	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Xanthomonadales	Xanthomonadaceae	Dokdonella	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Xanthomonadales	Xanthomonadaceae	Dyella	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Xanthomonadales	Xanthomonadaceae	Lysobacter	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Xanthomonadales	Xanthomonadaceae	Pseudoxanthomonas	<i>Pseudoxanthomonas mexicana</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Xanthomonadales	Xanthomonadaceae	Pseudoxanthomonas	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Xanthomonadales	Xanthomonadaceae	Rhodanobacter	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Xanthomonadales	Xanthomonadaceae	Stenotrophomonas	<i>unclassified</i>

Archaea and Bacteria taxa observed during the 2014 GGNP BioBlitz						
Taxa category	Phylum	Class	Order	Family	Genus	Species
Bacteria	Proteobacteria	Gammaproteobacteria	Xanthomonadales	Xanthomonadaceae	Thermomonas	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Xanthomonadales	Xanthomonadaceae	unclassified	<i>unclassified</i>
Bacteria	Proteobacteria	Gammaproteobacteria	Xanthomonadales	Xanthomonadaceae	Xanthomonas	<i>unclassified</i>
Bacteria	Proteobacteria	unclassified	unclassified	unclassified	sfA	<i>unclassified</i>
Bacteria	Proteobacteria	Zetaproteobacteria	Mariprofundales	Mariprofundaceae	Mariprofundus	<i>unclassified</i>
Bacteria	SAR406	AB16	Arctic96B-7	A714017	SargSea-WGS	<i>unclassified</i>
Bacteria	SAR406	AB16	Arctic96B-7	A714017	SGSH944	<i>unclassified</i>
Bacteria	SAR406	AB16	Arctic96B-7	A714017	SHAG537	<i>unclassified</i>
Bacteria	SAR406	AB16	Arctic96B-7	A714017	unclassified	<i>unclassified</i>
Bacteria	SAR406	AB16	Arctic96B-7	unclassified	sfA	<i>unclassified</i>
Bacteria	SAR406	AB16	SSW63Au	SHAS460	unclassified	<i>unclassified</i>
Bacteria	SAR406	AB16	SSW63Au	unclassified	sfA	<i>unclassified</i>
Bacteria	SBR1093	VHS-B5-50	unclassified	unclassified	sfA	<i>unclassified</i>
Bacteria	SC4	KD3-113	unclassified	unclassified	sfA	<i>unclassified</i>
Bacteria	SC4	unclassified	unclassified	unclassified	sfA	<i>unclassified</i>
Bacteria	SC4	unclassified	unclassified	unclassified	sfD	<i>unclassified</i>
Bacteria	SC4	unclassified	unclassified	unclassified	sfE	<i>unclassified</i>
Bacteria	SM2F11	unclassified	unclassified	unclassified	sfB	<i>unclassified</i>
Bacteria	SPAM	0319-6G9	unclassified	unclassified	sfA	<i>unclassified</i>
Bacteria	Spirochaetes	Spirochaetes	Sphaerochaetales	Sphaerochaetaceae	Sphaerochaeta	<i>unclassified</i>
Bacteria	Spirochaetes	Spirochaetes	Spirochaetales	Spirochaetaceae	SA-8	<i>unclassified</i>
Bacteria	Spirochaetes	Spirochaetes	Spirochaetales	Spirochaetaceae	Spirochaeta	<i>unclassified</i>
Bacteria	Spirochaetes	Spirochaetes	Spirochaetales	Spirochaetaceae	Treponema	<i>unclassified</i>
Bacteria	Spirochaetes	WWE1	PBS-18	SHA-4	Zplanct13	<i>unclassified</i>
Bacteria	Synergistetes	Synergistia	Synergistales	Dethiosulfovibrionaceae	HA73	<i>unclassified</i>

Archaea and Bacteria taxa observed during the 2014 GGNP BioBlitz						
Taxa category	Phylum	Class	Order	Family	Genus	Species
Bacteria	Synergistetes	Synergistia	Synergistales	Synergistaceae	unclassified	<i>unclassified</i>
Bacteria	Tenericutes	Erysipelotrichi	Erysipelotrichales	Erysipelotrichaceae	BHSD	<i>BHSD</i>
Bacteria	Tenericutes	Erysipelotrichi	Erysipelotrichales	Erysipelotrichaceae	Bulleidia	<i>unclassified</i>
Bacteria	Tenericutes	Erysipelotrichi	Erysipelotrichales	Erysipelotrichaceae	L7A_E11	<i>unclassified</i>
Bacteria	Tenericutes	Erysipelotrichi	Erysipelotrichales	Erysipelotrichaceae	PSB-M-3	<i>unclassified</i>
Bacteria	Tenericutes	Erysipelotrichi	Erysipelotrichales	vadinHA31	RFN20	<i>unclassified</i>
Bacteria	Tenericutes	Erysipelotrichi	Erysipelotrichales	vadinHA31	unclassified	<i>unclassified</i>
Bacteria	Tenericutes	Mollicutes	Acholeplasmatales	Acholeplasmataceae	Acholeplasma	<i>unclassified</i>
Bacteria	Tenericutes	Mollicutes	Mycoplasmatales	Mycoplasmataceae	Mycoplasma	<i>Mycoplasma iowae</i>
Bacteria	Tenericutes	Mollicutes	Mycoplasmatales	Mycoplasmataceae	Mycoplasma	<i>unclassified</i>
Bacteria	Tenericutes	Mollicutes	Mycoplasmatales	Mycoplasmataceae	unclassified	<i>unclassified</i>
Bacteria	Tenericutes	Mollicutes	RF39	unclassified	sfA	<i>unclassified</i>
Bacteria	TG3	TG3-2	M2PB4-14	unclassified	sfA	<i>unclassified</i>
Bacteria	TG3	TG3-2	unclassified	unclassified	sfA	<i>unclassified</i>
Bacteria	Thermi	Deinococci	Deinococcales	Deinococcaceae	Deinococcus	<i>Deinococcus maricopensis</i>
Bacteria	Thermi	Deinococci	Deinococcales	Deinococcaceae	Deinococcus	<i>unclassified</i>
Bacteria	Thermodesulfobacteria	Thermodesulfobacteria	Thermodesulfobacteriales	Thermodesulfobacteriaceae	unclassified	<i>unclassified</i>
Bacteria	TM6	SJA-4	unclassified	unclassified	sfC	<i>unclassified</i>
Bacteria	TM6	SJA-4	unclassified	unclassified	sfD	<i>unclassified</i>
Bacteria	TM6	SJA-4	unclassified	unclassified	sfJ	<i>unclassified</i>
Bacteria	TM6	SJA-4	unclassified	unclassified	sfL	<i>unclassified</i>
Bacteria	TM6	SJA-4	unclassified	unclassified	sfN	<i>unclassified</i>
Bacteria	TM7	TM7-1	unclassified	unclassified	sfA	<i>unclassified</i>
Bacteria	TM7	TM7-1	unclassified	unclassified	sfB	<i>unclassified</i>

Archaea and Bacteria taxa observed during the 2014 GGNP BioBlitz						
Taxa category	Phylum	Class	Order	Family	Genus	Species
Bacteria	TM7	TM7-1	unclassified	unclassified	sfC	<i>unclassified</i>
Bacteria	TM7	TM7-1	unclassified	unclassified	sfD	<i>unclassified</i>
Bacteria	TM7	TM7-1	unclassified	unclassified	sfE	<i>unclassified</i>
Bacteria	TM7	TM7-3	EW055	unclassified	sfA	<i>unclassified</i>
Bacteria	TM7	TM7-3	I025	A29	unclassified	<i>unclassified</i>
Bacteria	TM7	TM7-3	unclassified	unclassified	sfA	<i>unclassified</i>
Bacteria	Verrucomicrobia	Methylacidiphilae	Methylacidiphilales	LD19	unclassified	<i>unclassified</i>
Bacteria	Verrucomicrobia	Methylacidiphilae	Methylacidiphilales	Methylacidiphilaceae	LP2A	<i>unclassified</i>
Bacteria	Verrucomicrobia	Opitutae	Opitales	Opitutaceae	Opitutus	<i>unclassified</i>
Bacteria	Verrucomicrobia	Opitutae	Opitales	Opitutaceae	unclassified	<i>unclassified</i>
Bacteria	Verrucomicrobia	Opitutae	Puniceococcales	Puniceococcaceae	unclassified	<i>unclassified</i>
Bacteria	Verrucomicrobia	R76-B18	unclassified	unclassified	sfA	<i>unclassified</i>
Bacteria	Verrucomicrobia	R76-B18	unclassified	unclassified	sfB	<i>unclassified</i>
Bacteria	Verrucomicrobia	R76-B18	unclassified	unclassified	sfC	<i>unclassified</i>
Bacteria	Verrucomicrobia	Spartobacteria	Spartobacteriales	Spartobacteriaceae	Candidatus Xiphinematobacter	<i>unclassified</i>
Bacteria	Verrucomicrobia	Spartobacteria	Spartobacteriales	Spartobacteriaceae	Chthoniobacter	<i>Chthoniobacter flavus</i>
Bacteria	Verrucomicrobia	Spartobacteria	Spartobacteriales	Spartobacteriaceae	Chthoniobacter	<i>unclassified</i>
Bacteria	Verrucomicrobia	Spartobacteria	Spartobacteriales	Spartobacteriaceae	MC18	<i>unclassified</i>
Bacteria	Verrucomicrobia	Verruco-5	RFP12	unclassified	sfB	<i>unclassified</i>
Bacteria	Verrucomicrobia	Verruco-5	RFP12	unclassified	sfC	<i>unclassified</i>
Bacteria	Verrucomicrobia	Verruco-5	unclassified	unclassified	sfD	<i>unclassified</i>
Bacteria	Verrucomicrobia	Verrucomicrobiae	Verrucomicrobiales	unclassified	sfA	<i>unclassified</i>
Bacteria	Verrucomicrobia	Verrucomicrobiae	Verrucomicrobiales	unclassified	sfE	<i>unclassified</i>
Bacteria	Verrucomicrobia	Verrucomicrobiae	Verrucomicrobiales	unclassified	sfF	<i>unclassified</i>

Archea and Bacteria taxa observed during the 2014 GGNP BioBlitz						
Taxa category	Phylum	Class	Order	Family	Genus	Species
Bacteria	Verrucomicrobia	Verrucomicrobiae	Verrucomicrobiales	unclassified	sfG	<i>unclassified</i>
Bacteria	Verrucomicrobia	Verrucomicrobiae	Verrucomicrobiales	unclassified	sfL	<i>unclassified</i>
Bacteria	Verrucomicrobia	Verrucomicrobiae	Verrucomicrobiales	Verrucomicrobia subdivision 3	unclassified	<i>unclassified</i>
Bacteria	Verrucomicrobia	Verrucomicrobiae	Verrucomicrobiales	Verrucomicrobiaceae	Akkermansia	<i>unclassified</i>
Bacteria	Verrucomicrobia	Verrucomicrobiae	Verrucomicrobiales	Verrucomicrobiaceae	Haloferula	<i>unclassified</i>
Bacteria	Verrucomicrobia	Verrucomicrobiae	Verrucomicrobiales	Verrucomicrobiaceae	Luteolibacter	<i>unclassified</i>
Bacteria	Verrucomicrobia	Verrucomicrobiae	Verrucomicrobiales	Verrucomicrobiaceae	Prostheco bacter	<i>Prostheco bacter vanneervanii</i>
Bacteria	Verrucomicrobia	Verrucomicrobiae	Verrucomicrobiales	Verrucomicrobiaceae	Prostheco bacter	<i>unclassified</i>
Bacteria	Verrucomicrobia	Verrucomicrobiae	Verrucomicrobiales	Verrucomicrobiaceae	unclassified	<i>unclassified</i>
Bacteria	Verrucomicrobia	Verrucomicrobiae	Verrucomicrobiales	Verrucomicrobiaceae	Verrucomicrobium	<i>unclassified</i>
Bacteria	WPS-2	unclassified	unclassified	unclassified	sfB	<i>unclassified</i>
Bacteria	WPS-2	unclassified	unclassified	unclassified	sfC	<i>unclassified</i>
Bacteria	WS3	PRR-12	GN03	unclassified	sfA	<i>unclassified</i>
Bacteria	WS3	PRR-12	Sediment-1	PRR-10	unclassified	<i>unclassified</i>
Bacteria	WS3	PRR-12	Sediment-1	unclassified	sfB	<i>unclassified</i>
Bacteria	ZB2	unclassified	unclassified	unclassified	sfA	<i>unclassified</i>
Bacteria	ZB2	unclassified	unclassified	unclassified	sfB	<i>unclassified</i>
Bacteria	ZB3	unclassified	unclassified	unclassified	sfC	<i>unclassified</i>

The Department of the Interior protects and manages the nation's natural resources and cultural heritage; provides scientific and other information about those resources; and honors its special responsibilities to American Indians, Alaska Natives, and affiliated Island Communities.

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