



Herbarium Reviews for Eight Parks in the Southern Colorado Plateau Network

Natural Resource Technical Report NPS/SCPN/NRTR—2010/317



ON THE COVER

An herbarium specimen of the nonnative *Hibiscus trionum*.

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Abstract

Since herbarium specimens are the primary form of evidence for the occurrence of vascular plant species in national park units, accurate specimen information must be maintained in the service-wide database for species documentation in national parks, NPSpecies. This project verified and databased all herbarium specimens at the following Southern Colorado Plateau Network parks: Mesa Verde National Park, Navajo National Monument, Petrified Forest National Park, Petroglyph National Monument, Walnut Canyon National Monument, Wupatki National Monument, Sunset Crater National Monument, and Yucca House National Monument. A total of 5,768 specimens were identified and databased in NPSpecies. Of this total, 15% received nomenclature updates, and 12% were annotated.

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Introduction

Since herbarium specimens are the primary form of evidence for the occurrence of vascular plant species in national park units, accurate specimen information must be maintained in NPSpecies, the service-wide database for species documentation in national parks. In this project, we verified and databased all herbarium specimens at the following parks: Mesa Verde National Park, Navajo National Monument, Petrified Forest National Park, Petroglyph National Monument, Walnut Canyon National Monument, Wupatki National Monument, Sunset Crater National Monument, and Yucca House National Monument. We needed to verify the herbarium specimens because there had been reports that information in ANCS+ (NPS database for museum specimens) was not always accurate. Therefore, we first checked all ANCS+ specimen information for accuracy and then entered the correct data for all the specimens in the herbaria into a database compatible with NPSpecies.

Methods

Herbarium curation

We curated the specimens from all herbaria according to the following steps. First, we used standard floras and manuals to identify specimens to the lowest taxonomic level possible. When necessary, we updated correctly identified specimens to the current nomenclature, following the ITIS (Integrated Taxonomic Information System). We also corrected the identification of incorrectly identified specimens. We glued an annotation label with all updates, including the corrected or updated species name, the identifier, and the date, to the herbarium sheet.

Databasing

For each herbarium, the National Park Service (NPS) provided the ANCS+ databases in Microsoft Access format. We recorded the number of specimens in the ANCS+ database and compared that number with the number of specimens that we actually found in the herbaria. At each park, we either entered or checked for accuracy with the actual specimen label all the specimen information. When information was absent from the

specimen label, we entered “Not Provided” into the appropriate field in the database. We accessioned and cataloged specimens as necessary, and we noted the problems and discrepancies that we encountered while checking the accuracy of the specimen information. We created text documents (.txt) of each verified and completed herbarium database, which will later be transferred into the ANCS+ database. Table 1 describes all the fields in the databases.

We curated and databased all specimens currently in park herbaria as described above. We also processed (mounted, curated, accessioned, cataloged, and/or databased) many of the specimens that had not yet incorporated into the herbaria at Walnut Canyon NM and Mesa Verde NP.

Results

Herbarium curation

We curated and databased a total of 5,768 specimens—10% more specimens than we expected, based on the number of specimens in the ANCS+ database. See Table 2 for a breakdown of expected specimens to actual specimens for each park, and see appendix A for a table of all updated and annotated (species whose identification we corrected) specimens arranged by park. Across all parks we updated the nomenclature of an average of 13% of the specimens, although the range between parks was 4-24%. Specimens that we annotated averaged 11% for all parks, with a range of 3-38%. See Table 2 for counts of nomenclatural and annotation updates by park.

Databasing

We found the following problems for specimen information in the park herbarium ANCS+ databases:

Mesa Verde NP:

- No data in the elevation field
- Data in Forb/Shrub/Pern field was misplaced. Data in this field was more appropriate for the Soil Type field.
- Associated Species and Habitat fields

Table 1. Information fields required for compatibility with NPSpecies database.

Field	Data type	Character length	Description
ParkCode	Text	4	Four letter park code (see list of accepted codes)
TSN	Number		ITIS taxonomic serial number
DocLatinName	Text	255	Documented scientific name of species in the original records when it was collected
Date	Date		Date of collection
Observer	Text	255	Name of collector
ObserverNumber	Text	255	Field collection number provided by collector, if available
Habitat	Memo		Concise description of habitat where collection was made, if available
Elevation	Number		Elevation where collection was made
ElevationUnits	Text	20	Units for elevation (feet or meters)
SpecimenID	Text	255	NPS catalog number of specimen
SpecimenLocation	Text	255	Name and location of institution at which specimen is located
Location	Text	255	Concise description of collection site within the park
X_coord	Number		X coordinate of collection site , if available
Y_Coord	Number		Y coordinate of collection site, if available
CoordSystem	Text	25	Coordinate system of x and y coordinates (Lat/lon, UTM, etc)
Datum	Text	10	Datum of coordinates, if known (NAD27, NAD83, WGS84)

Table 2. Number of specimens curated, updated, and annotated at each park.

Metric	MEVE	NAVA	PEFO	PETR	WACA	WUPA	SUCR	YUHO	Total
Expected # of specimens	2786	400	770	150	521	628	N/A	N/A	5255
Actual # of specimens	2891	619	913	135	480	590	116	24	5768
Nomenclatural updates	476	22	223	24	42	52	11	3	853
Annotations	248	40	25	8	30	64	11	9	435
Updated (%)	16	4	24	18	9	9	9	13	14
Annotated (%)	9	6	3	6	6	11	9	38	12

Note: NAVA = Navajo National Monument, MEVE = Mesa Verde National Park, YUHO = Yucca House National Monument, Petrified Forest National Park, Walnut Canyon National Monument, SUCR= Sunset Crater Volcano National Monument, and PETR = Petroglyph National Monument.

were incomplete

- 40 specimens were not in the database.

Navajo NM:

- About 200 collections by Daniela Roth were incorrectly identified as being located at Deaver Herbarium
- Specimens were not cataloged
- Collection data for specimens in the database was incomplete.

Petrified Forest NP:

- Datum field included data more appropriate for Habitat field
- Annotations made in the 1980s were not reflected in the database
- Collection Number and Collection Date fields were incomplete
- Counties were in the Locality field instead of the County field

- UTM field incomplete for some records
- Missing records
- Catalog number incorrectly duplicated. For example, specimens of the same species would share a catalog number even though they had vastly different collection information.

Petroglyph NM:

- Data placed in inappropriate fields.

Walnut Canyon and Wupatki NM:

- Data placed in inappropriate fields
- Extraneous data in fields (e.g. in description field, data included a physical description of the herbarium sheet itself).

Discussion

This project verified the identification of and databased a total of 5,768 National Park Service herbarium specimens from parks in the Southern Colorado Plateau Network. We updated the nomenclature of an average 14% of the specimens at each park herbarium, and we annotated an average of 12% of the specimens at each park herbarium. These averages are a little high, probably because most of these herbaria are seldom visited and therefore do not benefit from the curation of visiting experts. Furthermore, these herbaria are currently curated by collection managers who are not botanists and therefore are not experts on botanical nomenclature and taxonomy.

Since park herbaria are likely to remain remote and managed by non-botanists, we advise hiring a trained botanist to review nomenclature and taxonomy on a cyclical basis, since botanical taxonomy is continually changing. Because of the work done for this project, reviewing nomenclature and taxonomy in the future should require less work.

The future work would entail running an update query on the data from the ANCS+ database, annotating herbarium labels, and re-filing, as appropriate. When park herbaria receive future specimens, in accordance with collection permits, these future specimens will create a work need similar to the scope of this project. If a botanist can update nomenclature and verify the identification of new specimens on a regular basis, the quality of the park herbaria, as well as both the ANCS+ and NPSpecies databases, would be maintained. The quality of the NPSpecies database is particularly important as it may help increase the use of National Park Service herbaria.

In the course of this project, we also fully processed (identified, mounted, accessioned, cataloged and databased) over 400 specimens from Mesa Verde NP and Walnut Canyon NM that were not currently considered to be incorporated in the herbaria. The collection managers at each park expressed interest in processing this backlog. However, these parks, along with Petrified Forest NP, Petroglyph NM, Wupatki NM, and Sunset Crater NM still have a backlog of herbarium specimens that are either unprocessed or only partially processed. Mesa Verde had four remaining boxes of unprocessed specimens. We estimate that these boxes contain 600-1200 specimens that are both mounted and unmounted and include duplicates and unique records. Although we identified the species of all the backlogged specimens at Walnut Canyon NM (including Wupatki NM and Sunset Crater NM) during this project, the park still had approximately 200 specimens that still needed to be mounted, accessioned, cataloged, and databased. Petrified Forest had 200-400 mounted specimens that needed to be processed. Petroglyph NM had less than 100 specimens that need to be processed. Future work would include processing these specimens.

Appendix A

Appendix A contains six tables that detail all the updates and annotations made to herbarium specimens during this review. The tables are arranged by park. The abbreviation “Np” stands for “not provided”.

Park	Table	Pages
Mesa Verde National Park	A1	6–33
Navajo National Monument	A2	34–35
Petrified Forest National Park	A3	36–46
Petroglyph National Monument	A4	47–48
Walnut Canyon / Wupatki / Sunset Crater National Monuments	A5	49–55
Yucca House National Monument	A6	56

Table A1. Updated and annotated herbarium specimens for Mesa Verde National Park.

Accession #	Catalog #	Collection #	Collection date	Family	Current scientific name	TSN	Original scientific name	Reviewers	Review date	Updated / annotated
MEVE-01320	69849	851	07/16/1991		<i>Chara</i>		<i>Galium verum</i>	Rink, Glenn	6/2005	A
MEVE-1142	96914	1659	6/29/1925	Agavaceae	<i>Yucca baileyi</i> var. <i>baileyi</i>	530890	<i>Yucca</i>	G. Rink	2005	A
MEVE-01147	73717	434	10/1983	Apiaceae	<i>Conioselinum scopulorum</i>	29471	<i>Coneoselinum scopulorum</i>	Litzinger, William	1995	U
MEVE-01147	58905	Np	07/14/1980	Apocynaceae	<i>Apocynum androsaemifolium</i>	30156	<i>Apocynum androsaemifolium</i>	Fleming, Richard	1993	U
MEVE-01147	61569	107	08/24/1982	Asteraceae	<i>Acroptilon repens</i>	36459	<i>Centaurea repens</i>	Heil, Ken	1993	U
MEVE-01147	61570	107	08/24/1982	Asteraceae	<i>Acroptilon repens</i>	36459	<i>Centaurea repens</i>	Heil, Ken	1993	U
MEVE-01148	61571		08/12/1979	Asteraceae	<i>Acroptilon repens</i>	36459	<i>Centaurea repens</i>	Heil, Ken	1993	U
MEVE-01147	61572		11/ 2/1980	Asteraceae	<i>Acroptilon repens</i>	36459	<i>Centaurea repens</i>	Heil, Ken	1993	U
MEVE-01149	58847	1786	06/27/1930	Asteraceae	<i>Antennaria marginata</i>	36739	<i>Antennaria neglecta</i>	DeKoker, T.	2005	A
MEVE-01154	58849	480	06/ 5/1965	Asteraceae	<i>Antennaria marginata</i>	36739	<i>Antennaria neglecta</i>	DeKoker, T.	2005	A
MEVE-01150	58973	326	09/15/1929	Asteraceae	<i>Artemisia cana</i>	35454	<i>Artemisia nova</i>	Rink, Glenn	6/2005	A
MEVE-01154	58862	1	09/30/1947	Asteraceae	<i>Artemisia dracunculus</i>	35462	<i>Artemisia dracunculus</i>	Fleming, Richard	1993	U
MEVE-01147	58863	Np	06/29/1981	Asteraceae	<i>Artemisia dracunculus</i>	35462	<i>Artemisia dracunculus</i>	Fleming, Richard	1993	U
MEVE-01158	58864	Np	08/ 6/1982	Asteraceae	<i>Artemisia dracunculus</i>	35462	<i>Artemisia dracunculus</i>	Fleming, Richard	1993	U
MEVE-01319	74274		05/19/1990	Asteraceae	<i>Baccharis wrightii</i>	35704	<i>Machaeranthera grindeioides</i>	Litzinger, William	1995	U
MEVE-01147	58749	276	08/15/1984	Asteraceae	<i>Brickellia eupatorioides</i> var. <i>eupatorioides</i>	526976	<i>Brickellia rosmarinifolia</i>	Fleming, Richard	1993	U
MEVE-01147	58805	276	08/15/1984	Asteraceae	<i>Brickellia eupatorioides</i> var. <i>eupatorioides</i>	526976	<i>Brickellia rosmarinifolia</i>	Fleming, Richard	1993	U
MEVE-01319	74290	Np	05/01/1990	Asteraceae	<i>Centaurea biebersteinii</i>	501347	<i>Acosta maculosa</i>	Litzinger, William	1995	U
MEVE-01317	69732	807	08/22/1988	Asteraceae	<i>Centaurea diffusa</i>	36958	<i>Acosta diffusa</i>	Litzinger, William	08/7/1994	U
MEVE-01319	69798	832	06/22/1990	Asteraceae	<i>Centaurea diffusa</i>	36958	<i>Acosta diffusa</i>	Litzinger, William	08/16/1994	U
MEVE-01317	70301	807	08/22/1988	Asteraceae	<i>Centaurea diffusa</i>	36958	<i>Acosta diffusa</i>	Litzinger, William	08/08/1994	U
MEVE-01294	58745	726	08/14/1986	Asteraceae	<i>Centaurea triumfettii</i>	501352	<i>Centaurea virgata</i>	Heil, Ken	1992	U
MEVE-01294	58746	726	08/14/1986	Asteraceae	<i>Centaurea triumfettii</i>	501352	<i>Centaurea virgata</i>	Heil, Ken	1992	U
MEVE-01319	74272		05/11/1990	Asteraceae	<i>Cirsium tiogonum</i> var. <i>coloradense</i>	527384	<i>Cirsium coloradense</i>	Litzinger, William	1995	U
MEVE-01147	73732	157	07/ 5/1983	Asteraceae	<i>Crepis acuminata</i> ssp. <i>acuminata</i>	37170	<i>Psilohenia acuminata</i>	Litzinger, William	1995	U

Table A1, continued. Updated and annotated herbarium specimens for Mesa Verde National Park.

Accession #	Catalog #	Collection date	Family	Current scientific name	TSN	Original scientific name	Reviewers	Review date	Updated / annotated
MEVE-01367	69783	05/21/1992	Asteraceae	<i>Crepis occidentalis</i> ssp. <i>occidentalis</i>	37197	<i>Psilochenia occidentalis</i>	Litzinger, William	08/23/1994	U
MEVE-01252	58817	11/ 7/1985	Asteraceae	<i>Ericameria nauseosa</i>	507594	<i>Chrysothamnus viscidiflorus</i>	Heil, Ken	1992	U
MEVE-01252	69747	09/ 4/1985	Asteraceae	<i>Ericameria nauseosa</i>	531871	<i>Chrysothamnus nauseosus</i>	Litzinger, William	08/07/1994	U
MEVE-01150	61595	08/20/1929	Asteraceae	<i>Ericameria nauseosa</i> ssp. <i>nauseosa</i> var. <i>nauseosa</i>	531871	<i>Chrysothamnus nauseosus</i>	Heil, Ken	1993	U
MEVE-01150	61596	08/20/1929	Asteraceae	<i>Ericameria nauseosa</i> ssp. <i>nauseosa</i> var. <i>nauseosa</i>	531871	<i>Chrysothamnus nauseosus</i>	Heil, Ken	1993	U
MEVE-01150	61597	09/15/1929	Asteraceae	<i>Ericameria nauseosa</i> ssp. <i>nauseosa</i> var. <i>nauseosa</i>	531871	<i>Chrysothamnus nauseosus</i>	Heil, Ken	1993	U
MEVE-01144	61598	07/ 4/1944	Asteraceae	<i>Ericameria nauseosa</i> ssp. <i>nauseosa</i> var. <i>nauseosa</i>	531871	<i>Chrysothamnus nauseosus</i>	Heil, Ken	1993	U
MEVE-01145	61599	09/ 6/1962	Asteraceae	<i>Ericameria nauseosa</i> ssp. <i>nauseosa</i> var. <i>nauseosa</i>	531871	<i>Chrysothamnus nauseosus</i>	Heil, Ken	1993	U
MEVE-01147	61600	05/22/1984	Asteraceae	<i>Ericameria nauseosa</i> ssp. <i>nauseosa</i> var. <i>nauseosa</i>	531871	<i>Chrysothamnus nauseosus</i>	Heil, Ken	1993	U
MEVE-01147	61601	11/18/1984	Asteraceae	<i>Ericameria nauseosa</i> ssp. <i>nauseosa</i> var. <i>nauseosa</i>	531871	<i>Chrysothamnus nauseosus</i>	Heil, Ken	1993	U
MEVE-01367	69730	05/29/1992	Asteraceae	<i>Erigeron grindeloides</i>	37992	<i>Erigeron utahensis</i>	Litzinger, William	08/11/1994	U
MEVE-01150	58876	07/16/1929	Asteraceae	<i>Eurybia glauca</i>	513443	<i>Aster glaucodes</i> var. <i>glaucodes</i>	Fleming, Richard	1993	U
MEVE-01150	58877	07/16/1929	Asteraceae	<i>Eurybia glauca</i>	513443	<i>Aster glaucodes</i> var. <i>glaucodes</i>	Fleming, Richard	1993	U
MEVE-01149	58878	10/ 9/1931	Asteraceae	<i>Eurybia glauca</i>	513443	<i>Aster glaucodes</i> var. <i>glaucodes</i>	Fleming, Richard	1993	U
MEVE-01145	58879	09/11/1963	Asteraceae	<i>Eurybia glauca</i>	513443	<i>Aster glaucodes</i> var. <i>glaucodes</i>	Fleming, Richard	1993	U
MEVE-01147	61573	09/20/1980	Asteraceae	<i>Eurybia glauca</i>	513443	<i>Aster laevis</i>	Heil, Ken	1993	U
MEVE-01148	61575	08/ 2/1979	Asteraceae	<i>Gnaphalium palustre</i>	36709	<i>Anaphalis margaritacea</i>	Rink, Glenn	6/2005	A
MEVE-01147	61566	11/26/1980	Asteraceae	<i>Grindelia nuda</i> var. <i>aphanactis</i>	528284	<i>Grindelia aphanactis</i>	Heil, Ken	1993	U
MEVE-01147	61567	07/22/1981	Asteraceae	<i>Grindelia nuda</i> var. <i>aphanactis</i>	528284	<i>Grindelia aphanactis</i>	Heil, Ken	1993	U

Table A1, continued. Updated and annotated herbarium specimens for Mesa Verde National Park.

Accession #	Catalog #	Collection #	Collection date	Family	Current scientific name	TSN	Original scientific name	Reviewers	Review date	Updated / annotated
MEVE-01147	61568	Np	07/22/1981	Asteraceae	<i>Grindelia nuda</i> var. <i>aphanactis</i>	528284	<i>Grindelia aphanactis</i>	Heil, Ken	1993	U
MEVE-01147	58893	401	1984	Asteraceae	<i>Helianthella uniflora</i> var. <i>uniflora</i>	528360	<i>Helianthus uniflorus</i>	Heil, Ken	1993	U
MEVE-01282	54973	13	MAY1991	Asteraceae	<i>Helioomeris multiflora</i> var. <i>multiflora</i>	528364	<i>Viguiera multiflora</i>	Adams & Hovezak	1991	U
MEVE-01282	54982	66	MAY1991	Asteraceae	<i>Helioomeris multiflora</i> var. <i>multiflora</i>	528364	<i>Viguiera multiflora</i>	Adams & Hovezak	1991	U
MEVE-01154	61658	6	08/21/1976	Asteraceae	<i>Helioomeris multiflora</i> var. <i>multiflora</i>	528364	<i>Viguiera multiflora</i>	Heil, Ken	1993	U
MEVE-01150	61659	2002	08/2/1929	Asteraceae	<i>Helioomeris multiflora</i> var. <i>multiflora</i>	528364	<i>Viguiera multiflora</i>	Heil, Ken	1993	U
MEVE-01252	59008	585	08/14/1985	Asteraceae	<i>Hesperodoria scopulorum</i>	502959	<i>Haplopappus scopulorum</i>	Fleming, Richard	1993	U
MEVE-01252	58747	584	08/14/1985	Asteraceae	<i>Hesperodoria scopulorum</i>	502959	<i>Haplopappus scopulorum</i>	Heil, Ken	1992	U
MEVE-01252	58748	584	08/14/1985	Asteraceae	<i>Hesperodoria scopulorum</i>	502959	<i>Haplopappus scopulorum</i>	Heil, Ken	1992	U
MEVE-01252	58900	554	06/18/1985	Asteraceae	<i>Hesperodoria scopulorum</i>	502959	<i>Haplopappus scopulorum</i>	Heil, Ken	1993	U
MEVE-01252	58901	554	06/18/1985	Asteraceae	<i>Hesperodoria scopulorum</i>	502959	<i>Haplopappus scopulorum</i>	Heil, Ken	1993	U
MEVE-01252	58693	588	08/14/1985	Asteraceae	<i>Iva acerosa</i>	36026	<i>Eriogonum lonchophyllum</i>	Rink, Glenn	6/2005	A
MEVE-01147	69921		12/1/1982	Asteraceae	<i>Iva acerosa</i>	36026	<i>Eriogonum leptophyllum</i>	Rink, Glenn	6/2005	A
MEVE-01147	58880		09/23/1980	Asteraceae	<i>Machaeranthera pinnatifida</i> ssp. <i>pinnatifida</i>	524293	<i>Machaeranthera tanacetifolia</i>	Fleming, Richard	1993	U
MEVE-01147	61608	111	08/24/1982	Asteraceae	<i>Machaeranthera pinnatifida</i> ssp. <i>pinnatifida</i> var. <i>pinnatifida</i>	531712	<i>Haplopappus spinulosus</i>	Heil, Ken	1993	U
MEVE-01148	61609	50	08/4/1981	Asteraceae	<i>Machaeranthera pinnatifida</i> ssp. <i>pinnatifida</i> var. <i>pinnatifida</i>	531712	<i>Haplopappus spinulosus</i>	Heil, Ken	1993	U
MEVE-01147	61610		10/15/1981	Asteraceae	<i>Machaeranthera pinnatifida</i> ssp. <i>pinnatifida</i> var. <i>pinnatifida</i>	531712	<i>Haplopappus spinulosus</i>	Heil, Ken	1993	U
MEVE-01149	61611	2	10/8/1931	Asteraceae	<i>Machaeranthera pinnatifida</i> ssp. <i>pinnatifida</i> var. <i>pinnatifida</i>	531712	<i>Haplopappus spinulosus</i>	Heil, Ken	1993	U

Table A1, continued. Updated and annotated herbarium specimens for Mesa Verde National Park.

Accession #	Catalog #	Collection #	Collection date	Family	Current scientific name	TSN	Original scientific name	Reviewers	Review date	Updated / annotated
MEVE-01147	61612	432	10/12/1983	Asteraceae	<i>Machaeranthera pinnatifida</i> ssp. <i>pinnatifida</i> var. <i>pinnatifida</i>	531712	<i>Haplopappus spinulosus</i>	Heil, Ken	1993	U
MEVE-01142	63316	1598	05/30/1925	Asteraceae	<i>Packera neomexicana</i> var. <i>mutabilis</i>	526299	<i>Senecio multilobatus</i>	Heil, Ken	1993	U
MEVE-01145	63319	502	06/ 5/1965	Asteraceae	<i>Packera neomexicana</i> var. <i>mutabilis</i>	526299	<i>Senecio mutabilis</i>	Heil, Ken	1993	U
MEVE-01142	63320	1598	05/29/1925	Asteraceae	<i>Packera neomexicana</i> var. <i>mutabilis</i>	526299	<i>Senecio mutabilis</i>	Heil, Ken	1993	U
MEVE-01150	63321	63	05/31/1929	Asteraceae	<i>Packera neomexicana</i> var. <i>mutabilis</i>	526299	<i>Senecio mutabilis</i>	Heil, Ken	1993	U
MEVE-01150	63322	63	05/31/1929	Asteraceae	<i>Packera neomexicana</i> var. <i>mutabilis</i>	526299	<i>Senecio mutabilis</i>	Heil, Ken	1993	U
MEVE-01144	63323	10	06/24/1944	Asteraceae	<i>Packera neomexicana</i> var. <i>mutabilis</i>	526299	<i>Senecio mutabilis</i>	Heil, Ken	1993	U
MEVE-01144	63324	97	06/29/1944	Asteraceae	<i>Packera neomexicana</i> var. <i>mutabilis</i>	526299	<i>Senecio mutabilis</i>	Heil, Ken	1993	U
MEVE-01148	65834	74	05/19/1982	Asteraceae	<i>Packera neomexicana</i> var. <i>mutabilis</i>	526299	<i>Senecio mutabilis</i>	Heil, Ken	1993	U
MEVE-01142	66192	1598	05/29/1925	Asteraceae	<i>Packera neomexicana</i> var. <i>mutabilis</i>	526299	<i>Senecio mutabilis</i>	Heil, Ken	1993	U
MEVE-01145	66193	316	05/21/1963	Asteraceae	<i>Packera neomexicana</i> var. <i>mutabilis</i>	526299	<i>Senecio mutabilis</i>	Heil, Ken	1993	U
MEVE-01144	77920	2	06/24/1944	Asteraceae	<i>Packera neomexicana</i> var. <i>mutabilis</i>	526299	<i>Senecio mutabilis</i>	Heil, Ken	1993	U
MEVE-01294	62112	689	06/13/1986	Asteraceae	<i>Packera neomexicana</i> var. <i>neomexicana</i>	566280	<i>Senecio neomexicanus</i>	Colyer, Marilyn	06/16/1986	U
MEVE-1144	96906	44	6/26/1944	Asteraceae	<i>Petradoria pumila</i> ssp. <i>pumila</i>	38234	<i>Petradoria pumila</i>	Explorers' Camp For Boys	1944	U
MEVE-01252	58742	583	08/14/1985	Asteraceae	<i>Solidago canadensis</i>	36224	<i>Solidago sparsiflora</i>	Heil, Ken	1992	U
MEVE-01252	58816	583	08/14/1985	Asteraceae	<i>Solidago canadensis</i>	36224	<i>Solidago sparsiflora</i>	Heil, Ken	1992	U
MEVE-01147	63297	141	09/ 2/1083	Asteraceae	<i>Solidago canadensis</i>	36224	<i>Solidago sparsiflora</i>	Heil, Ken	1993	U
MEVE-01443	73733		08/19/1994	Asteraceae	<i>Solidago canadensis</i>	36224	<i>Solidago missouriensis</i>	Litzinger, William	1995	U
MEVE-01150	63295	239	07/19/1929	Asteraceae	<i>Solidago velutina</i>	505290	<i>Solidago sparsiflora</i>	Heil, Ken	1993	U
MEVE-01150	63296	239	07/19/1929	Asteraceae	<i>Solidago velutina</i>	505290	<i>Solidago sparsiflora</i>	Heil, Ken	1993	U

Table A1, continued. Updated and annotated herbarium specimens for Mesa Verde National Park.

Accession #	Catalog #	Collection #	Collection date	Family	Current scientific name	TSN	Original scientific name	Reviewers	Review date	Updated / annotated
MEVE-01148	63298		07/15/1979	Asteraceae	<i>Solidago velutina</i>	505290	<i>Solidago sparsiflora</i>	Heil, Ken	1993	U
MEVE-01148	63299		07/15/1979	Asteraceae	<i>Solidago velutina</i>	505290	<i>Solidago sparsiflora</i>	Heil, Ken	1993	U
MEVE-01144	61605	71	06/28/1944	Asteraceae	<i>Stenotus armerioides</i> var. <i>armerioides</i>	530563	<i>Haplopappus armerioides</i>	Heil, Ken	1993	U
MEVE-01148	61606		06/27/1980	Asteraceae	<i>Stenotus armerioides</i> var. <i>armerioides</i>	530563	<i>Haplopappus armerioides</i>	Heil, Ken	1993	U
MEVE-01148	61607	14	05/23/1981	Asteraceae	<i>Stenotus armerioides</i> var. <i>armerioides</i>	530563	<i>Haplopappus armerioides</i>	Heil, Ken	1993	U
MEVE-01319	62128	841	08/ 9/1990	Asteraceae	<i>Stephanomeria minor</i> var. <i>minor</i>	566323	<i>Lygodesmia grandiflora</i>	DeKoker, T.	38534	A
MEVE-01154	63300		08/ 2/1982	Asteraceae	<i>Stephanomeria minor</i> var. <i>minor</i>	566323	<i>Stephanomeria tenuifolia</i>	Heil, Ken	1993	U
MEVE-01150	63301	224	07/19/1929	Asteraceae	<i>Stephanomeria minor</i> var. <i>minor</i>	566323	<i>Stephanomeria tenuifolia</i>	Heil, Ken	1993	U
MEVE-01145	63302	235	09/ 6/1962	Asteraceae	<i>Stephanomeria minor</i> var. <i>minor</i>	566323	<i>Stephanomeria tenuifolia</i>	Heil, Ken	1993	U
MEVE-01148	63303		08/ 3/1979	Asteraceae	<i>Stephanomeria minor</i> var. <i>minor</i>	566323	<i>Stephanomeria tenuifolia</i>	Heil, Ken	1993	U
MEVE-01152	63304		08/13/1979	Asteraceae	<i>Stephanomeria minor</i> var. <i>minor</i>	566323	<i>Stephanomeria tenuifolia</i>	Heil, Ken	1993	U
MEVE-01370	70307	L011		Asteraceae	<i>Stephanomeria pauciflora</i>	38451	<i>Stephanomeria paciflora</i>	Litzinger, William	08/08/1994	U
MEVE-01317	62118	811	08/31/1988	Asteraceae	<i>Symphytotrichum ascen-</i> <i>dens</i>	522184	<i>Aster chilensis</i> ssp. <i>adscen-</i> <i>dens</i>	Colyer, Marilyn	08/31/1988	U
MEVE-01318	69793	816	08/30/1989	Asteraceae	<i>Symphytotrichum ascen-</i> <i>dens</i>	522184	<i>Erigeron subtrinervis</i>	Litzinger, William	08/ 9/1994	U
MEVE-01252	58781	590	08/14/1985	Asteraceae	<i>Symphytotrichum chilense</i> var. <i>chilense</i>	566327	<i>Aster chilensis</i>	Heil, Ken	1992	U
MEVE-01147	58895	312	Np	Asteraceae	<i>Symphytotrichum ciliatum</i>	522190	<i>Aster brachyactis</i>	Heil, Ken	1993	U
MEVE-01147	58898	306	Np	Asteraceae	<i>Symphytotrichum ciliatum</i>	522190	<i>Aster brachyactis</i>	Heil, Ken	1993	U
MEVE-01149	58999	3	10/ 8/1931	Asteraceae	<i>Symphytotrichum ericoides</i> var. <i>pansum</i>	541083	<i>Aster pansus</i>	Fleming, Richard	1993	U
MEVE-01145	59000	231	08/27/1962	Asteraceae	<i>Symphytotrichum ericoides</i> var. <i>pansum</i>	541083	<i>Aster pansus</i>	Fleming, Richard	1993	U
MEVE-01317	69743	822	10/24/1989	Asteraceae	<i>Symphytotrichum falcatum</i>	522205	<i>Aster ascendens</i>	Litzinger, William	08/ 8/1994	U

Table A1, continued. Updated and annotated herbarium specimens for Mesa Verde National Park.

Accession #	Catalog #	Collection date	Family	Current scientific name	TSN	Original scientific name	Review date	Updated / annotated
MEVE-01150	58873	08/16/1928	Asteraceae	<i>Symphyotrichum falcatum</i> var. <i>falcatum</i>	566331	<i>Aster falcatus</i>	Fleming, Richard 1993	U
MEVE-01150	58874	08/20/1929	Asteraceae	<i>Symphyotrichum falcatum</i> var. <i>falcatum</i>	566331	<i>Aster falcatus</i>	Fleming, Richard 1993	U
MEVE-01149	58875	10/8/1931	Asteraceae	<i>Symphyotrichum falcatum</i> var. <i>falcatum</i>	566331	<i>Aster falcatus</i>	Fleming, Richard 1993	U
MEVE-01154	58997	07/20/1944	Asteraceae	<i>Symphyotrichum falcatum</i> var. <i>falcatum</i>	566331	<i>Aster falcatus</i>	Fleming, Richard 1993	U
MEVE-01148	58998	08/4/1980	Asteraceae	<i>Symphyotrichum falcatum</i> var. <i>falcatum</i>	566331	<i>Aster falcatus</i>	Fleming, Richard 1993	U
MEVE-01147	79622	08/10/1983	Asteraceae	<i>Symphyotrichum laeve</i> var. <i>geyeri</i>	541092	<i>Aster laevis</i> var. <i>geyeri</i>	Litzinger, William 05/16/1998	U
MEVE-01156	66213	06/22/1944	Asteraceae	<i>Tetranneuris acaulis</i> var. <i>acaulis</i>	530623	<i>Hymenoxys acaulis</i>	Heil, Ken 1993	U
MEVE-01150	66221	06/4/1929	Asteraceae	<i>Tetranneuris acaulis</i> var. <i>acaulis</i>	530623	<i>Hymenoxys acaulis</i>	Heil, Ken 1993	U
MEVE-01145	66208	JUN1965	Asteraceae	<i>Tetranneuris ivesiana</i>	38512	<i>Hymenoxys acaulis</i>	Heil, Ken 1993	U
MEVE-01154	66209	06/5/1965	Asteraceae	<i>Tetranneuris ivesiana</i>	38512	<i>Hymenoxys acaulis</i>	Heil, Ken 1993	U
MEVE-01144	66210	06/28/1944	Asteraceae	<i>Tetranneuris ivesiana</i>	38512	<i>Hymenoxys acaulis</i>	Heil, Ken 1993	U
MEVE-01156	66211	06/29/1941	Asteraceae	<i>Tetranneuris ivesiana</i>	38512	<i>Hymenoxys acaulis</i>	Heil, Ken 1993	U
MEVE-01156	66212	06/22/1944	Asteraceae	<i>Tetranneuris ivesiana</i>	38512	<i>Hymenoxys acaulis</i>	Heil, Ken 1993	U
MEVE-01151	66214	JUN1939	Asteraceae	<i>Tetranneuris ivesiana</i>	38512	<i>Hymenoxys acaulis</i>	Heil, Ken 1993	U
MEVE-01142	66219	06/14/1925	Asteraceae	<i>Tetranneuris ivesiana</i>	38512	<i>Hymenoxys acaulis</i>	Heil, Ken 1993	U
MEVE-01150	66220	06/4/1929	Asteraceae	<i>Tetranneuris ivesiana</i>	38512	<i>Hymenoxys acaulis</i>	Heil, Ken 1993	U
MEVE-01150	66222	07/19/1929	Asteraceae	<i>Tetranneuris ivesiana</i>	38512	<i>Hymenoxys acaulis</i>	Heil, Ken 1993	U
MEVE-01319	74275	05/11/1990	Asteraceae	<i>Tetranneuris ivesiana</i>	38512	<i>Tetranneuris ivesiana</i>	Litzinger, William 1995	U
MEVE-01319	74269	05/11/1990	Asteraceae	Unknown		Unidentified	Litzinger, William 1995	U
MEVE-01319	74277	05/19/1990	Asteraceae	<i>Wyethia scabra</i> var. <i>cane-scens</i>	530870	<i>Wyethia scabra</i> ssp. <i>cane-scens</i>	Litzinger, William 1995	U
MEVE-01319	62119	03/12/1990	Berberidaceae	<i>Mahonia fremontii</i>	195033	<i>Quercus turbinella</i>	Rink, Glenn 2005	A
MEVE-01319	74278	05/11/1990	Boraginaceae	<i>Cryptantha crassispala</i>	31800	<i>Cryptantha gracilis</i>	Litzinger, William 1995	U
MEVE-01282	54987	08/01/1990	Boraginaceae	<i>Lappula occidentalis</i> var. <i>occidentalis</i>	528678	<i>Lappula redowskii</i>	Adams & Hovey 1991	U

Table A1, continued. Updated and annotated herbarium specimens for Mesa Verde National Park.

Accession #	Catalog #	Collection #	Collection date	Family	Current scientific name	TSN	Original scientific name	Reviewers	Review date	Updated / annotated
MEVE-01252	62066	462	05/15/1985	Boraginaceae	<i>Lappula occidentalis</i> var. <i>occidentalis</i>	528678	<i>Lappula redowskii</i>	Colyer, Marilyn		U
MEVE-01143	61706	1650	05/30/1925	Boraginaceae	<i>Lappula occidentalis</i> var. <i>occidentalis</i>	528678	<i>Lappula redowskii</i>	Heil, Ken	1993	U
MEVE-01143	61707	1650	05/30/1925	Boraginaceae	<i>Lappula occidentalis</i> var. <i>occidentalis</i>	528678	<i>Lappula redowskii</i>	Heil, Ken	1993	U
MEVE-01150	61708	11	05/ 5/1929	Boraginaceae	<i>Lappula occidentalis</i> var. <i>occidentalis</i>	528678	<i>Lappula redowskii</i>	Heil, Ken	1993	U
MEVE-01151	61709	Np	05/04/1939	Boraginaceae	<i>Lappula occidentalis</i> var. <i>occidentalis</i>	528678	<i>Lappula redowskii</i>	Heil, Ken	1993	U
MEVE-01150	61710	11	05/ 5/1929	Boraginaceae	<i>Lappula occidentalis</i> var. <i>occidentalis</i>	528678	<i>Lappula redowskii</i>	Heil, Ken	1993	U
MEVE-01142	61711	1670	06/ 2/1925	Boraginaceae	<i>Lappula occidentalis</i> var. <i>occidentalis</i>	528678	<i>Lappula redowskii</i>	Heil, Ken	1993	U
MEVE-01145	61712	288	05/ 6/1963	Boraginaceae	<i>Lappula occidentalis</i> var. <i>occidentalis</i>	528678	<i>Lappula redowskii</i>	Heil, Ken	1993	U
MEVE-01145	61713	291	05/ 7/1963	Boraginaceae	<i>Lappula occidentalis</i> var. <i>occidentalis</i>	528678	<i>Lappula redowskii</i>	Heil, Ken	1993	U
MEVE-01145	61714	297	05/ 8/1963	Boraginaceae	<i>Lappula occidentalis</i> var. <i>occidentalis</i>	528678	<i>Lappula redowskii</i>	Heil, Ken	1993	U
MEVE-01145	61715	260	04/10/1963	Boraginaceae	<i>Lappula occidentalis</i> var. <i>occidentalis</i>	528678	<i>Lappula redowskii</i>	Heil, Ken	1993	U
MEVE-01145	61716	530	JUN1965	Boraginaceae	<i>Lappula occidentalis</i> var. <i>occidentalis</i>	528678	<i>Lappula redowskii</i>	Heil, Ken	1993	U
MEVE-01147	61717	81	05/27/1982	Boraginaceae	<i>Lappula occidentalis</i> var. <i>occidentalis</i>	528678	<i>Lappula redowskii</i>	Heil, Ken	1993	U
MEVE-01148	61718	80	05/25/1982	Boraginaceae	<i>Lappula occidentalis</i> var. <i>occidentalis</i>	528678	<i>Lappula redowskii</i>	Heil, Ken	1993	U
MEVE-01142	61719	1670	06/ 2/1925	Boraginaceae	<i>Lappula occidentalis</i> var. <i>occidentalis</i>	528678	<i>Lappula redowskii</i>	Heil, Ken	1993	U
MEVE-01370	69915	L012		Boraginaceae	<i>Lappula occidentalis</i> var. <i>occidentalis</i>	528678	<i>Lappula redowskii</i>	Litzinger, William	08/ 8/1994	U
MEVE-01252	62075	471	05/19/1985	Boraginaceae	<i>Mertensia oblongifolia</i>	31683	<i>Mertensia lanceolata</i>	Colyer, Marilyn	05/20/1985	U
MEVE-01145	61695	285	05/ 3/1963	Boraginaceae	<i>Mertensia oblongifolia</i>	31683	<i>Mertensia fusiformis</i>	Heil, Ken	1993	U
MEVE-01145	61696	202	04/18/1960	Boraginaceae	<i>Mertensia oblongifolia</i>	31683	<i>Mertensia fusiformis</i>	Heil, Ken	1993	U

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MEVE-01150	61697	33	05/12/1929	Boraginaceae	<i>Mertensia oblongifolia</i>	31683	<i>Mertensia fusiformis</i>	Heil, Ken 1993	U
MEVE-01143	61698	1585	05/28/1925	Boraginaceae	<i>Mertensia oblongifolia</i>	31683	<i>Mertensia fusiformis</i>	Heil, Ken 1993	U
MEVE-01150	61699	33	05/12/1929	Boraginaceae	<i>Mertensia oblongifolia</i>	31683	<i>Mertensia fusiformis</i>	Heil, Ken 1993	U
MEVE-01143	61700	1585	05/28/1925	Boraginaceae	<i>Mertensia oblongifolia</i>	31683	<i>Mertensia fusiformis</i>	Heil, Ken 1993	U
MEVE-01147	61701	247	06/22/1984	Boraginaceae	<i>Mertensia oblongifolia</i>	31683	<i>Mertensia fusiformis</i>	Heil, Ken 1993	U
MEVE-01143	61702	1585	05/28/1925	Boraginaceae	<i>Mertensia oblongifolia</i>	31683	<i>Mertensia fusiformis</i>	Heil, Ken 1993	U
MEVE-01145	61703	362	05/29/1963	Boraginaceae	<i>Mertensia oblongifolia</i>	31683	<i>Mertensia fusiformis</i>	Heil, Ken 1993	U
MEVE-01320	69768	888	07/ 5/1991	Boraginaceae	<i>Mertensia oblongifolia</i>	31683	<i>Mertensia fusiformis</i>	Litzinger, William 08/ 5/1994	U
MEVE-01147	79090	SN-C	08/10/1981	Brassicaceae	<i>Alyssum alyssoides</i>	23030	<i>Lesquerella gordonii</i> ssp. sessile	Litzinger, William 09/06/1997	U
MEVE-01147	79091	SN-A	08/10/1981	Brassicaceae	<i>Alyssum alyssoides</i>	23030	<i>Lesquerella gordonii</i> ssp. sessile	Litzinger, William 09/06/1997	U
MEVE-01147	79092	SN-B	08/10/1981	Brassicaceae	<i>Alyssum alyssoides</i>	23030	<i>Lesquerella gordonii</i> ssp. sessile	Litzinger, William 09/06/1997	U
MEVE-01147	79093	Np	04/28/1981	Brassicaceae	<i>Alyssum alyssoides</i>	23030	<i>Lesquerella gordonii</i> ssp. sessile	Litzinger, William 1997	U
MEVE-01147	79094	Np	11/02/1980	Brassicaceae	<i>Alyssum alyssoides</i>	23030	<i>Lesquerella gordonii</i> ssp. sessile	Litzinger, William 09/06/1997	U
MEVE-01294	58766	670	05/14/1986	Brassicaceae	<i>Arabis fendleri</i> var. <i>fendleri</i>	184331	<i>Arabis holboellii</i> var. <i>fendleri</i>	Heil, Ken 1992	U
MEVE-01320	69764	846	05/ 9/1991	Brassicaceae	Brassicaceae		<i>Sisymbrium altissimum</i>	Litzinger, William 08/17/1994	U
MEVE-01147	73745	159	09/15/1983	Brassicaceae	<i>Descurainia incana</i> ssp. <i>incana</i>	523966	<i>Descurainia richardsonii</i>	Litzinger, William 1995	U
MEVE-01150	79050	18	05/05/1929	Brassicaceae	<i>Descurainia incana</i> ssp. <i>incana</i>	523967	<i>Descurainia incisa</i>	Litzinger, William 09/07/1997	U
MEVE-01147	79056	3 MARC	05/13/1981	Brassicaceae	<i>Descurainia incana</i> ssp. <i>incana</i>	523967	<i>Descurainia incisa</i> ssp. <i>incisa</i>	Litzinger, William 09/07/1997	U
MEVE-01143	79051	1751-D	06/17/1925	Brassicaceae	<i>Descurainia pinnata</i> ssp. <i>filipes</i>	22829	<i>Descurainia incisa</i> ssp. <i>filipes</i>	Litzinger, William 09/07/1997	U
MEVE-01143	79052	1751-C	06/17/1925	Brassicaceae	<i>Descurainia pinnata</i> ssp. <i>filipes</i>	22829	<i>Descurainia incisa</i> ssp. <i>filipes</i>	Litzinger, William 09/07/1997	U
MEVE-01143	79053	1751-A	06/17/1925	Brassicaceae	<i>Descurainia pinnata</i> ssp. <i>filipes</i>	22829	<i>Descurainia incisa</i> ssp. <i>filipes</i>	Litzinger, William 09/07/1997	U

Table A1, continued. Updated and annotated herbarium specimens for Mesa Verde National Park.

Accession #	Catalog #	Collection #	Collection date	Family	Current scientific name	TSN	Original scientific name	Reviewers	Review date	Updated / annotated
MEVE-01143	79054	1751-B	06/17/1925	Brassicaceae	<i>Descurainia pinnata</i> ssp. <i>filipes</i>	22829	<i>Descurainia incisca</i> ssp. <i>filipes</i>	Litzinger, William	09/07/1997	U
MEVE-01150	79055	2049	05/05/1929	Brassicaceae	<i>Descurainia pinnata</i> ssp. <i>filipes</i>	22829	<i>Descurainia incisca</i> ssp. <i>filipes</i>	Litzinger, William	09/07/1997	U
MEVE-01151	79047	Np	04/18/1939	Brassicaceae	<i>Descurainia pinnata</i> ssp. <i>intermedia</i>	22832	<i>Descurainia pinnata</i> ssp. <i>intermedia</i>	Litzinger, William	09/07/1997	U
MEVE-01147	79048	83 MARC	06/14/1982	Brassicaceae	<i>Descurainia pinnata</i> ssp. <i>intermedia</i>	22832	<i>Descurainia pinnata</i> ssp. <i>intermedia</i>	Litzinger, William	09/07/1997	U
MEVE-01151	79049	Np	05/05/1939	Brassicaceae	<i>Descurainia pinnata</i> ssp. <i>intermedia</i>	22832	<i>Descurainia pinnata</i> ssp. <i>intermedia</i>	Litzinger, William	09/07/1997	U
MEVE-01319	74280		05/11/1990	Brassicaceae	<i>Draba aurea</i>	22863	<i>Draba cana</i>	Litzinger, William	1995	U
MEVE-01252	62074	470	05/19/1985	Brassicaceae	<i>Erysimum capitatum</i>	22932	<i>Erysimum inconspicuum</i>	Colyer, Marilyn	05/20/1985	U
MEVE-01147	79069	400	06/12/1981	Brassicaceae	<i>Erysimum capitatum</i>	22932	<i>Erysimum inconspicuum</i>	Litzinger, William	1997	U
MEVE-01252	62086	485	05/21/1985	Brassicaceae	<i>Malcolmia africana</i>	23243	<i>Chorispora tenella</i>	Hill, Mar-Elise	2005	A
MEVE-01367	69753	871	04/30/1992	Brassicaceae	<i>Malcolmia africana</i>	23243	<i>Thelypodium laxiflorum</i>	Litzinger, William	08/10/1994	U
MEVE-01320	69751	889	09/11/1991	Brassicaceae	<i>Rorippa nasturtium-aquaticum</i>	22993	<i>Nasturtium officinale</i>	Litzinger, William	08/ 5/1994	U
MEVE-01320	69772	897	09/11/1991	Brassicaceae	<i>Rorippa nasturtium-aquaticum</i>	22993	<i>Nasturtium officinale</i>	Litzinger, William	08/ 3/1994	U
MEVE-01320	62130	847	06/ 6/1991	Brassicaceae	<i>Schoenocrambe linifolia</i>	23296	<i>Sisymbrium linifolium</i>	Colyer, Marilyn		U
MEVE-01150	79108	95-A	06/11/1929	Brassicaceae	<i>Schoenocrambe linifolia</i>	23296	<i>Sisymbrium loeselii</i>	Hill, Mar-Elise	6/2005	A
MEVE-01150	79109	95-B	06/11/1929	Brassicaceae	<i>Schoenocrambe linifolia</i>	23296	<i>Sisymbrium loeselii</i>	Hill, Mar-Elise	6/2005	A
MEVE-01147	79110	SN-A	05/28/1981	Brassicaceae	<i>Schoenocrambe linifolia</i>	23296	<i>Sisymbrium loeselii</i>	Hill, Mar-Elise	6/2005	A
MEVE-01147	79111	SN-B	05/28/1981	Brassicaceae	<i>Schoenocrambe linifolia</i>	23296	<i>Sisymbrium loeselii</i>	Hill, Mar-Elise	6/2005	A
MEVE-01145	79112	315	05/21/1963	Brassicaceae	<i>Schoenocrambe linifolia</i>	23296	<i>Sisymbrium loeselii</i>	Hill, Mar-Elise	6/2005	A
MEVE-01145	79113	Np	SUMMER 1961	Brassicaceae	<i>Schoenocrambe linifolia</i>	23296	<i>Sisymbrium loeselii</i>	Hill, Mar-Elise	6/2005	A
MEVE-01144	79114	16	06/24/1944	Brassicaceae	<i>Schoenocrambe linifolia</i>	23296	<i>Sisymbrium loeselii</i>	Hill, Mar-Elise	6/2005	A
MEVE-01144	79115	16	06/24/1944	Brassicaceae	<i>Schoenocrambe linifolia</i>	23296	<i>Sisymbrium loeselii</i>	Hill, Mar-Elise	6/2005	A
MEVE-01151	79116	Np	05/08/1939	Brassicaceae	<i>Schoenocrambe linifolia</i>	23296	<i>Sisymbrium loeselii</i>	Hill, Mar-Elise	6/2005	A
MEVE-01156	79117	Np	05/25/1941	Brassicaceae	<i>Schoenocrambe linifolia</i>	23296	<i>Sisymbrium loeselii</i>	Hill, Mar-Elise	6/2005	A
MEVE-01148	79128	82 MARC	06/02/1982	Brassicaceae	<i>Thelypodopsis elegans</i>	23387	<i>Thelypodopsis elegans</i>	Litzinger, William	09/12/1997	U

Table A1, continued. Updated and annotated herbarium specimens for Mesa Verde National Park.

Accession #	Catalog #	Collection #	Collection date	Family	Current scientific name	TSN	Original scientific name	Reviewers	Review date	Updated / annotated
MEVE-01147	79133	246	06/22/1984	Brassicaceae	<i>Thlaspi montanum</i> var. <i>montanum</i>	530668	<i>Noccaea montana</i>	Litzinger, William	1997	U
MEVE-01143	79134	1626-A	05/29/1925	Brassicaceae	<i>Thlaspi montanum</i> var. <i>montanum</i>	530668	<i>Noccaea montana</i>	Litzinger, William	1997	U
MEVE-01143	79135	1626-B	05/29/1925	Brassicaceae	<i>Thlaspi montanum</i> var. <i>montanum</i>	530668	<i>Noccaea montana</i>	Litzinger, William	1997	U
MEVE-01150	79136	2055	05/12/1929	Brassicaceae	<i>Thlaspi montanum</i> var. <i>montanum</i>	530668	<i>Noccaea montana</i>	Litzinger, William	1997	U
MEVE-01145	79137	198	04/18/1960	Brassicaceae	<i>Thlaspi montanum</i> var. <i>montanum</i>	530668	<i>Noccaea montana</i>	Litzinger, William	1997	U
MEVE-01143	69760	1791	07/12/1925	Cactaceae	<i>Escobaria vivipara</i> var. <i>vivipara</i>	528100	<i>Conypantha vivipara</i>	Litzinger, William	08/4/1994	U
MEVE-01143	79138	1731	06/12/1925	Cactaceae	<i>Opuntia phaeacantha</i>	19724	<i>Opuntia polycantha</i>	Hill, Mar-Elise	6/2005	A
MEVE-01147	69759	87	07/30/1982	Cactaceae	<i>Opuntia polyacantha</i>	19726	<i>Opuntia polycantha</i>	Litzinger, William	08/4/1994	U
MEVE-01144	69867		06/29/1944	Cactaceae	<i>Opuntia polyacantha</i>	19726	<i>Opuntia polycantha</i>	Litzinger, William	08/4/1994	U
MEVE-1142	91179	1767	6/24/1925	Cactaceae	<i>Opuntia tunicata</i> var. <i>davisii</i>	195303	<i>Opuntia tunicata</i>	Schmoll, H.M.	1925	U
MEVE-1144	91203	28	6/26/1944	Cactaceae	<i>Opuntia tunicata</i> var. <i>davisii</i>	195303	<i>Opuntia tunicata</i>	Weber, W.A.	1950	U
MEVE-01294	58671	694	06/25/1986	Caprifoliaceae	<i>Sambucus nigra</i> ssp. <i>cerulea</i>	525080	<i>Sambucus cerulea</i>	Heil, Ken	1992	U
MEVE-01252	58758	547	07/10/1985	Caprifoliaceae	<i>Sambucus nigra</i> ssp. <i>cerulea</i>	525080	<i>Sambucus cerulea</i>	Heil, Ken	1992	U
MEVE-01252	58759	547	07/10/1985	Caprifoliaceae	<i>Sambucus nigra</i> ssp. <i>cerulea</i>	525080	<i>Sambucus cerulea</i>	Heil, Ken	1992	U
MEVE-01252	58760	547	07/10/1985	Caprifoliaceae	<i>Sambucus nigra</i> ssp. <i>cerulea</i>	525080	<i>Sambucus cerulea</i>	Heil, Ken	1992	U
MEVE-01147	79144	415	07/03/1984	Caprifoliaceae	<i>Sambucus nigra</i> ssp. <i>cerulea</i>	525080	<i>Sambucus cerulea</i>	Litzinger, William	1997	U
MEVE-01143	79145	1764-A	06/18/1925	Caprifoliaceae	<i>Sambucus nigra</i> ssp. <i>cerulea</i>	525080	<i>Sambucus cerulea</i>	Litzinger, William	1997	U
MEVE-01143	79146	1764-B	06/18/1925	Caprifoliaceae	<i>Sambucus nigra</i> ssp. <i>cerulea</i>	525080	<i>Sambucus cerulea</i>	Litzinger, William	1997	U
MEVE-01150	79147	168-A	06/28/1929	Caprifoliaceae	<i>Sambucus nigra</i> ssp. <i>cerulea</i>	525080	<i>Sambucus cerulea</i>	Litzinger, William	1997	U

Table A1, continued. Updated and annotated herbarium specimens for Mesa Verde National Park.

Accession #	Catalog #	Collection #	Collection date	Family	Current scientific name	TSN	Original scientific name	Reviewers	Review date	Updated / annotated
MEVE-01150	79148	168-B	06/28/1929	Caprifoliaceae	<i>Sambucus nigra</i> ssp. <i>cerulea</i>	525080	<i>Sambucus cerulea</i>	Litzinger, William	1997	U
MEVE-01150	79149	168-C	06/28/1929	Caprifoliaceae	<i>Sambucus nigra</i> ssp. <i>cerulea</i>	525080	<i>Sambucus cerulea</i>	Litzinger, William	1997	U
MEVE-01252	58708	736	08/14/1985	Carophyllaceae	<i>Arenaria congesta</i> var. <i>congesta</i>	184218	<i>Juncus confusus</i>	Heil, Ken	1992	U
MEVE-01143	79511	1565-B	05/26/1925	Caryophyllaceae	<i>Arenaria congesta</i>	20243	<i>Unknown</i>	Rink, Glenn	6/2005	A
MEVE-01143	78892	1704-A	06/09/1925	Caryophyllaceae	<i>Arenaria congesta</i> var. <i>congesta</i>	184218	<i>Eremogone congesta</i>	Litzinger, William	09/24/1997	U
MEVE-01143	78893	1704-B	06/09/1925	Caryophyllaceae	<i>Arenaria congesta</i> var. <i>congesta</i>	184218	<i>Eremogone congesta</i>	Litzinger, William	09/24/1997	U
MEVE-01144	78894	153	07/10/1944	Caryophyllaceae	<i>Arenaria congesta</i> var. <i>congesta</i>	184218	<i>Eremogone congesta</i>	Litzinger, William	09/24/1997	U
MEVE-01144	78895	116	07/01/1944	Caryophyllaceae	<i>Arenaria congesta</i> var. <i>congesta</i>	184218	<i>Eremogone congesta</i>	Litzinger, William	09/24/1997	U
MEVE-01150	78896	75 (1704)	06/04/1929	Caryophyllaceae	<i>Arenaria congesta</i> var. <i>congesta</i>	184218	<i>Eremogone congesta</i>	Litzinger, William	09/24/1997	U
MEVE-01142	78897	1506	07/12/1924	Caryophyllaceae	<i>Arenaria congesta</i> var. <i>congesta</i>	184218	<i>Eremogone congesta</i>	Litzinger, William	09/24/1997	U
MEVE-01151	78898	SN	06/1939	Caryophyllaceae	<i>Arenaria congesta</i> var. <i>congesta</i>	184218	<i>Eremogone congesta</i>	Litzinger, William	09/24/1997	U
MEVE-01147	78899	SN-A	06/15/1980	Caryophyllaceae	<i>Arenaria congesta</i> var. <i>congesta</i>	184218	<i>Eremogone congesta</i>	Litzinger, William	09/24/1997	U
MEVE-01147	78900	SN-B	06/15/1980	Caryophyllaceae	<i>Arenaria congesta</i> var. <i>congesta</i>	184218	<i>Eremogone congesta</i>	Litzinger, William	09/24/1997	U
MEVE-01144	78901	63	06/27/1944	Caryophyllaceae	<i>Arenaria congesta</i> var. <i>congesta</i>	184218	<i>Eremogone congesta</i>	Litzinger, William	09/24/1997	U
MEVE-01147	79435	138	07/29/1983	Caryophyllaceae	<i>Silene scouleri</i>	20117	<i>Nicotiana attenuata</i>	Rink, Glenn	6/2005	A
MEVE-01147	79437	139	09/02/1983	Caryophyllaceae	<i>Silene scouleri</i>	20117	<i>Nicotiana attenuata</i>	Rink, Glenn	6/2005	A
MEVE-01147	79441	429	10/12/1983	Caryophyllaceae	<i>Silene scouleri</i>	20117	<i>Nicotiana attenuata</i>	Rink, Glenn	6/2005	A

Table A1, continued. Updated and annotated herbarium specimens for Mesa Verde National Park.

Accession #	Catalog #	Collection #	Collection date	Family	Current scientific name	TSN	Original scientific name	Reviewers	Review date	Updated / annotated
MEVE-01147	79442	424	07/23/1983	Caryophyllaceae	<i>Silene scouleri</i>	20117	<i>Nicotiana attenuata</i>	Rink, Glenn	6/2005	A
MEVE-01156	78913	SN	05/24/1941	Celastraceae	<i>Paxistima myrsinites</i>	504149	<i>Pachystima myrsinites</i>	Litzinger, William	09/22/1999	U
MEVE-01145	78914	188	07/1960	Celastraceae	<i>Paxistima myrsinites</i>	504149	<i>Pachystima myrsinites</i>	Litzinger, William	09/22/1997	U
MEVE-01150	78915	8 (2044)	05/05/1929	Celastraceae	<i>Paxistima myrsinites</i>	504149	<i>Pachystima myrsinites</i>	Litzinger, William	09/22/1997	U
MEVE-01143	78916	1661-A	06/01/1929	Celastraceae	<i>Paxistima myrsinites</i>	504149	<i>Pachystima myrsinites</i>	Litzinger, William	09/22/1997	U
MEVE-01143	78917	1661-B	06/01/1925	Celastraceae	<i>Paxistima myrsinites</i>	504149	<i>Pachystima myrsinites</i>	Litzinger, William	09/22/1997	U
MEVE-01143	78918	1661-C	06/01/1925	Celastraceae	<i>Paxistima myrsinites</i>	504149	<i>Pachystima myrsinites</i>	Litzinger, William	09/22/1997	U
MEVE-01146	78919	1555		Celastraceae	<i>Paxistima myrsinites</i>	504149	<i>Pachystima myrsinites</i>	Litzinger, William	09/22/1997	U
MEVE-01294	58797	705	07/11/1986	Chenopodiaceae	<i>Atriplex micrantha</i>	192269	<i>Atriplex heterosperma</i>	Heil, Ken	1992	U
MEVE-01319	74271	Np	05/11/1990	Chenopodiaceae	<i>Kochia americana</i>	20694	<i>Artemisia frigida</i>	Hill, Mar-Elise	6/2005	A
MEVE-01316	58725	786	09/21/1987	Chenopodiaceae	<i>Kochia scoparia</i>	20696	<i>Kochia sieversiana</i>	Heil, Ken	1992	U
MEVE-01147	78978	Np	07/28/1981	Chenopodiaceae	<i>Kochia scoparia</i>	20696	<i>Bassia hyssopifolia</i>	Litzinger, William	09/28/1997	U
MEVE-01147	78979	Np	08/14/1981	Chenopodiaceae	<i>Kochia scoparia</i>	20696	<i>Bassia hyssopifolia</i>	Litzinger, William	09/28/1997	U
MEVE-01147	78980	Np	10/03/1981	Chenopodiaceae	<i>Kochia scoparia</i>	20696	<i>Bassia hyssopifolia</i>	Litzinger, William	09/28/1997	U
MEVE-01147	78981	Np	08/14/1981	Chenopodiaceae	<i>Kochia scoparia</i>	20696	<i>Bassia hyssopifolia</i>	Litzinger, William	09/28/1997	U
MEVE-01147	78982	Np	10/03/1981	Chenopodiaceae	<i>Kochia scoparia</i>	20696	<i>Bassia hyssopifolia</i>	Litzinger, William	09/28/1997	U
MEVE-01148	78983	28 MARC	07/20/1981	Chenopodiaceae	<i>Kochia scoparia</i>	20696	<i>Bassia hyssopifolia</i>	Litzinger, William	09/28/1997	U
MEVE-01149	78961	1	10/08/1931	Chenopodiaceae	<i>Krascheninnikovia lanata</i>	503290	<i>Krascheninnikovia lanata</i>	Litzinger, William	09/21/1997	U
MEVE-01149	78976	SN	10/22/1980	Chenopodiaceae	<i>Krascheninnikovia lanata</i>	503290	<i>Krascheninnikovia lanata</i>	Litzinger, William	09/20/1997	U
MEVE-01149	78977	1	10/08/1931	Chenopodiaceae	<i>Krascheninnikovia lanata</i>	503290	<i>Krascheninnikovia lanata</i>	Litzinger, William	09/20/1997	U

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Accession #	Catalog #	Collection #	Collection date	Family	Current scientific name	TSN	Original scientific name	Reviewers	Review date	Updated / annotated
MEVE-01147	78984	303-A	09/27/1984	Chenopodiaceae	<i>Monolepis nuttalliana</i>	20700	<i>Monolepis nuttalliana</i>	Litzinger, William	09/26/1997	U
MEVE-01147	78985	303-B	09/27/1984	Chenopodiaceae	<i>Monolepis nuttalliana</i>	20700	<i>Monolepis nuttalliana</i>	Litzinger, William	09/26/1997	U
MEVE-01148	78986	SN	10/21/1981	Chenopodiaceae	<i>Monolepis nuttalliana</i>	20700	<i>Monolepis nuttalliana</i>	Litzinger, William	09/26/1997	U
MEVE-01319	74293		05/19/1990	Chenopodiaceae	<i>Salsola tragus</i>	520950	<i>Tripterocalyx carneus</i>	Litzinger, William	1995	U
MEVE-01155	78987	5236	09/14/1949	Chenopodiaceae	<i>Salsola tragus</i>	520950	<i>Salsola australis</i>	Litzinger, William	09/26/1997	U
MEVE-01145	78988	239	09/19/1962	Chenopodiaceae	<i>Salsola tragus</i>	520950	<i>Salsola australis</i>	Litzinger, William	09/26/1997	U
MEVE-01252	62057	455B	05/12/1985	Cornaceae	<i>Cornus sericea</i> ssp. <i>sericea</i>	523904	<i>Cornus stolonifera</i>	Colyer, Marilyn		U
MEVE-01316	58753	771	07/14/1987	Crassulaceae	<i>Sedum lanceolatum</i>	24126	<i>Sedum stenopetalum</i>	Heil, Ken	1992	U
MEVE-01144	78996	86	06/28/1944	Crassulaceae	<i>Sedum lanceolatum</i>	24126	<i>Amerosedum lanceolatum</i>	Litzinger, William	09/23/1997	U
MEVE-01252	69812	660	04/11/1985	Cupressaceae	<i>Juniperus scopulorum</i>	194872	<i>Sabina scopulorum</i>	Litzinger, William	08/12/1994	U
MEVE-01150	79187	22-B (2071)	05/12/1929	Cupressaceae	<i>Juniperus scopulorum</i>	194872	<i>Sabina scopulorum</i>	Litzinger, William	10/17/1997	U
MEVE-01150	79188	22 (2071)	05/12/1929	Cupressaceae	<i>Juniperus scopulorum</i>	194872	<i>Sabina scopulorum</i>	Litzinger, William	10/17/1997	U
MEVE-01146	79194	1558	06/06/1961	Cupressaceae	<i>Juniperus scopulorum</i>	194872	<i>Sabina scopulorum</i>	Litzinger, William	10/17/1997	U
MEVE-01252	58743	736	08/14/1985	Cuscutaceae	<i>Cuscuta cuspidata</i>	30726	<i>Cuscuta pentagona</i>	Heil, Ken	1992	U
MEVE-01147	73756	156	09/20/1983	Cuscutaceae	<i>Cuscuta cuspidata</i>	30726	<i>Grammica cuspidata</i>	Litzinger, William	1995	U
MEVE-01147	73757	156	09/20/1983	Cuscutaceae	<i>Cuscuta cuspidata</i>	30726	<i>Grammica cuspidata</i>	Litzinger, William	1995	U
MEVE-01147	73758	156	09/20/1983	Cuscutaceae	<i>Cuscuta cuspidata</i>	30726	<i>Grammica cuspidata</i>	Litzinger, William	1995	U
MEVE-01147	73759	156	09/20/1983	Cuscutaceae	<i>Cuscuta cuspidata</i>	30726	<i>Grammica cuspidata</i>	Litzinger, William	1995	U
MEVE-01147	79023	317	10/08/1984	Cyperaceae	<i>Carex deweyana</i>	39575	<i>Carex dweyana</i>	Litzinger, William	1997	U
MEVE-01150	79007	2086 (102)	06/11/1929	Cyperaceae	<i>Carex inops</i> ssp. <i>heliophila</i>	523761	<i>Carex pensylvanica</i> ssp. <i>heliophila</i>	Litzinger, William	10/01/1997	U
MEVE-01150	79011	3113 (162)	06/21/1929	Cyperaceae	<i>Carex inops</i> ssp. <i>heliophila</i>	523761	<i>Carex pensylvanica</i> ssp. <i>heliophila</i>	Litzinger, William	10/01/1997	U
MEVE-01150	79009	2109 (146-A)	06/18/1929	Cyperaceae	<i>Carex microptera</i>	39699	<i>Carex egglestonia</i>	Litzinger, William	10/01/1997	U

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MEVE-01150	79010	06/18/1929	Cyperaceae	<i>Carex microptera</i>	39699	<i>Carex egglestonia</i>	Litzinger, William	10/01/1997	U
MEVE-1147	96907	5/2/1984	Cyperaceae	<i>Carex rossii</i>	39786	<i>Carex cf rossii</i>	G. Rink	2005	A
MEVE-01316	69813	05/2/1987	Cyperaceae	<i>Carex rossii</i>	39786	<i>Carex pityophila</i>	Litzinger, William	08/3/1994	U
MEVE-01147	73761	07/3/1983	Cyperaceae	<i>Carex rossii</i>	39786	<i>Carex</i>	Litzinger, William	1995	U
MEVE-01148	74079	08/7/1980	Cyperaceae	<i>Carex rossii</i>	39786	<i>Distichlis spicata</i>	Litzinger, William	1995	U
MEVE-01147	79012	05/17/1984	Cyperaceae	<i>Carex rossii</i>	39786	<i>Carex geophila</i>	Litzinger, William	10/02/1997	U
MEVE-01147	79013	06/18/1984	Cyperaceae	<i>Carex rossii</i>	39786	<i>Carex geophila</i>	Litzinger, William	10/02/1997	U
MEVE-01147	79014	06/18/1984	Cyperaceae	<i>Carex rossii</i>	39786	<i>Carex geophila</i>	Litzinger, William	10/02/1997	U
MEVE-01147	79016	05/31/1984	Cyperaceae	<i>Carex rossii</i>	39786	<i>Carex geophila</i>	Litzinger, William	10/02/1997	U
MEVE-01147	79017	05/08/1984	Cyperaceae	<i>Carex rossii</i>	39786	<i>Carex geophila</i>	Litzinger, William	10/02/1997	U
MEVE-01147	79018	05/08/1984	Cyperaceae	<i>Carex rossii</i>	39786	<i>Carex geophila</i>	Litzinger, William	10/02/1997	U
MEVE-01443	73767	08/18/1994	Cyperaceae	<i>Cyperus tenuis</i>	39243	<i>Cyperus uniflorus</i>	Litzinger, William	7/3/2005	U
MEVE-01318	73765	08/30/1989	Cyperaceae	<i>Eleocharis palustris</i>	40019	<i>Eleocharis montevidensis</i>	Litzinger, William	1995	U
MEVE-01318	73766	08/30/1989	Cyperaceae	<i>Eleocharis palustris</i>	40019	<i>Eleocharis montevidensis</i>	Litzinger, William	1995	U
MEVE-01148	79022	05/13/1981	Cyperaceae	<i>Juncus longistylis</i>	503256	<i>Carex nebraskensis</i>	Litzinger, William	7/3/2005	U
MEVE-01252	62103	08/15/1985	Cyperaceae	<i>Schoenoplectus acutus</i> var. <i>acutus</i>	531332	<i>Scirpus lacustris</i>	Colyer, Marilyn	08/15/1985	U
MEVE-01252	69814	08/15/1985	Cyperaceae	<i>Schoenoplectus maritimus</i>	521093	<i>Bolboschoenus maritimus</i>	Litzinger, William	08/17/1994	U
MEVE-01145	79026	07/07/1960	Cyperaceae	<i>Schoenoplectus maritimus</i>	521093	<i>Bolboschoenus maritimus</i> ssp. <i>paludosus</i>	Litzinger, William	09/29/1997	U
MEVE-01294	58706	07/11/1986	Cyperaceae	<i>Schoenoplectus pungens</i> var. <i>pungens</i>	531336	<i>Scirpus pungens</i>	Heil, Ken	1992	U
MEVE-01294	58707	07/11/1986	Cyperaceae	<i>Schoenoplectus pungens</i> var. <i>pungens</i>	531336	<i>Scirpus pungens</i>	Heil, Ken	1992	U
MEVE-01147	73763	06/24/1983	Cyperaceae	<i>Schoenoplectus pungens</i> var. <i>pungens</i>	531336	<i>Carex simulata</i>	Litzinger, William	1995	U
MEVE-01147	73764	06/24/1983	Cyperaceae	<i>Schoenoplectus pungens</i> var. <i>pungens</i>	531336	<i>Carex simulata</i>	Litzinger, William	1995	U
MEVE-01148	79019	05/13/1981	Cyperaceae	<i>Schoenoplectus pungens</i> var. <i>pungens</i>	531336	<i>Amphiscirpus nevadensis</i>	Litzinger, William	1997	U
MEVE-01148	79020	05/13/1981	Cyperaceae	<i>Schoenoplectus pungens</i> var. <i>pungens</i>	531336	<i>Amphiscirpus nevadensis</i>	Litzinger, William	1997	U

Table A1, continued. Updated and annotated herbarium specimens for Mesa Verde National Park.

Accession #	Catalog #	Collection #	Collection date	Family	Current scientific name	TSN	Original scientific name	Reviewers	Review date	Updated / annotated
MEVE-01252	62104	605	08/15/1985	Cyperaceae	<i>Schoenoplectus pungens</i> var. <i>pungens</i>	531336	<i>Scirpus pungens</i>	Weber, Dr. William A.		U
MEVE-1144	96921	25	6/26/1944	Equisetaceae	<i>Equisetum hyemale</i> var. <i>affine</i>	527892	<i>Equisetum praealtum</i>	G. Rink	2005	A
MEVE-01147	79185	388	06/08/1983	Equisetaceae	<i>Equisetum variegatum</i> var. <i>variegatum</i>	181782	<i>Hippochaete variegata</i>	Litzinger, William	10/16/1997	U
MEVE-01147	79279	Np	09/27/1982	Euphorbiaceae	<i>Chamaesyce</i>	28244	<i>Galium aparine</i>	G. Rink	7/3/2005	A
MEVE-01152	79281	68 MARC	10/20/1981	Euphorbiaceae	<i>Chamaesyce</i>	28244	<i>Galium aparine</i>	G. Rink	7/3/2005	A
MEVE-01147	79029	Np	08/05/1981	Euphorbiaceae	<i>Chamaesyce maculata</i>	565061	<i>Chamaesyce strictospora</i>	Litzinger, William	10/04/1997	U
MEVE-01147	79030	Np	07/17/1981	Euphorbiaceae	<i>Chamaesyce maculata</i>	565061	<i>Chamaesyce strictospora</i>	Litzinger, William	10/04/1997	U
MEVE-01252	62082	479	05/21/1985	Euphorbiaceae	<i>Euphorbia brachycera</i>	28049	<i>Euphorbia robusta</i>	Colyer, Marilyn		U
MEVE-01147	79039	376	06/29/1983	Euphorbiaceae	<i>Euphorbia brachycera</i>	28049	<i>Tithymalus brachycerus</i>	Litzinger, William	10/05/1997	U
MEVE-01150	79036	1150 (106)	06/11/1929	Euphorbiaceae	<i>Euphorbia incisa</i> var. <i>mollis</i>	528131	<i>Tithymalus inciscus</i> var. <i>mollis</i>	Litzinger, William	10/05/1997	U
MEVE-01148	79037	SN	06/01/1979	Euphorbiaceae	<i>Euphorbia incisa</i> var. <i>mollis</i>	528131	<i>Tithymalus inciscus</i> var. <i>mollis</i>	Litzinger, William	10/05/1997	U
MEVE-01150	79038	251	07/24/1929	Euphorbiaceae	<i>Euphorbia incisa</i> var. <i>mollis</i>	528131	<i>Tithymalus inciscus</i> var. <i>mollis</i>	Litzinger, William	10/05/1997	U
MEVE-01150	79040	2153 (251)	07/24/1929	Euphorbiaceae	<i>Euphorbia incisa</i> var. <i>mollis</i>	528131	<i>Tithymalus brachycerus</i>	Litzinger, William	10/05/1997	U
MEVE-01143	79041	1662	06/01/1925	Euphorbiaceae	<i>Euphorbia incisa</i> var. <i>mollis</i>	528131	<i>Tithymalus inciscus</i> var. <i>mollis</i>	Litzinger, William	10/05/1997	U
MEVE-01143	79042	1662	06/01/1925	Euphorbiaceae	<i>Euphorbia incisa</i> var. <i>mollis</i>	528131	<i>Tithymalus inciscus</i> var. <i>mollis</i>	Litzinger, William	10/05/1997	U
MEVE-1145	91194	519	6/9/1965	Fabaceae	<i>Astragalus mollissimus</i> var. <i>thompsoniae</i>	192649	<i>Astragalus mollissimus</i>	Erdman, J.A.	1965	U
MEVE-01145	78875	287	05/04/1963	Fabaceae	<i>Astragalus pattersonii</i>	25625	<i>Astragalus pattersonii</i>	Litzinger, William	10/09/1997	U
MEVE-01148	78876	SN-A	05/13/1981	Fabaceae	<i>Astragalus pattersonii</i>	25625	<i>Astragalus pattersonii</i>	Litzinger, William	1997	U
MEVE-01148	78877	SN-B	05/13/1981	Fabaceae	<i>Astragalus pattersonii</i>	25625	<i>Astragalus pattersonii</i>	Litzinger, William	10/09/1997	U
MEVE-01148	78878	SN-C	05/13/1981	Fabaceae	<i>Astragalus pattersonii</i>	25625	<i>Astragalus pattersonii</i>	Litzinger, William	10/09/1997	U
MEVE-01252	62054	454A	04/18/1985	Fabaceae	<i>Astragalus sesquiflorus</i>	25675	<i>Astragalus deterior</i>	Colyer, Marilyn	04/18/1985	U
MEVE-01319	62121	827	05/24/1990	Fabaceae	<i>Lathyrus lanszwertii</i> var. <i>leucanthus</i>	528691	<i>Lathyrus leucanthus</i>	Colyer, Marilyn	05/24/1990	U

Table A1, continued. Updated and annotated herbarium specimens for Mesa Verde National Park.

Accession #	Catalog #	Collection #	Collection date	Family	Current scientific name	TSN	Original scientific name	Reviewers	Review date	Updated / annotated
MEVE-01316	69821	775	06/30/1987	Fabaceae	<i>Lathyrus lanszwertii</i> var. <i>leucanthus</i>	528691	<i>Lathyrus eucosmus</i>	Litzinger, William	08/ 3/1994	U
MEVE-01442	73777	1035	06/10/1993	Fabaceae	<i>Lathyrus lanszwertii</i> var. <i>leucanthus</i>	528691	<i>Lathyrus leucanthus</i>	Litzinger, William	1995	U
MEVE-01145	78837	353	05/24/1963	Fabaceae	<i>Lathyrus lanszwertii</i> var. <i>leucanthus</i>	528691	<i>Lathyrus lucaanthus</i>	Litzinger, William	10/11/1997	U
MEVE-01144	78831	145	07/06/1944	Fabaceae	<i>Melilotus officinalis</i>	26150	<i>Melilotus officinale</i>	Litzinger, William	10/11/1997	U
MEVE-01145	78832	360	05/29/1963	Fabaceae	<i>Melilotus officinalis</i>	26150	<i>Melilotus officinale</i>	Litzinger, William	10/11/1997	U
MEVE-01145	78833	1802	08/29/1932	Fabaceae	<i>Melilotus officinalis</i>	26150	<i>Melilotus albus</i>	Litzinger, William	10/11/1997	U
MEVE-01142	79225	1705	06/09/1925	Fabaceae	<i>Thermopsis montana</i>	508158	<i>Thermopsis montanum</i>	Litzinger, William	1997	U
MEVE-01316	62114	780	09/ 3/1987	Fagaceae	<i>Quercus +pauciloba</i>	19395	<i>Quercus undulata</i>	Colyer, Marilyn	09/ 3/1987	U
MEVE-01294	62139	673	05/29/1986	Fagaceae	<i>Quercus +pauciloba</i>	19395	<i>Quercus undulata</i>	Colyer, Marilyn		U
MEVE-01294	62144	683	06/12/1986	Fagaceae	<i>Quercus +pauciloba</i>	19395	<i>Quercus turbinella</i>	Colyer, Marilyn		U
MEVE-01154	73801	84	08/ 2/1982	Fagaceae	<i>Quercus +pauciloba</i>	19395	<i>Quercus gambelii</i>	Litzinger, William	1995	U
MEVE-01154	73802	80	08/ 2/1982	Fagaceae	<i>Quercus +pauciloba</i>	19395	<i>Quercus turbinella</i>	Litzinger, William	1995	U
MEVE-01154	73803	84	08/ 2/1982	Fagaceae	<i>Quercus +pauciloba</i>	19395	<i>Quercus turbinella</i>	Litzinger, William	1995	U
MEVE-01154	73804	84	08/ 2/1982	Fagaceae	<i>Quercus +pauciloba</i>	19395	<i>Quercus turbinella</i>	Litzinger, William	1995	U
MEVE-01148	73805	73	05/19/1982	Fumariaceae	<i>Corydalis aurea</i>	18999	<i>Corydalis aurea</i> ssp. <i>aurea</i>	Litzinger, William	1995	U
MEVE-01147	73806	73	05/19/1982	Fumariaceae	<i>Corydalis aurea</i>	18999	<i>Corydalis aurea</i> ssp. <i>aurea</i>	Litzinger, William	1995	U
MEVE-01150	73807	12/2046	05/ 5/1925	Fumariaceae	<i>Corydalis aurea</i>	18999	<i>Corydalis aurea</i> ssp. <i>aurea</i>	Litzinger, William	1995	U
MEVE-01143	73808	1649	05/30/1925	Fumariaceae	<i>Corydalis aurea</i>	18999	<i>Corydalis aurea</i> ssp. <i>aurea</i>	Litzinger, William	1995	U
MEVE-01319	69856	892	09/ 2/1990	Gentianaceae	<i>Centaurium calycosum</i>	30028	<i>Phlox longifolia</i>	Litzinger, William	08/ 5/1994	U
MEVE-01443	73822		07/12/1994	Hydrocharitaceae	<i>Elodea bifoliata</i>	38940	<i>Elodea longivaginata</i>	Litzinger, William	1995	U
MEVE-01252	62107	608	08/14/1985	Juncaceae	<i>Juncus nevadensis</i>	39295	<i>Juncus torreyi</i>	Weber, Dr. William A.		U
MEVE-01252	62106	607	08/15/1985	Juncaceae	<i>Juncus tenuis</i>	39243	<i>Juncus compressus</i>	G. Rink	7/3/2005	A
MEVE-01147	79003	252	06/27/1984	Juncaceae	<i>Juncus tenuis</i>	39243	<i>Juncus interior</i>	G. Rink	7/3/2005	A
MEVE-01143	73754	1718	06/ 9/1925	Liliaceae	<i>Maianthemum racemosum</i> ssp. <i>amplexicaule</i>	524296	<i>Maianthemum amplexicaule</i>	Litzinger, William	1995	U
MEVE-01143	73755	1718	06/ 9/1925	Liliaceae	<i>Maianthemum racemosum</i> ssp. <i>amplexicaule</i>	524296	<i>Maianthemum amplexicaule</i>	Litzinger, William	1995	U

Table A1, continued. Updated and annotated herbarium specimens for Mesa Verde National Park.

Accession #	Catalog #	Collection #	Collection date	Family	Current scientific name	TSN	Original scientific name	Reviewers	Review date	Updated / annotated
MEVE-01150	73882	209/2136	07/16/1929	Liliaceae	<i>Maianthemum racemosum</i> ssp. <i>amplexicaule</i>	524296	<i>Maianthemum amplexicaule</i>	Litzinger, William	1995	U
MEVE-01150	73883	209/2136	07/16/1929	Liliaceae	<i>Maianthemum racemosum</i> ssp. <i>amplexicaule</i>	524296	<i>Maianthemum amplexicaule</i>	Litzinger, William	1995	U
MEVE-01147	73884	238	06/22/1984	Liliaceae	<i>Maianthemum racemosum</i> ssp. <i>amplexicaule</i>	524296	<i>Maianthemum amplexicaule</i>	Litzinger, William	1995	U
MEVE-01148	73885		08/ 7/1980	Liliaceae	<i>Maianthemum racemosum</i> ssp. <i>amplexicaule</i>	524296	<i>Maianthemum amplexicaule</i>	Litzinger, William	1995	U
MEVE-01148	73886		08/ 7/1980	Liliaceae	<i>Maianthemum racemosum</i> ssp. <i>amplexicaule</i>	524296	<i>Maianthemum amplexicaule</i>	Litzinger, William	1995	U
MEVE-01149	73893	20	06/10/1932	Liliaceae	<i>Zigadenus venenosus</i> var. <i>venenosus</i>	530912	<i>Toxicoscordion venenosum</i>	Litzinger, William	1995	U
MEVE-01145	73894	340	05/23/1963	Liliaceae	<i>Zigadenus venenosus</i> var. <i>venenosus</i>	530912	<i>Toxicoscordion venenosum</i>	Litzinger, William	1995	U
MEVE-01143	73895	1668	06/ 2/1925	Liliaceae	<i>Zigadenus venenosus</i> var. <i>venenosus</i>	530912	<i>Toxicoscordion venenosum</i>	Litzinger, William	1995	U
MEVE-01142	73896	1668	06/ 2/1925	Liliaceae	<i>Zigadenus venenosus</i> var. <i>venenosus</i>	530912	<i>Toxicoscordion venenosum</i>	Litzinger, William	1995	U
MEVE-01145	73897	314	05/21/1963	Linaceae	<i>Linum lewisii</i> var. <i>lewisii</i>	528819	<i>Adenolinum lewisii</i>	Litzinger, William	1995	U
MEVE-01150	73898	83/2080	06/ 8/1929	Linaceae	<i>Linum lewisii</i> var. <i>lewisii</i>	528819	<i>Adenolinum lewisii</i>	Litzinger, William	1995	U
MEVE-01150	73899	96/2080	06/11/1929	Linaceae	<i>Linum lewisii</i> var. <i>lewisii</i>	528819	<i>Adenolinum lewisii</i>	Litzinger, William	1995	U
MEVE-01143	73900	1596	05/28/1925	Linaceae	<i>Linum lewisii</i> var. <i>lewisii</i>	528819	<i>Adenolinum lewisii</i>	Litzinger, William	1995	U
MEVE-01143	73901	1596	05/28/1925	Linaceae	<i>Linum lewisii</i> var. <i>lewisii</i>	528819	<i>Adenolinum lewisii</i>	Litzinger, William	1995	U
MEVE-01143	73902	1596	05/28/1925	Linaceae	<i>Linum lewisii</i> var. <i>lewisii</i>	528819	<i>Adenolinum lewisii</i>	Litzinger, William	1995	U
MEVE-01151	73903	Np	05/23/1939	Linaceae	<i>Linum lewisii</i> var. <i>lewisii</i>	528819	<i>Adenolinum lewisii</i>	Litzinger, William	1995	U
MEVE-01151	73904	Np	05/23/1939	Linaceae	<i>Linum lewisii</i> var. <i>lewisii</i>	528819	<i>Adenolinum lewisii</i>	Litzinger, William	1995	U
MEVE-01367	69805	875	04/30/1992	Loasaceae	<i>Mentzelia albicaulis</i>	503757	<i>Arcolasia albicaulis</i>	Litzinger, William	08/10/1994	U
MEVE-01367	69806	873	04/30/1992	Loasaceae	<i>Mentzelia albicaulis</i>	503757	<i>Arcolasia albicaulis</i>	Litzinger, William	08/10/1994	U
MEVE-01147	73905		06/25/1980	Loasaceae	<i>Mentzelia albicaulis</i>	503757	<i>Arcolasia albicaulis</i>	Litzinger, William	1995	U
MEVE-01150	73906	137/2103	06/18/1929	Loasaceae	<i>Mentzelia albicaulis</i>	503757	<i>Arcolasia albicaulis</i>	Litzinger, William	1995	U
MEVE-01150	73907	137/2103	06/18/1929	Loasaceae	<i>Mentzelia albicaulis</i>	503757	<i>Arcolasia albicaulis</i>	Litzinger, William	1995	U
MEVE-01143	73908	1647	05/30/1925	Loasaceae	<i>Mentzelia albicaulis</i>	503757	<i>Arcolasia albicaulis</i>	Litzinger, William	1995	U
MEVE-01143	73909	1647	05/30/1925	Loasaceae	<i>Mentzelia albicaulis</i>	503757	<i>Arcolasia albicaulis</i>	Litzinger, William	1995	U

Table A1, continued. Updated and annotated herbarium specimens for Mesa Verde National Park.

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MEVE-01367	69804	876	04/30/1992	Loasaceae	<i>Mentzelia albicaulis</i>	503757	<i>Arcolasia humilis</i>	Rink, Glenn	6/2005	A
MEVE-01147	73910	132	08/ 3/1983	Loasaceae	<i>Mentzelia multicaulis</i>	503787	<i>Nuttallia multicaulis</i>	Litzinger, William	1995	U
MEVE-01147	73911	396	10/29/1984	Loasaceae	<i>Mentzelia multiflora</i> var. <i>multiflora</i>	529149	<i>Nuttallia multiflora</i>	Litzinger, William	1995	U
MEVE-01147	73912	396	10/29/1984	Loasaceae	<i>Mentzelia multiflora</i> var. <i>multiflora</i>	529149	<i>Nuttallia multiflora</i>	Litzinger, William	1995	U
MEVE-01148	73913		05/13/1981	Loasaceae	<i>Mentzelia multiflora</i> var. <i>multiflora</i>	529149	<i>Nuttallia multiflora</i>	Litzinger, William	1995	U
MEVE-01150	73914	215/2138	07/16/1929	Loasaceae	<i>Mentzelia multiflora</i> var. <i>multiflora</i>	529149	<i>Nuttallia multiflora</i>	Litzinger, William	1995	U
MEVE-00115	73915	215/2138	07/16/1929	Loasaceae	<i>Mentzelia multiflora</i> var. <i>multiflora</i>	529149	<i>Nuttallia multiflora</i>	Litzinger, William	1995	U
MEVE-01148	73916		08/ 4/1981	Loasaceae	<i>Mentzelia multiflora</i> var. <i>multiflora</i>	529149	<i>Nuttallia multiflora</i>	Litzinger, William	1995	U
MEVE-01147	73917		08/25/1981	Loasaceae	<i>Mentzelia multiflora</i> var. <i>multiflora</i>	529149	<i>Nuttallia multiflora</i>	Litzinger, William	1995	U
MEVE-01147	74033	326	11/ 1/1984	Loasaceae	<i>Mentzelia multiflora</i> var. <i>multiflora</i>	529149	<i>Nuttallia multiflora</i>	Litzinger, William	1995	U
MEVE-01442	73832	1038	08/ 5/1993	Malvaceae	<i>Sidalcea neomexicana</i>	21891	<i>Delphinium</i>	Rink, Glenn	6/2005	A
MEVE-01442	73834	1041	08/ 5/1993	Malvaceae	<i>Sidalcea neomexicana</i>	21891	<i>Delphinium nuttallianum</i>	Rink, Glenn	6/2005	A
MEVE-01252	69807	642	10/10/1985	Monotropaceae	<i>Pterospora andromedea</i>	23787	<i>Pterospora andromedea</i>	Litzinger, William	08/ 7/1994	U
MEVE-1145	97055		8/28/1963	Nyctaginaceae	<i>Mirabilis linearis</i>	19651	<i>Oxybaphus linearis</i>	Erdman, James	1963	U
MEVE-01147	73971	116	08/24/1982	Nyctaginaceae	<i>Mirabilis linearis</i>	19651	<i>Oxybaphus linearis</i>	Litzinger, William	1995	U
MEVE-01147	73972	116	08/24/1982	Nyctaginaceae	<i>Mirabilis linearis</i>	19651	<i>Oxybaphus linearis</i>	Litzinger, William	1995	U
MEVE-01148	73973		08/ 4/1980	Nyctaginaceae	<i>Mirabilis linearis</i>	19651	<i>Oxybaphus linearis</i>	Litzinger, William	1995	U
MEVE-01148	73974		08/23/1979	Nyctaginaceae	<i>Mirabilis linearis</i>	19651	<i>Oxybaphus linearis</i>	Litzinger, William	1995	U
MEVE-01152	73975		09/ 7/1980	Nyctaginaceae	<i>Mirabilis linearis</i>	19651	<i>Oxybaphus linearis</i>	Litzinger, William	1995	U
MEVE-01152	73976		09/ 7/1980	Nyctaginaceae	<i>Mirabilis linearis</i>	19651	<i>Oxybaphus linearis</i>	Litzinger, William	1995	U
MEVE-01147	74032	385	07/ 8/1983	Nyctaginaceae	<i>Mirabilis linearis</i>	19651	<i>Oxybaphus linearis</i>	Litzinger, William	1995	U
MEVE-01252	58678	556	06/18/1985	Onagraceae	<i>Chamerion angustifolium</i> ssp. <i>angustifolium</i>	566019	<i>Epilobium angustifolium</i>	Heil, Ken	1992	U
MEVE-01252	58679	556	06/18/1985	Onagraceae	<i>Chamerion angustifolium</i> ssp. <i>angustifolium</i>	566019	<i>Epilobium angustifolium</i>	Heil, Ken	1992	U

Table A1, continued. Updated and annotated herbarium specimens for Mesa Verde National Park.

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MEVE-01147	73990	308	09/27/1984	Onagraceae	<i>Gaura mollis</i>	565206	<i>Gaura parviflora</i>	Litzinger, William	1995	U
MEVE-01147	73991	308	09/27/1984	Onagraceae	<i>Gaura mollis</i>	565206	<i>Gaura parviflora</i>	Litzinger, William	1995	U
MEVE-01443	73999	1064	06/ 2/1994	Onagraceae	<i>Oenothera albicaulis</i>	27373	<i>Oenothera caespitosa</i> ssp. <i>marginata</i>	Litzinger, William	1995	U
MEVE-01252	58798	596	08/15/1985	Onagraceae	<i>Oenothera elata</i> ssp. <i>hookeri</i>	524353	<i>Oenothera hookeri</i>	Heil, Ken	1992	U
MEVE-01147	74025	240	06/22/1984	Orchidaceae	<i>Corallorrhiza maculata</i>	43523	<i>Corallorrhiza maculata</i>	Litzinger, William	1995	U
MEVE-01442	74024	Np	06/16/1994	Orchidaceae	<i>Goodyera oblongifolia</i>	43593	<i>Calypso bulbosa</i>	Litzinger, William	1995	U
MEVE-01316	69800	756	04/28/1987	Pinaceae	<i>Pinus ponderosa</i> var. <i>scopulorum</i>	529675	<i>Pinus ponderosa</i> ssp. <i>scopulorum</i>	Litzinger, William	08/ 3/1994	U
MEVE-01316	69801	753	04/23/1987	Pinaceae	<i>Pinus ponderosa</i> var. <i>scopulorum</i>	529675	<i>Pinus ponderosa</i> ssp. <i>scopulorum</i>	Litzinger, William	08/ 3/1994	U
MEVE-01252	69802	656	09/10/1985	Pinaceae	<i>Pinus ponderosa</i> var. <i>scopulorum</i>	529675	<i>Pinus ponderosa</i> ssp. <i>scopulorum</i>	Litzinger, William	08/ 6/1994	U
MEVE-01144	79200	79	07/28/1944	Pinaceae	<i>Pinus ponderosa</i> var. <i>scopulorum</i>	529675	<i>Pinus ponderosa</i> ssp. <i>scopulorum</i>	Litzinger, William	10/19/1997	U
MEVE-01147	79201	198	04/22/1984	Pinaceae	<i>Pinus ponderosa</i> var. <i>scopulorum</i>	529675	<i>Pinus ponderosa</i> ssp. <i>scopulorum</i>	Litzinger, William	10/19/1997	U
MEVE-01147	79202	245	06/22/1984	Pinaceae	<i>Pinus ponderosa</i> var. <i>scopulorum</i>	529675	<i>Pinus ponderosa</i> ssp. <i>scopulorum</i>	Litzinger, William	10/19/1997	U
MEVE-01147	79203	275	08/02/1984	Pinaceae	<i>Pinus ponderosa</i> var. <i>scopulorum</i>	529675	<i>Pinus ponderosa</i> ssp. <i>scopulorum</i>	Litzinger, William	10/19/1997	U
MEVE-01147	79204	SN	05/13/1981	Pinaceae	<i>Pinus ponderosa</i> var. <i>scopulorum</i>	529675	<i>Pinus ponderosa</i> ssp. <i>scopulorum</i>	Litzinger, William	10/19/1997	U
MEVE-01147	74199	354	07/15/1983	Plantaginaceae	<i>Plantago tweedyi</i>	32894	<i>Plantago major</i>	Litzinger, William	1995	U
MEVE-01148	74172		10/20/1981	Poaceae	<i>Achnatherum nelsonii</i> ssp. <i>nelsonii</i>	525107	<i>Stipa nelsonii</i>	Litzinger, William	1995	U
MEVE-01294	58698	720	07/23/1986	Poaceae	<i>Achnatherum speciosum</i>	507958	<i>Stipa speciosa</i>	Heil, Ken	1992	U
MEVE-01145	74036	212	08/ 7/1960	Poaceae	<i>Agropyron desertorum</i>	40372	<i>Agropyron cristatum</i>	Rink, Glenn	6/2005	A
MEVE-01294	58792	713	07/11/1986	Poaceae	<i>Agrostis capillaris</i>	185249	<i>Agrostis stolonifera</i>	Rink, Glenn	6/2005	A
MEVE-01150	74039	256/2154	07/24/1929	Poaceae	<i>Agrostis capillaris</i>	185249	<i>Agrostis stolonifera</i>	Rink, Glenn	6/2005	A
MEVE-01150	74040	256/2154	07/24/1929	Poaceae	<i>Agrostis capillaris</i>	185249	<i>Agrostis stolonifera</i>	Rink, Glenn	6/2005	A
MEVE-01294	58761	712	07/11/1986	Poaceae	<i>Agrostis exarata</i>	40412	<i>Agrostis stolonifera</i>	Rink, Glenn	6/2005	A

Table A1, continued. Updated and annotated herbarium specimens for Mesa Verde National Park.

Accession #	Catalog #	Collection date	Family	Current scientific name	TSN	Original scientific name	Reviewers	Review date	Updated / annotated
MEVE-01294	58762	07/11/1986	Poaceae	<i>Agrostis exarata</i>	40412	<i>Agrostis stolonifera</i>	Rink, Glenn	6/2005	A
MEVE-01147	74034	08/20/1984	Poaceae	<i>Andropogon gerardii</i>	40462	<i>Adendropogon gerardii</i>	Litzinger, William	1995	U
MEVE-01147	74204	06/24/1983	Poaceae	<i>Bouteloua simplex</i>	41507	<i>Bouteloua gracilis</i>	Rink, Glenn	6/2005	A
MEVE-01145	74066	AUG1960	Poaceae	<i>Bromus carinatus</i>	40481	<i>Ceratochloa carinata</i>	Litzinger, William	1995	U
MEVE-01147	74060	06/24/1983	Poaceae	<i>Bromus commutatus</i>	41497	<i>Bromus hordeaceus</i>	Rink, Glenn	6/2005	A
MEVE-01144	74052	07/06/1944	Poaceae	<i>Bromus inermis</i>	40502	<i>Bromopsis inermis</i>	Litzinger, William	1995	U
MEVE-01145	74053	07/22/1960	Poaceae	<i>Bromus inermis</i>	40502	<i>Bromopsis inermis</i>	Litzinger, William	1995	U
MEVE-01145	74054	06/21/1960	Poaceae	<i>Bromus inermis</i>	40502	<i>Bromopsis inermis</i>	Litzinger, William	1995	U
MEVE-01145	74055	SUM1961	Poaceae	<i>Bromus inermis</i>	40502	<i>Bromopsis inermis</i>	Litzinger, William	1995	U
MEVE-01145	74056	05/28/1963	Poaceae	<i>Bromus inermis</i>	40502	<i>Bromopsis inermis</i>	Litzinger, William	1995	U
MEVE-01147	74064	07/1/1983	Poaceae	<i>Bromus porteri</i>	40486	<i>Bromopsis porteri</i>	Litzinger, William	1995	U
MEVE-01147	74065	07/1/1983	Poaceae	<i>Bromus porteri</i>	40486	<i>Bromopsis porteri</i>	Litzinger, William	1995	U
MEVE-01154	74080	09/5/1963	Poaceae	<i>Echinochloa crus-galli</i>	502210	<i>Echinochloa crus-galli</i>	Litzinger, William	1995	U
MEVE-01147	69879		Poaceae	<i>Elymus repens</i>	512839	<i>Elytrigia intermedia</i>	Rink, Glenn	6/2005	A
MEVE-01147	69818		Poaceae	<i>Elymus x pseudorepens</i>	502274	<i>Elytrigia repens</i>	Rink, Glenn	6/2005	A
MEVE-01282	55000	07/22/1990	Poaceae	<i>Hesperostipa comata</i> ssp. <i>comata</i>	525116	<i>Stipa comata</i>	Adams & Hovezak	1991	U
MEVE-01337	62835	07/1/1992	Poaceae	<i>Hesperostipa comata</i> ssp. <i>comata</i>	525116	<i>Stipa comata</i>	Adams, Hovezak & Gray		U
MEVE-01156	74165	07/8/1982	Poaceae	<i>Hesperostipa comata</i> ssp. <i>comata</i>	525116	<i>Stipa comata</i>	Litzinger, William	1995	U
MEVE-01150	74167	06/14/1929	Poaceae	<i>Hesperostipa comata</i> ssp. <i>comata</i>	525116	<i>Stipa comata</i>	Litzinger, William	1995	U
MEVE-01150	74168	06/14/1929	Poaceae	<i>Hesperostipa comata</i> ssp. <i>comata</i>	525116	<i>Stipa comata</i>	Litzinger, William	1995	U
MEVE-01150	74169	06/14/1929	Poaceae	<i>Hesperostipa comata</i> ssp. <i>comata</i>	525116	<i>Stipa comata</i>	Litzinger, William	1995	U
MEVE-01142	74170	06/9/1925	Poaceae	<i>Hesperostipa comata</i> ssp. <i>comata</i>	525116	<i>Stipa comata</i>	Litzinger, William	1995	U
MEVE-01154	74171	1939	Poaceae	<i>Hesperostipa comata</i> ssp. <i>comata</i>	525116	<i>Stipa comata</i>	Litzinger, William	1995	U
MEVE-01144	74067	06/29/1944	Poaceae	<i>Hordeum jubatum</i> ssp. <i>jubatum</i>	524156	<i>Critesion jubatur</i>	Litzinger, William	1995	U

Table A1, continued. Updated and annotated herbarium specimens for Mesa Verde National Park.

Accession #	Catalog #	Collection #	Collection date	Family	Current scientific name	TSN	Original scientific name	Reviewers	Review date	Updated / annotated
MEVE-01145	74068	169	07/ 7/1960	Poaceae	<i>Hordeum jubatum</i> ssp. <i>jubatum</i>	524156	<i>Critesion jubatum</i>	Litzinger, William	1995	U
MEVE-01294	59009	668	05/14/1986	Poaceae	<i>Hordeum murinum</i> ssp. <i>leporinum</i>	524161	<i>Hordeum leporinum</i>	Fleming, Richard	1993	U
MEVE-01294	58750	668	05/14/1986	Poaceae	<i>Hordeum murinum</i> ssp. <i>leporinum</i>	524161	<i>Hordeum leporinum</i>	Heil, Ken	1992	U
MEVE-01294	58751	668	05/14/1986	Poaceae	<i>Hordeum murinum</i> ssp. <i>leporinum</i>	524161	<i>Hordeum leporinum</i>	Heil, Ken	1992	U
MEVE-01150	74069	145/2107	06/18/1929	Poaceae	<i>Hordeum pusillum</i>	40866	<i>Critesion pusillum</i>	Litzinger, William	1995	U
MEVE-01150	74070	145/2107	06/18/1929	Poaceae	<i>Hordeum pusillum</i>	40866	<i>Critesion pusillum</i>	Litzinger, William	1995	U
MEVE-01148	74071		05/13/1982	Poaceae	<i>Hordeum pusillum</i>	40866	<i>Critesion pusillum</i>	Litzinger, William	1995	U
MEVE-01147	74193	199	07/20/1982	Poaceae	<i>Leymus salinus</i>	503441	<i>Leymus salina</i>	Litzinger, William	1995	U
MEVE-01147	74194	199	07/20/1982	Poaceae	<i>Leymus salinus</i>	503441	<i>Leymus salina</i>	Litzinger, William	1995	U
MEVE-01252	69889	482	05/21/1985	Poaceae	<i>Leymus triticoides</i>	503443	<i>Elymus glaucus</i>	Rink, Glenn	6/2005	A
MEVE-01252	62102	600	08/15/1985	Poaceae	<i>Lolium arundinaceum</i>	507979	<i>Festuca arundinaceae</i>	Colyer, Marilyn		U
MEVE-01320	62133	854	07/16/1991	Poaceae	<i>Lolium pratense</i>	507983	<i>Festuca elatior</i>	Colyer, Marilyn	07/16/1991	U
MEVE-01316	69888	769	07/ 8/1987	Poaceae	<i>Lolium pratense</i>	507983	<i>Festuca pratensis</i>	Litzinger, William	08/14/1994	U
MEVE-01318	74081	814	08/30/1989	Poaceae	<i>Lolium pratense</i>	507983	<i>Elymus</i>	Rink, Glenn	6/2005	A
MEVE-01252	69832	658	11/ 2/1985	Poaceae	<i>Muhlenbergia montana</i>	41927	<i>Muhlenbergia pungens</i>	Rink, Glenn	6/2005	A
MEVE-01147	74217	273	08/ 2/1984	Poaceae	<i>Muhlenbergia montana</i>	41927	<i>Muhlenbergia filiculmis</i>	Rink, Glenn	6/2005	A
MEVE-01147	74218	329	11/ 7/1984	Poaceae	<i>Muhlenbergia montana</i>	41927	<i>Muhlenbergia filiculmis</i>	Rink, Glenn	6/2005	A
MEVE-01252	69872	602A		Poaceae	<i>Panicum capillare</i>	40914	<i>Panicum capillare</i> var <i>occidentale</i>	Litzinger, William	08/17/1994	U
MEVE-01370	69912	L009		Poaceae	<i>Phalaris arundinacea</i>	41335	<i>Phalaroides arundinacea</i>	Litzinger, William	08/24/1994	U
MEVE-01252	69834	657	10/23/1985	Poaceae	<i>Piptatherum micranthum</i>	507991	<i>Oryzopsis micrantha</i>	Litzinger, William	08/ 6/1994	U
MEVE-01367	69836	903	05/21/1992	Poaceae	<i>Piptatherum micranthum</i>	507991	<i>Oryzopsis micrantha</i>	Litzinger, William	08/10/1994	U
MEVE-01316	69840	791	10/ 3/1987	Poaceae	<i>Piptatherum micranthum</i>	507991	<i>Oryzopsis micrantha</i>	Litzinger, William	08/ 7/1994	U
MEVE-01316	69841	792	11/ 8/1987	Poaceae	<i>Piptatherum micranthum</i>	507991	<i>Oryzopsis micrantha</i>	Litzinger, William	08/ 7/1994	U
MEVE-01145	74230	218	06/ 2/1962	Poaceae	<i>Piptatherum micranthum</i>	507991	<i>Oryzopsis micrantha</i>	Litzinger, William	1995	U
MEVE-01145	74177	376	05/31/1963	Poaceae	<i>Pleuraphis jamesii</i>	507993	<i>Hilaria jamesii</i>	Litzinger, William	1995	U
MEVE-01148	74178		07/15/1979	Poaceae	<i>Pleuraphis jamesii</i>	507993	<i>Hilaria jamesii</i>	Litzinger, William	1995	U
MEVE-01150	74143	99	06/11/1929	Poaceae	<i>Poa nemoralis</i> ssp. <i>interior</i>	526427	<i>Poa pratensis</i>	Rink, Glenn	6/2005	A

Table A1, continued. Updated and annotated herbarium specimens for Mesa Verde National Park.

Accession #	Catalog #	Collection #	Collection date	Family	Current scientific name	TSN	Original scientific name	Reviewers	Review date	Updated / annotated
MEVE-01442	74219	1039	07/ 9/1993	Poaceae	<i>Polypogon interruptus</i>	41174	<i>Muhlenbergia filiformis</i>	Litzinger, William	7/9/1993	U
MEVE-01367	69769	1000	06/ 2/1992	Poaceae	<i>Psathyrostachys juncea</i>	504629	<i>Elymus glaucus</i>	Rink, Glenn	6/2005	A
MEVE-01442	74109	1042	07/ 1/1993	Poaceae	<i>Psathyrostachys juncea</i>	504629	<i>Elymus glaucus</i>	Rink, Glenn	6/2005	A
MEVE-01252	69850	637	09/ 9/1985	Poaceae	<i>Sorghum bicolor</i> ssp. <i>bicolor</i>	524713	<i>Sorghum vulgare</i>	Litzinger, William	08/12/1995	U
MEVE-01294	58764	701	07/ 1/1986	Poaceae	<i>Thinopyrum intermedium</i>	522540	<i>Elymus hispidus</i>	Heil, Ken	1992	U
MEVE-01252	69843	638	10/ 9/1985	Poaceae	<i>Thinopyrum intermedium</i>	522540	<i>Elytrigia intermedia</i>	Litzinger, William	08/ 6/1994	U
MEVE-01145	74176	Np	SUM1961	Poaceae	<i>Thinopyrum intermedium</i>	522540	<i>Elytrigia intermedia</i>	Litzinger, William	1995	U
MEVE-01370	69910	L010		Poaceae	<i>Thinopyrum intermedium</i>	522540	<i>Elytrigia repens</i>	Rink, Glenn	6/2005	A
MEVE-01145	74175	210	AUG1960	Poaceae	<i>Thinopyrum intermedium</i>	522540	<i>Elytrigia dasystachya</i>	Rink, Glenn	6/2005	A
MEVE-11150	91176		5/18/1929	Polemoniaceae	<i>Ipomopsis aggregata</i>	31193	<i>Gilia aggregata</i>	Bader, E.H.	1929	U
MEVE-01282	54970	9	07/12/1990	Polemoniaceae	<i>Phlox gracilis</i> ssp. <i>gracilis</i>	524480	<i>Microsteris gracilis</i>	Adams & Hovezak	1991	U
MEVE-01302	61205	174	06/ 7/1991	Polemoniaceae	<i>Phlox gracilis</i> ssp. <i>gracilis</i>	524480	<i>Microsteris gracilis</i>	Adams, Hovezak & Gray	1991	U
MEVE-01337	61237	300	06/17/1992	Polemoniaceae	<i>Phlox gracilis</i> ssp. <i>gracilis</i>	524480	<i>Microsteris gracilis</i>	Adams, Hovezak & Gray		U
MEVE-01294	58744	675	06/ 7/1986	Polemoniaceae	<i>Phlox gracilis</i> ssp. <i>gracilis</i>	524480	<i>Microsteris gracilis</i>	Heil, Ken	1992	U
MEVE-01147	78912	SN	06/25/1980	Polemoniaceae	<i>Phlox gracilis</i> ssp. <i>gracilis</i>	524480	<i>Silene antirrhina</i>	Litzinger, William	09/25/1997	U
MEVE-01145	79523	261	04/10/1963	Polemoniaceae	<i>Phlox gracilis</i> ssp. <i>gracilis</i>	524480	<i>Microsteris gracilis</i>	Litzinger, William	05/01/1998	U
MEVE-01147	79524	Np	05/15/1982	Polemoniaceae	<i>Phlox gracilis</i> ssp. <i>gracilis</i>	524480	<i>Microsteris gracilis</i>	Litzinger, William	05/01/1998	U
MEVE-01147	79525	Np	05/08/1982	Polemoniaceae	<i>Phlox gracilis</i> ssp. <i>gracilis</i>	524480	<i>Microsteris gracilis</i>	Litzinger, William	05/01/1998	U
MEVE-01148	79526	Np	05/18/1979	Polemoniaceae	<i>Phlox gracilis</i> ssp. <i>gracilis</i>	524480	<i>Microsteris gracilis</i>	Litzinger, William	05/01/1998	U
MEVE-01145	79527	527	06/1965	Polemoniaceae	<i>Phlox gracilis</i> ssp. <i>gracilis</i>	524480	<i>Microsteris gracilis</i>	Litzinger, William	05/01/1998	U
MEVE-01145	79528	192	04/18/1960	Polemoniaceae	<i>Phlox gracilis</i> ssp. <i>gracilis</i>	524480	<i>Microsteris gracilis</i>	Litzinger, William	05/01/1998	U
MEVE-01145	79529	257	03/31/1963	Polemoniaceae	<i>Phlox gracilis</i> ssp. <i>gracilis</i>	524480	<i>Microsteris gracilis</i>	Litzinger, William	05/01/1998	U
MEVE-01144	79512	94	06/29/1944	Polemoniaceae	<i>Phlox longifolia</i> ssp. <i>longifolia</i>	30957	<i>Phlox longifolia</i> var. <i>longifolia</i>	Litzinger, William	05/04/1998	U
MEVE-01150	79513	2052	05/12/1929	Polemoniaceae	<i>Phlox longifolia</i> ssp. <i>longifolia</i>	30957	<i>Phlox longifolia</i> var. <i>longifolia</i>	Litzinger, William	05/04/1998	U
MEVE-01150	79514	88 (2052)	06/08/1929	Polemoniaceae	<i>Phlox longifolia</i> ssp. <i>longifolia</i>	30957	<i>Phlox longifolia</i> var. <i>longifolia</i>	Litzinger, William	05/04/1998	U

Table A1, continued. Updated and annotated herbarium specimens for Mesa Verde National Park.

Accession #	Catalog #	Collection #	Collection date	Family	Current scientific name	TSN	Original scientific name	Reviewers	Review date	Updated / annotated
MEVE-01143	79515	1558-C	05/26/1925	Polemoniaceae	<i>Phlox longifolia</i> ssp. <i>longifolia</i>	30957	<i>Phlox longifolia</i> var. <i>longifolia</i>	Litzinger, William	05/04/1998	U
MEVE-01143	79516	1558-B	05/26/1925	Polemoniaceae	<i>Phlox longifolia</i> ssp. <i>longifolia</i>	30957	<i>Phlox longifolia</i> var. <i>longifolia</i>	Litzinger, William	05/04/1998	U
MEVE-01143	79517	1558-A	05/28/1925	Polemoniaceae	<i>Phlox longifolia</i> ssp. <i>longifolia</i>	30957	<i>Phlox longifolia</i> var. <i>longifolia</i>	Litzinger, William	05/04/1998	U
MEVE-01143	79518	1558-D	05/28/1925	Polemoniaceae	<i>Phlox longifolia</i> ssp. <i>longifolia</i>	30957	<i>Phlox longifolia</i> var. <i>longifolia</i>	Litzinger, William	05/04/1998	U
MEVE-01145	79519	491	06/05/1965	Polemoniaceae	<i>Phlox longifolia</i> ssp. <i>longifolia</i>	30957	<i>Phlox longifolia</i> var. <i>longifolia</i>	Litzinger, William	05/04/1998	U
MEVE-01145	79520	501	06/05/1965	Polemoniaceae	<i>Phlox longifolia</i> ssp. <i>longifolia</i>	30957	<i>Phlox longifolia</i> var. <i>longifolia</i>	Litzinger, William	05/04/1998	U
MEVE-01150	79521	27 (2052)	05/12/1929	Polemoniaceae	<i>Phlox longifolia</i> ssp. <i>longifolia</i>	30957	<i>Phlox longifolia</i> var. <i>longifolia</i>	Litzinger, William	05/04/1998	U
MEVE-01156	79522	SN	05/24/1941	Polemoniaceae	<i>Phlox longifolia</i> ssp. <i>longifolia</i>	30957	<i>Phlox longifolia</i> var. <i>longifolia</i>	Litzinger, William	05/04/1998	U
MEVE-01150	79600	2019 (286)	08/08/1929	Polygonaceae	<i>Eriogonum cernuum</i>	21090	<i>Eriogonum cernuum</i>	Litzinger, William	05/08/1998	U
MEVE-01147	79601	346	06/29/1983	Polygonaceae	<i>Eriogonum cernuum</i>	21090	<i>Eriogonum cernuum</i>	Litzinger, William	05/08/1998	U
MEVE-01316	69754	781A	10/ 3/1987	Polygonaceae	<i>Eriogonum corymbosum</i> var. <i>corymbosum</i>	195443	<i>Eriogonum corymbosum</i> var. <i>corymbosum</i>	Litzinger, William	08/15/1994	U
MEVE-01145	79560	399	07/31/1963	Polygonaceae	<i>Eriogonum microthecum</i>	21192	<i>Eriogonum leptophyllum</i>	Rink, Glenn	6/2005	A
MEVE-01148	79561	Np	09/10/1979	Polygonaceae	<i>Eriogonum microthecum</i>	21192	<i>Eriogonum leptophyllum</i>	Rink, Glenn	6/2005	A
MEVE-01317	69919		04/27/1988	Polygonaceae	<i>Eriogonum ovalifolium</i> var. <i>ovalifolium</i>	195553	<i>Eriogonum ovalifolium</i> var. <i>nevadensis</i>	Litzinger, William	08/20/1994	U
MEVE-01147	79598	119 MARC	09/22/1982	Polygonaceae	<i>Polygonum convolvulus</i> var. <i>convolvulus</i>	529779	<i>Fallopia convolvulus</i>	Litzinger, William	05/05/1998	U
MEVE-01319	70299	837	06/22/1990	Polygonaceae	<i>Polygonum douglasii</i> ssp. <i>engelmannii</i>	524555	<i>Polygonum engelmannii</i>	Litzinger, William	08/ 4/1994	U
MEVE-01282	54992	82	MAY1991	Polygonaceae	<i>Polygonum douglasii</i> ssp. <i>johnstonii</i>	524556	<i>Polygonum sawatchense</i>	Adams & Hov-ezak	1991	U
MEVE-01147	79605	269-B	07/17/1984	Polygonaceae	<i>Rumex patientia</i>	20970	<i>Rumex crispus</i>	Rink, Glenn	6/2005	A
MEVE-01147	79606	269-C	07/17/1984	Polygonaceae	<i>Rumex patientia</i>	20970	<i>Rumex crispus</i>	Rink, Glenn	6/2005	A
MEVE-01147	69886	300	09/27/1984	Polygonaceae	<i>Rumex salicifolius</i> var. <i>mexicanus</i>	530197	<i>Rumex triangulivalvis</i>	Litzinger, William	08/25/1994	U

Table A1, continued. Updated and annotated herbarium specimens for Mesa Verde National Park.

Accession #	Catalog #	Collection #	Collection date	Family	Current scientific name	TSN	Original scientific name	Reviewers	Review date	Updated / annotated
MEVE-01147	69903	217	05/25/1984	Polygonaceae	<i>Rumex salicifolius</i> var. <i>mexicanus</i>	530197	<i>Rumex triangulivalvis</i>	Litzinger, William	08/25/1994	U
MEVE-01150	79216	2143 (222)	07/19/1929	Pteridaceae	<i>Adiantum capillus-veneris</i>	17308	<i>Adiantum capillus-veneris</i>	Litzinger, William	1997	U
MEVE-01147	79217	298	09/26/1984	Pteridaceae	<i>Adiantum capillus-veneris</i>	17308	<i>Adiantum capillus-veneris</i>	Litzinger, William	1997	U
MEVE-01150	79218	20 (2070)	05/12/1929	Pteridaceae	<i>Cheilanthes feei</i>	17441	<i>Cheilanthes feei</i>	Litzinger, William	10/16/1997	U
MEVE-01143	79219	1766-A	06/23/1925	Pteridaceae	<i>Cheilanthes feei</i>	17441	<i>Cheilanthes feei</i>	Litzinger, William	10/16/1997	U
MEVE-01150	79220	2070	05/12/1929	Pteridaceae	<i>Cheilanthes feei</i>	17441	<i>Cheilanthes feei</i>	Litzinger, William	10/16/1997	U
MEVE-01143	79221	1766	06/23/1925	Pteridaceae	<i>Cheilanthes feei</i>	17441	<i>Cheilanthes feei</i>	Litzinger, William	1997	U
MEVE-1147	96934		5/13/1981	Ranunculaceae	<i>Anemone</i>	18425		G. Rink	2005	A
MEVE-01145	79623	256	04/04/1963	Ranunculaceae	<i>Ceratocephala testiculata</i>	501365	<i>Ceratocephala orthoceras</i>	Litzinger, William	05/12/1998	U
MEVE-01147	79646	142	08/10/1983	Ranunculaceae	<i>Clematis columbiana</i>	18693	<i>Clematis linquisticifolia</i>	Litzinger, William	05/16/1998	U
MEVE-01156	79637	Np	05/24/1941	Ranunculaceae	<i>Clematis columbiana</i>	18693	<i>Clematis linquisticifolia</i>	Rink, Glenn	6/2005	A
MEVE-01156	79638	SN-A	05/24/1941	Ranunculaceae	<i>Clematis columbiana</i>	18693	<i>Clematis linquisticifolia</i>	Rink, Glenn	6/2005	A
MEVE-01147	79639	Np	07/15/1979	Ranunculaceae	<i>Clematis columbiana</i>	18693	<i>Clematis linquisticifolia</i>	Rink, Glenn	6/2005	A
MEVE-01150	79640	60 (1748)	05/31/1929	Ranunculaceae	<i>Clematis columbiana</i>	18693	<i>Clematis linquisticifolia</i>	Rink, Glenn	6/2005	A
MEVE-01144	79647	17	06/24/1944	Ranunculaceae	<i>Clematis hirsutissima</i>	18699	<i>Clematis linquisticifolia</i>	Rink, Glenn	6/2005	A
MEVE-01143	79648	1706-A	06/09/1925	Ranunculaceae	<i>Clematis hirsutissima</i>	18699	<i>Clematis linquisticifolia</i>	Rink, Glenn	6/2005	A
MEVE-01143	79649	1706-B	06/09/1925	Ranunculaceae	<i>Clematis hirsutissima</i>	18699	<i>Clematis linquisticifolia</i>	Rink, Glenn	6/2005	A
MEVE-01143	79650	1706-C	06/09/1925	Ranunculaceae	<i>Clematis hirsutissima</i>	18699	<i>Clematis linquisticifolia</i>	Rink, Glenn	6/2005	A
MEVE-01143	79635	1748-B	06/16/1925	Ranunculaceae	<i>Clematis ligusticifolia</i>	18702	<i>Clematis linquisticifolia</i>	Litzinger, William	05/16/1998	U
MEVE-01143	79636	1748-A	06/16/1925	Ranunculaceae	<i>Clematis ligusticifolia</i>	18702	<i>Clematis linquisticifolia</i>	Litzinger, William	05/16/1998	U
MEVE-01148	79641	SN-B	05/13/1981	Ranunculaceae	<i>Clematis ligusticifolia</i>	18702	<i>Clematis linquisticifolia</i>	Litzinger, William	05/16/1998	U
MEVE-01148	79642	SN-A	05/13/1981	Ranunculaceae	<i>Clematis ligusticifolia</i>	18702	<i>Clematis linquisticifolia</i>	Litzinger, William	05/16/1998	U
MEVE-01142	79643	1738-A	06/12/1925	Ranunculaceae	<i>Clematis ligusticifolia</i>	18702	<i>Clematis linquisticifolia</i>	Litzinger, William	05/16/1998	U
MEVE-01142	79644	1738-B	06/12/1925	Ranunculaceae	<i>Clematis ligusticifolia</i>	18702	<i>Clematis linquisticifolia</i>	Litzinger, William	05/16/1998	U
MEVE-01143	79645	1781	06/24/1925	Ranunculaceae	<i>Clematis ligusticifolia</i>	18702	<i>Clematis linquisticifolia</i>	Litzinger, William	05/16/1998	U
MEVE-01142	79654	1582-A	05/27/1925	Ranunculaceae	<i>Delphinium barbeyi</i>	18539	<i>Delphinium nuttallianum</i>	Rink, Glenn	6/2005	A
MEVE-01143	79655	1582-B	05/27/1925	Ranunculaceae	<i>Delphinium barbeyi</i>	18539	<i>Delphinium nuttallianum</i>	Rink, Glenn	6/2005	A
MEVE-01142	79657	1593-A	05/28/1925	Ranunculaceae	<i>Delphinium barbeyi</i>	18539	<i>Delphinium nuttallianum</i>	Rink, Glenn	6/2005	A
MEVE-01142	79658	1593-B	05/28/1925	Ranunculaceae	<i>Delphinium barbeyi</i>	18539	<i>Delphinium nuttallianum</i>	Rink, Glenn	6/2005	A

Table A1, continued. Updated and annotated herbarium specimens for Mesa Verde National Park.

Accession #	Catalog #	Collection #	Collection date	Family	Current scientific name	TSN	Original scientific name	Reviewers	Review date	Updated / annotated
MEVE-01142	79659	1593-C	05/28/1925	Ranunculaceae	<i>Delphinium barbeyi</i>	18539	<i>Delphinium nuttallianum</i>	Rink, Glenn	6/2005	A
MEVE-01150	79624	178 (2122)	06/28/1929	Ranunculaceae	<i>Ranunculus cymbalaria</i>	18600	<i>Halerpestes cymbalaria</i> ssp. <i>saximontanus</i>	Litzinger, William	05/12/1998	U
MEVE-01145	79625	178 (2122)	06/28/1929	Ranunculaceae	<i>Ranunculus cymbalaria</i>	18600	<i>Halerpestes cymbalaria</i> ssp. <i>saximontanus</i>	Litzinger, William	05/12/1998	U
MEVE-01147	79626	Np	06/27/1980	Ranunculaceae	<i>Ranunculus cymbalaria</i>	18600	<i>Halerpestes cymbalaria</i> ssp. <i>saximontanus</i>	Litzinger, William	05/12/1998	U
MEVE-01147	79627	Np	06/27/1980	Ranunculaceae	<i>Ranunculus cymbalaria</i>	18600	<i>Halerpestes cymbalaria</i> ssp. <i>saximontanus</i>	Litzinger, William	05/12/1998	U
MEVE-01147	79628	Np	06/27/1980	Ranunculaceae	<i>Ranunculus cymbalaria</i>	18600	<i>Halerpestes cymbalaria</i> ssp. <i>saximontanus</i>	Litzinger, William	05/12/1998	U
MEVE-01144	79629	19	06/24/1944	Ranunculaceae	<i>Ranunculus cymbalaria</i>	18600	<i>Halerpestes cymbalaria</i> ssp. <i>saximontanus</i>	Litzinger, William	05/12/1998	U
MEVE-1144	96936		6/26/1944	Ranunculaceae	<i>Ranunculus cymbalaria</i>	18600	<i>Halerpestes cymbalaria</i>	Mesa Verde Explorers' Camp For Boys	1944	U
MEVE-01443	74253	1053	05/17/1994	Ranunculaceae	<i>Ranunculus sceleratus</i>	18576	<i>Ranunculus omelinii</i>	G. Rink	7/3/05	A
MEVE-01443	74252	1054	05/17/1994	Ranunculaceae	<i>Rorippa nasturtium-aquaticum</i>	22993	<i>Ranunculus</i>	G. Rink	5/17/1994	A
MEVE-01319	69870	829	05/24/1990	Rosaceae	<i>Geum</i>	24644	<i>Potentilla</i>	Litzinger, William	08/17/1994	U
MEVE-01147	79235	94 MARC	07/05/1982	Rosaceae	<i>Prunus armeniaca</i>	24763	<i>Padus virginiana</i> ssp. <i>mela-nocarpa</i>	Litzinger, William	04/18/1998	U
MEVE-01147	74257	201	04/25/1984	Rosaceae	<i>Prunus virginiana</i>	24806	<i>Prunus virginiana</i>	Litzinger, William	1995	U
MEVE-01317	69866	798	07/12/1988	Rosaceae	<i>Prunus virginiana</i>	24806	<i>Holodiscus dumosus</i>	Rink, Glenn	6/2005	A
MEVE-01147	69898	399	08/10/1984	Rosaceae	<i>Prunus virginiana</i> var. <i>melanocarpa</i>	529894	<i>Padus virginiana</i> ssp. <i>mela-nocarpa</i>	Litzinger, William	08/16/1994	U
MEVE-01143	79230	1597	05/28/1925	Rosaceae	<i>Prunus virginiana</i> var. <i>melanocarpa</i>	529894	<i>Padus virginiana</i> ssp. <i>mela-nocarpa</i>	Litzinger, William	04/18/1998	U
MEVE-01150	79231	85 (2082)	06/08/1929	Rosaceae	<i>Prunus virginiana</i> var. <i>melanocarpa</i>	529894	<i>Padus virginiana</i> ssp. <i>mela-nocarpa</i>	Litzinger, William	04/18/1998	U
MEVE-01147	79232	242	06/22/1984	Rosaceae	<i>Prunus virginiana</i> var. <i>melanocarpa</i>	529894	<i>Padus virginiana</i> ssp. <i>mela-nocarpa</i>	Litzinger, William	04/18/1998	U
MEVE-01145	79233	364	05/29/1963	Rosaceae	<i>Prunus virginiana</i> var. <i>melanocarpa</i>	529894	<i>Padus virginiana</i> ssp. <i>mela-nocarpa</i>	Litzinger, William	04/18/1998	U

Table A1, continued. Updated and annotated herbarium specimens for Mesa Verde National Park.

Accession #	Catalog #	Collection date	Family	Current scientific name	TSN	Original scientific name	Reviewers	Review date	Updated / annotated
MEVE-01154	79234	06/21/1964	Rosaceae	<i>Prunus virginiana</i> var. <i>melanocarpa</i>	529894	<i>Padus virginiana</i> ssp. <i>mela-nocarpa</i>	Litzinger, William	04/18/1998	U
MEVE-01143	79236	05/28/1925	Rosaceae	<i>Prunus virginiana</i> var. <i>melanocarpa</i>	529894	<i>Padus virginiana</i> ssp. <i>mela-nocarpa</i>	Litzinger, William	04/18/1998	U
MEVE-01144	79237	06/24/1944	Rosaceae	<i>Prunus virginiana</i> var. <i>melanocarpa</i>	529894	<i>Padus virginiana</i> ssp. <i>mela-nocarpa</i>	Litzinger, William	04/18/1998	U
MEVE-01146	79238	06/06/1961	Rosaceae	<i>Prunus virginiana</i> var. <i>melanocarpa</i>	529894	<i>Padus virginiana</i> ssp. <i>mela-nocarpa</i>	Litzinger, William	04/18/1998	U
MEVE-01147	79239	06/05/1984	Rosaceae	<i>Prunus virginiana</i> var. <i>melanocarpa</i>	529894	<i>Padus virginiana</i> ssp. <i>mela-nocarpa</i>	Litzinger, William	04/18/1998	U
MEVE-01148	79240	10/20/1981	Rosaceae	<i>Prunus virginiana</i> var. <i>melanocarpa</i>	529894	<i>Padus virginiana</i> ssp. <i>mela-nocarpa</i>	Litzinger, William	04/18/1998	U
MEVE-1144	91172	7/1/1944	Rosaceae	<i>Prunus virginiana</i> var. <i>melanocarpa</i>	529894	<i>Prunus melanocarpa</i>	Mesa Verde Explorers' Camp For Boys	1944	U
MEVE-01147	74255	72	Rosaceae	<i>Prunus virginiana</i> var. <i>virginiana</i>	529895	<i>Padus virginiana</i>	Litzinger, William	1995	U
MEVE-01147	74260	254	Rosaceae	<i>Rubus idaeus</i>	24947	<i>Rubus idaeus</i>	Litzinger, William	1995	U
MEVE-01147	79268	391	Rosaceae	<i>Rubus idaeus</i> ssp. <i>strigosus</i>	524636	<i>Rubus idaeus</i> ssp. <i>melanolausius</i>	Litzinger, William	1997	U
MEVE-01294	58811	669	Salicaceae	<i>Populus +acuminata</i>	22450	<i>Populus acuminata</i>	Heil, Ken	1992	U
MEVE-01294	58812	669	Salicaceae	<i>Populus +acuminata</i>	22450	<i>Populus acuminata</i>	Heil, Ken	1992	U
MEVE-01252	58819	662	Salicaceae	<i>Populus +acuminata</i>	22450	<i>Populus acuminata</i>	Heil, Ken	1992	U
MEVE-01252	58820	662	Salicaceae	<i>Populus +acuminata</i>	22450	<i>Populus acuminata</i>	Heil, Ken	1992	U
MEVE-01316	58712	760	Saxifragaceae	<i>Lithophragma tenellum</i>	24400	<i>Lithophragma tenella</i>	Heil, Ken	1992	U
MEVE-01148	79313	SN	Saxifragaceae	<i>Lithophragma tenellum</i>	24400	<i>Lithophragma tenella</i>	Litzinger, William	04/09/1998	U
MEVE-01147	74262	65	Scrophulariaceae	<i>Castilleja applegatei</i> ssp. <i>martinii</i>	525154	<i>Castilleja chromosa</i>	Litzinger, William	1995	U
MEVE-01319	74286	Np	Scrophulariaceae	<i>Castilleja applegatei</i> ssp. <i>martinii</i>	525154	<i>Castilleja chromosa</i>	Litzinger, William	1995	U
MEVE-01319	74294		Scrophulariaceae	<i>Castilleja applegatei</i> ssp. <i>martinii</i>	525154	<i>Castilleja chromosa</i>	Litzinger, William	1995	U
MEVE-01156	79343	SN	Scrophulariaceae	<i>Castilleja applegatei</i> ssp. <i>martinii</i>	525154	<i>Castilleja chromosa</i>	Litzinger, William	02/08/1998	U

Table A1, continued. Updated and annotated herbarium specimens for Mesa Verde National Park.

Accession #	Catalog #	Collection #	Collection date	Family	Current scientific name	TSN	Original scientific name	Reviewers	Review date	Updated / annotated
MEVE-01150	79350	31 (2054)	05/12/1929	Scrophulariaceae	<i>Castilleja applegatei</i> ssp. <i>martinii</i>	525154	<i>Castilleja chromosa</i>	Litzinger, William	02/08/1998	U
MEVE-01145	79351	334	05/23/1963	Scrophulariaceae	<i>Castilleja applegatei</i> ssp. <i>martinii</i>	525154	<i>Castilleja chromosa</i>	Litzinger, William	02/08/1998	U
MEVE-01143	79352	1594-A	05/28/1925	Scrophulariaceae	<i>Castilleja applegatei</i> ssp. <i>martinii</i>	525154	<i>Castilleja chromosa</i>	Litzinger, William	02/08/1998	U
MEVE-01143	79353	1594-B	05/28/1925	Scrophulariaceae	<i>Castilleja applegatei</i> ssp. <i>martinii</i>	525154	<i>Castilleja chromosa</i>	Litzinger, William	02/08/1998	U
MEVE-01143	79354	1564-A	05/26/1925	Scrophulariaceae	<i>Castilleja applegatei</i> ssp. <i>martinii</i>	525154	<i>Castilleja chromosa</i>	Litzinger, William	02/08/1998	U
MEVE-01143	79355	1564-B	05/26/1925	Scrophulariaceae	<i>Castilleja applegatei</i> ssp. <i>martinii</i>	525154	<i>Castilleja chromosa</i>	Litzinger, William	02/08/1998	U
MEVE-01145	79356	128	06/21/1960	Scrophulariaceae	<i>Castilleja applegatei</i> ssp. <i>martinii</i>	525154	<i>Castilleja chromosa</i>	Litzinger, William	02/08/1998	U
MEVE-01144	79357	117	07/01/1944	Scrophulariaceae	<i>Castilleja applegatei</i> ssp. <i>martinii</i>	525154	<i>Castilleja chromosa</i>	Litzinger, William	02/08/1998	U
MEVE-01144	79358	52	06/27/1944	Scrophulariaceae	<i>Castilleja applegatei</i> ssp. <i>martinii</i>	525154	<i>Castilleja chromosa</i>	Litzinger, William	02/08/1998	U
MEVE-01151	79359	SN	06/1939	Scrophulariaceae	<i>Castilleja applegatei</i> ssp. <i>martinii</i>	525154	<i>Castilleja chromosa</i>	Litzinger, William	02/08/1998	U
MEVE-01143	79360	1564	05/26/1925	Scrophulariaceae	<i>Castilleja applegatei</i> ssp. <i>martinii</i>	525154	<i>Castilleja chromosa</i>	Litzinger, William	02/08/1998	U
MEVE-01145	79361	200	04/18/1960	Scrophulariaceae	<i>Castilleja applegatei</i> ssp. <i>martinii</i>	525154	<i>Castilleja chromosa</i>	Litzinger, William	02/08/1998	U
MEVE-01147	79374	431	10/20/1983	Scrophulariaceae	<i>Linaria dalmatica</i> ssp. <i>dalmatica</i>	524246	<i>Linaria genistifolia</i> ssp. <i>dalmatica</i>	Litzinger, William	03/03/1998	U
MEVE-01150	79362	183	07/02/1929	Scrophulariaceae	<i>Penstemon barbatus</i> ssp. <i>trichander</i>	524441	<i>Penstemon barbatus</i> var. <i>trichander</i>	Litzinger, William	02/21/1998	U
MEVE-01143	79363	1740-A	06/12/1925	Scrophulariaceae	<i>Penstemon barbatus</i> ssp. <i>trichander</i>	524441	<i>Penstemon barbatus</i> var. <i>trichander</i>	Litzinger, William	02/21/1998	U
MEVE-01143	79364	1740-B	06/12/1925	Scrophulariaceae	<i>Penstemon barbatus</i> ssp. <i>trichander</i>	524441	<i>Penstemon barbatus</i> var. <i>trichander</i>	Litzinger, William	02/21/1998	U
MEVE-01150	79367	140	06/18/1929	Scrophulariaceae	<i>Penstemon barbatus</i> ssp. <i>trichander</i>	524441	<i>Penstemon barbatus</i> var. <i>trichander</i>	Litzinger, William	02/21/1998	U

Table A1, continued. Updated and annotated herbarium specimens for Mesa Verde National Park.

Accession #	Catalog #	Collection #	Collection date	Family	Current scientific name	TSN	Original scientific name	Reviewers	Review date	Updated / annotated
MEVE-01142	79370	1697	06/08/1925	Scrophulariaceae	<i>Penstemon barbatus</i> ssp. <i>trichander</i>	524441	<i>Penstemon barbatus</i> var. <i>trichander</i>	Litzinger, William	02/21/1998	U
MEVE-01142	79407	1629	05/29/1925	Scrophulariaceae	<i>Penstemon eatonii</i> ssp. <i>eatonii</i>	33687	<i>Penstemon eatonii</i> var. <i>eatonii</i>	Litzinger, William	02/20/1998	U
MEVE-01156	79408	SN	05/24/1941	Scrophulariaceae	<i>Penstemon eatonii</i> ssp. <i>eatonii</i>	33687	<i>Penstemon eatonii</i> var. <i>eatonii</i>	Litzinger, William	02/20/1998	U
MEVE-01143	79412	1656-B	05/30/1925	Scrophulariaceae	<i>Penstemon eatonii</i> ssp. <i>eatonii</i>	33687	<i>Penstemon eatonii</i> var. <i>eatonii</i>	Litzinger, William	02/20/1998	U
MEVE-01143	79413	1656-C	05/30/1925	Scrophulariaceae	<i>Penstemon eatonii</i> ssp. <i>eatonii</i>	33687	<i>Penstemon eatonii</i> var. <i>eatonii</i>	Litzinger, William	02/20/1998	U
MEVE-01143	79414	1656-A	05/30/1925	Scrophulariaceae	<i>Penstemon eatonii</i> ssp. <i>eatonii</i>	33687	<i>Penstemon eatonii</i> var. <i>eatonii</i>	Litzinger, William	02/20/1998	U
MEVE-01150	79394	113	06/11/1929	Scrophulariaceae	<i>Penstemon osterhoutii</i>	33737	<i>Penstemon comarrhenus</i>	Litzinger, William	02/20/1998	U
MEVE-01143	79365	1787	06/29/1925	Scrophulariaceae	<i>Penstemon rostriflorus</i>	504226	<i>Penstemon bridgesii</i>	Litzinger, William	2/21/1998	U
MEVE-01150	79366	260	08/02/1929	Scrophulariaceae	<i>Penstemon rostriflorus</i>	504226	<i>Penstemon bridgesii</i>	Litzinger, William	02/21/1998	U
MEVE-01150	79368	2146 (227)	07/19/1929	Scrophulariaceae	<i>Penstemon rostriflorus</i>	504226	<i>Penstemon bridgesii</i>	Litzinger, William	02/21/1998	U
MEVE-01150	79369	247	07/24/1929	Scrophulariaceae	<i>Penstemon rostriflorus</i>	504226	<i>Penstemon bridgesii</i>	Litzinger, William	02/21/1998	U
MEVE-01149	79409	1809-A	08/26/1930	Scrophulariaceae	<i>Penstemon rostriflorus</i>	504226	<i>Penstemon bridgesii</i>	Litzinger, William	02/20/1998	U
MEVE-01149	79410	1809-B	08/26/1930	Scrophulariaceae	<i>Penstemon rostriflorus</i>	504226	<i>Penstemon bridgesii</i>	Litzinger, William	02/20/1998	U
MEVE-01147	79411	281	09/07/1984	Scrophulariaceae	<i>Penstemon rostriflorus</i>	504226	<i>Penstemon bridgesii</i>	Litzinger, William	02/20/1998	U
MEVE-01252	58778	566	07/30/1985	Urticaceae	<i>Urtica dioica</i> ssp. <i>gracilis</i>	19154	<i>Urtica gracilis</i>	Heil, Ken	1992	U
MEVE-01252	69891	566	07/30/1985	Urticaceae	<i>Urtica dioica</i> ssp. <i>gracilis</i>	19154	<i>Urtica gracilis</i>	Litzinger, William	08/25/1994	U
MEVE-01320	69846	891?	11/11/1991	Violaceae	<i>Viola</i>	22030	<i>Unidentified</i>	Litzinger, William	08/5/1994	U

Table A2. Updated and annotated herbarium specimens for Navajo National Monument.

Accession #	Catalog #	Collection #	Family	Current scientific name	TSN	Original scientific name	Reviewers	Review date	Updated / annotated
NAVA-587	14987	413	Anacardiaceae	<i>Toxicodendron rydbergii</i>	28822	<i>Toxicodendron radicans</i>	Christie, K.	2005	A
NAVA-587	14984	1236	Anacardiaceae	<i>Rhus trilobata</i> var. <i>simplicifolia</i>	530013	<i>Rhus trilobata</i> var. <i>trilobata</i>	Roth, D	2001	A
NAVA-587	14985	1118	Anacardiaceae	<i>Rhus trilobata</i> var. <i>simplicifolia</i>	530013	<i>Rhus trilobata</i> var. <i>trilobata</i>	Roth, D	2001	A
NAVA-587	14820	170	Poaceae	<i>Puccinellia distans</i>	41197	<i>Puccinellia nuttalliana</i>	Hill, M.	2005	A
NAVA-587	14863	309	Rosaceae	<i>Prunus serotina</i>	24764	<i>Prunus virginiana</i>	Christie, K.	2005	A
NAVA-587	14690	106	Onagraceae	<i>Oenothera pallida</i> var. <i>pallida</i>	27437	<i>Oenothera albicaulis</i>	Hill, M.	2005	A
NAVA-587	14818	42	Poaceae	<i>Leymus triticoides</i>	503443	<i>Elymus glaucus</i>	Hill, M.	2005	A
NAVA-587	14824	261	Fabaceae	<i>Lathyrus</i> sp.	25834	<i>Lathyrus lanszwertii</i> var. <i>leucanthus</i>	Hill, M.	2005	A
NAVA-587	14788	166	Rubiaceae	<i>Galium triflorum</i>	34933	<i>Galium aparine</i>	Hill, M.	2005	A
NAVA-587	14898	221	Asclepiadaceae	<i>Funastrum cynanchoides</i>	513718	<i>Funastrum lineare</i>	Hill, M.	2005	A
NAVA-587	14906	85	Poaceae	<i>Elymus trachycaulus</i>	502282	<i>Elymus caninus</i>	Hill, M.	2005	A
NAVA-587	14903	183	Poaceae	<i>Elymus elymoides</i>	525113	<i>Sitanion hystrix</i>	Fairchild and Brotherson	2005	U
NAVA-587	14516		Asteraceae	<i>Tetaneuris ivesiana</i>	38512	Unknown	Hill, M.	7/7/05	A
NAVA-587	14933		Asteraceae	<i>Antennaria parvifolia</i>	36749	<i>Antennaria agorica</i>	Hill, M.	2005	A
NAVA-587	14518	83	Asteraceae	<i>Tetaneuris ivesiana</i>	38512	Unknown	Hill, M.	7/7/05	A
NAVA-587	14519	245	Asteraceae	<i>Tetaneuris acutis</i>	38508	Unknown	Hill, M.	7/7/05	A
NAVA-587	14520	260	Asteraceae	<i>Tetaneuris acutis</i>	38508	Unknown	Hill, M.	7/7/05	A
NAVA-587	14528	67	Asteraceae	<i>Senecio flaccidus</i>	505126	Unknown	Hill, M.	7/7/05	A
NAVA-587	14530	10	Asteraceae	<i>Machaeranthera canescens</i>	37984	Unknown	Hill, M.	7/05	A
NAVA-587	14531	29	Asteraceae	<i>Erigeron bellidiastrum</i>	35827	Unknown	Hill, M.	7/05	A
NAVA-587	14532	304	Asteraceae	<i>Erigeron eatonii</i>	35853	Unknown	Hill, M.	7/05	A
NAVA-587	14533	198	Asteraceae	<i>Erigeron eatonii</i>	35853	Unknown	Hill, M.	7/05	A
NAVA-587	14535	194	Asteraceae	<i>Erigeron flagellaris</i>	35865	Unknown	Hill, M.	7/05	A
NAVA-587	14538	238	Asteraceae	<i>Erigeron pumilus</i>	35934	Unknown	Hill, M.	7/05	A
NAVA-587	14540	141	Asteraceae	<i>Erigeron pumilus</i>	35934	Unknown	Hill, M.	7/05	A
NAVA-587	14542	209	Asteraceae	<i>Erigeron pumilus</i>	35934	Unknown	Hill, M.	7/05	A
NAVA-587	14543	88	Asteraceae	<i>Erigeron pumilus</i>	35934	Unknown	Hill, M.	7/05	A
NAVA-587	14544	163	Asteraceae	<i>Erigeron glabellus</i>	35873	Unknown	Hill, M.	7/05	A

Table A2, continued. Updated and annotated herbarium specimens for Navajo National Monument.

Accession #	Catalog #	Collection #	Collection date	Family	Current scientific name	TSN	Original scientific name	Reviewers	Review date	Updated / annotated
NAVA-587	14549	350	7/24/73	Asteraceae	<i>Conyza canadensis</i>	37113	Unknown	Hill, M.	7/05	A
NAVA-587	14571		7/24/46	Asteraceae	<i>Chrysothamnus baileyi</i>	510990	Unknown	Hill, M.	7/05	A
NAVA-587	14572		7/24/1946	Asteraceae	<i>Chrysothamnus baileyi</i>	510990	Unknown	Hill, M.	7/05	A
NAVA-587	14701	361	7/24/73	Nyctaginaceae	<i>Mirabilis linearis</i>	19651	Unknown	Hill, M.	2005	A
NAVA-587	14748	236	6/16/77	Chenopodiaceae	<i>Chenopodium fremontii</i>	20607	Unknown	Hill, M.	2005	A
NAVA-587	14957	28	9/1/1977	Cyperaceae	<i>Eleocharis parishii</i>	40063	<i>Eleocharis palustris</i>	Hill, M.	2005	A
NAVA-587	14809	73	6/9/1972	Brassicaceae	<i>Descurainia sophia</i>	22843	Unknown	Hill, M.	2005	A
NAVA-587	14818	42	7/18/1977	Poaceae	<i>Leymus triticoides</i>	503443	<i>Elymus glaucus</i>	Hill, M.	2005	A
NAVA-587	14434			Polemoniaceae	<i>Gilia scopulorum</i>	31173	Unknown	Hill, M.	5/6/2005	A
NAVA-587	14708	31	8/1/1977	Nyctaginaceae	<i>Allionia incarnata</i>	19581	Unknown	Christie, K.	2005	A

Table A3. Updated and annotated herbarium specimens for Petrified Forest National Park.

Accession #	Catalog #	Collection #	Family	Current scientific name	TSN	Original scientific name	Reviewers	Review date	Updated/annotated
PEFO-00272	2291	7/15/1958	Amaranthaceae	<i>Amaranthus albus</i>	20719	<i>Amaranthus</i> sp.	Stephenson		A
PEFO-00216	1956	8/27/1958	Amaranthaceae	<i>Amaranthus hybridus</i>	20735	<i>Amaranthus</i>	Stephenson	1958	A
PEFO-00217	1955	8/27/1958	Amaranthaceae	<i>Amaranthus retroflexus</i>	20745	<i>Amaranthus</i>	Stephenson	1958	A
PEFO-00599	13635	04/27/1998	Apiaceae	<i>Cymopterus acaulis</i> var. <i>fendleri</i>	527614	<i>Cymopterus acaulis</i>	Hansen, Monica	06/11/1998	U
PEFO-00366	19669	5/22/1980	Apiaceae	<i>Cymopterus acaulis</i> var. <i>fendleri</i>	527614	<i>Cymopterus fendleri</i>	Kierstead, J.R.		U
PEFO-00366	19669	5/22/1980	Apiaceae	<i>Cymopterus acaulis</i> var. <i>fendleri</i>	527614	<i>Cymopterus fendleri</i>	Kierstead, J.R.	5/22/1980	U
PEFO-00599	13684	05/27/1998	Apiaceae	<i>Cymopterus acaulis</i> var. <i>fendleri</i>	527614	<i>Cymopterus acaulis</i>	Hansen, Monica	06/11/1998	U
PEFO-00213	1744	5/21/1941	Apiaceae	<i>Cymopterus acaulis</i> var. <i>fendleri</i>	527614	<i>Cymopterus newberryi</i>	Fleming	8/1941	A
PEFO-00366	16669	5/22/1980	Apiaceae	<i>Cymopterus acaulis</i> var. <i>fendleri</i>	527614	<i>Cymopterus fendleri</i>	Kierstead, J.R.	5/22/1980	U
PEFO-00214	1825	7/16/1942	Asclepiadaceae	<i>Asclepias subverticillata</i>	30308	<i>Asclepias galioides</i>	Fleming	1942	U
PEFO-00599	13967	07/08/1998	Asclepiadaceae	<i>Asclepias subverticillata</i>	30308	<i>Asclepias subverticillata</i>	West, Patty	07/08/1998	U
PEFO-00218	1975	8/1959	Asclepiadaceae	<i>Asclepias subverticillata</i>	30308	<i>Asclepias</i>	Stephenson	1959	A
PEFO-00272	2318	7/6/1960	Asteraceae	<i>Achillea millefolium</i> var. <i>occidentalis</i>	526856	<i>Achillea lanulosa</i>	Stephenson		U
PEFO-00217	1930	9/15/1958	Asteraceae	<i>Brickellia eupatorioides</i>	36875	<i>Kunhia rosmarifolia</i>	Stephenson	1958	U
PEFO-00366	2801	9/15/1980	Asteraceae	<i>Chrysothamnus baileyi</i>	510990	<i>Chrysothamnus pulchellus</i> var. <i>baileyi</i>	Kierstead, J.R.	09/15/1980	U
PEFO-00366	20552	9/15/1980	Asteraceae	<i>Chrysothamnus baileyi</i>	510990	<i>Chrysothamnus pulchellum</i>	Kierstead, J.R.	9/15/1980	U
PEFO-00272	2326	7/22/60	Asteraceae	<i>Chrysothamnus baileyi</i>	510990	<i>Chrysothamnus puchellus</i>	Stephenson		U
PEFO-00272	2327	7/19/60	Asteraceae	<i>Cirsium ochrocentrum</i>	36392	<i>Cirsium ochrocentrum</i>	Stephenson		U
PEFO-00599	14016	07/23/1998	Asteraceae	<i>Cirsium ochrocentrum</i>	36392	<i>Cirsium foliosum</i>	Scott, R.	08/4/1998	U
PEFO-00213	1725	7/19/41	Asteraceae	<i>Conyza canadensis</i> var. <i>canadensis</i>	527476	<i>Erigeron canadensis</i>	Fleming	8/1941	U
PEFO-00599	14549	9/23/1997	Asteraceae	<i>Ericameria nauseosa</i>	507594	<i>Ericameris nauseosus</i>	Hansen, Monica	12/16/1998	U
PEFO-00599	14536	8/23/1996	Asteraceae	<i>Ericameria nauseosa</i>	507594	<i>Ericameris nauseosus</i>	Hammond, H.D.	19/1999	U
PEFO-00214	1821	8/13/1942	Asteraceae	<i>Ericameria nauseosa</i>	507594	<i>Chrysothamnus parryi</i> var. <i>nevadensis</i>	Fleming	1942	A

Table A3, continued. Updated and annotated herbarium specimens for Petrified Forest National Park.

Accession #	Catalog #	Collection #	Family	Current scientific name	TSN	Original scientific name	Reviewers	Review date	Updated/annotated
PEFO-00366	2800	81-11	Asteraceae	<i>Ericameria nauseosa</i>	507594	<i>Chrysothamnus parryi</i>	Kierstead, J.R.	04/18/1981	A
PEFO-00214	1822	273	Asteraceae	<i>Ericameria nauseosa</i> ssp. <i>nauseosa</i> var. <i>bigelovii</i>	531864	<i>Chrysothamnus nauseosus</i> var. <i>bigelovii</i>	Fleming	1942	U
PEFO-00366	2807		Asteraceae	<i>Erigeron consimilis</i>	502386	<i>Erigeron compactus</i> var. <i>consimilis</i>	Kierstead, J.R.	04/26/1980	U
PEFO-00599	14543		Asteraceae	<i>Erigeron eatonii</i>	35853	<i>Erigeron divergens</i>	DeKoker, T.	7/5/2005	A
PEFO-00213	1717	148	Asteraceae	<i>Grindelia nuda</i> var. <i>aphanactis</i>	528284	<i>Grindelia aphanactis</i>	Fleming	8/1941	U
PEFO-00366	20556	80-169	Asteraceae	<i>Grindelia nuda</i> var. <i>aphanactis</i>	528284	<i>Grindelia nuda</i>	Kierstead, J.R.	8/29/1980	U
PEFO-00272	2288		Asteraceae	<i>Helianthus ciliaris</i>	36625	<i>Vigiera ciliata</i>	Stephenson		U
PEFO-00599	14043		Asteraceae	<i>Heterotheca subaxillaris</i>	37686	<i>Heterosperma psammophila</i>	Helleson, J.	12/28/1999	U
PEFO-00366	20560	80-173	Asteraceae	<i>Heterotheca subaxillaris</i>	37686	<i>Heterotheca psammophila</i>	Kierstead, J.R.	8/29/1980	U
PEFO-00272	2341		Asteraceae	<i>Heterotheca villosa</i> var. <i>foliosa</i>	531499	<i>Chrysopsis foliosa</i>	Stephenson		U
PEFO-00213	1715	145	Asteraceae	<i>Heterotheca villosa</i> var. <i>villosa</i>	528399	<i>Chrysopsis villosa</i>	Fleming	8/1941	U
PEFO-00213	1719	67	Asteraceae	<i>Hymenopappus filifolius</i> var. <i>pauciflorus</i>	528527	<i>Hymenopappus pauciflorus</i>	Fleming	8/1941	U
PEFO-00272	2308		Asteraceae	<i>Hymenoxys richardsonii</i> var. <i>floribunda</i>	528536	<i>Hymenoxys richardsonii</i> var. <i>floribunda</i>	Stephenson		U
PEFO-00366	34340	80-190	Asteraceae	<i>Machaeranthera gracilis</i>	37991	<i>Haplopappus gracilis</i>	Kierstead, J.R.		U
PEFO-00217	1940		Asteraceae	<i>Machaeranthera gracilis</i>	37991	<i>Aplopappus gracilis</i>	Stephenson	1958	U
PEFO-00272	2328		Asteraceae	<i>Machaeranthera grindelioides</i>	37992	<i>Haplopappus nuttallii</i>	Stephenson		U
PEFO-00217	1939		Asteraceae	<i>Machaeranthera pinnatifida</i> ssp. <i>pinnatifida</i>	524293	<i>Aplopappus spinulosus</i> var. <i>turbineus</i>	Stephenson	1958	U
PEFO-00272	2296		Asteraceae	<i>Machaeranthera tanacetifolia</i>	38013	<i>Aster tanacetifolius</i>	Stephenson		U
PEFO-00272	2312		Asteraceae	<i>Petradoria pumila</i> ssp. <i>pumila</i>	38234	<i>Solidago petradoria</i>	C.B.	5/25/2000	U
PEFO-00217	1969		Asteraceae	<i>Sanvitalia abertii</i>	38356	<i>Sanvitalia aberti</i>	Stephenson	1958	U
PEFO-00366	34341	80-171	Asteraceae	<i>Senecio flaccidus</i> var. <i>douglasii</i>	530312	<i>Senecio douglasii</i>	Kierstead, J.R.		U

Table A3, continued. Updated and annotated herbarium specimens for Petrified Forest National Park.

Accession #	Catalog #	Collection #	Family	Current scientific name	TSN	Original scientific name	Reviewers	Review date	Updated/annotated
PEFO-00366	34342	80-122	Asteraceae	<i>Senecio flaccidus</i> var. <i>flaccidus</i>	530313	<i>Senecio douglasii</i> var. <i>longilobus</i>	Kierstead, J.R.		U
PEFO-00599	13991		Asteraceae	<i>Senecio flaccidus</i> var. <i>flaccidus</i>	530313	<i>Senecio flaccidus</i>	West, Patty	07/29/1998	U
PEFO-00212	1688	12	Asteraceae	<i>Senecio flaccidus</i> var. <i>flaccidus</i>	530313	<i>Senecio longilobus</i>	Jepson	1939	U
PEFO-00599	16507		Asteraceae	<i>Senecio spartioides</i> var. <i>multicapitatus</i>	531525	<i>Senecio spartioides</i>	Hansen, Monica	11/12/1998	U
PEFO-00217	1942		Asteraceae	<i>Senecio spartioides</i> var. <i>multicapitatus</i>	531525	<i>Sevecio multicapitatus</i>	Stephenson	1958	U
PEFO-00599	14551		Asteraceae	<i>Senecio spartioides</i> var. <i>multicapitatus</i>	531525	<i>Senecio spartioides</i>	Hansen, Monica	11/15/1999	U
PEFO-00217	1934		Asteraceae	<i>Tetranneuris acaulis</i>	38512	<i>Actinea acaulis</i> var. <i>ivesiana</i>	Stephenson	1958	U
PEFO-00366	34315	80-136	Asteraceae	<i>Tetranneuris ivesiana</i>	38512	<i>Hymenoxys ivesiana</i>	Kierstead, J.R.	07/15/1980	U
PEFO-00366	34314	80-159	Asteraceae	<i>Tetranneuris ivesiana</i>	38512	<i>Hymenoxys ivesiana</i>	Kierstead, J.R.	08/29/1980	U
PEFO-00366	34343	80-73	Asteraceae	<i>Tetranneuris ivesiana</i>	38512	<i>Hymenoxys ivesiana</i>	Kierstead, J.R.		U
PEFO-00599	13999		Asteraceae	<i>Tetranneuris ivesiana</i>	38512	<i>Hymenoxys ivesiana</i>	West, Patty	07/29/1998	U
PEFO-00366	2806	80-159	Asteraceae	<i>Tetranneuris ivesiana</i>	38512	<i>Hymenoxys ivesiana</i>	Kierstead, J.R.	08/29/1980	U
PEFO-00366	2805		Asteraceae	<i>Tetranneuris ivesiana</i>	38512	<i>Hymenoxys ivesiana</i>	Kierstead, J.R.	07/15/1980	U
PEFO-00213	1720	53	Asteraceae	<i>Tetranneuris ivesiana</i>	38512	<i>Actinea acaulis</i> var. <i>arizonica</i>	Fleming	8/1941	U
PEFO-00217	1931		Asteraceae	<i>Verbesina encelioides</i>	38601	<i>Verbesina encelioides</i> var. <i>typica</i>	Stephenson	1958	U
PEFO-00210	1683	251	Asteraceae	<i>Xanthium strumarium</i> var. <i>canadense</i>	530872	<i>Xanthium saccharatum</i>	Jepson		U
PEFO-00217	1922		Boraginaceae	<i>Heliotropium convolvulaceum</i>	31644	<i>Heliotropium convolvulaceum</i>	Stephenson	1958	U
PEFO-00212	1690	17	Boraginaceae	<i>Lappula marginata</i>	503328	<i>Lappula texana</i>	Hill, M.	7/11/2005	A
PEFO-00599	13651		Boraginaceae	<i>Lappula occidentalis</i> var. <i>cupulata</i>	528677	<i>Lappula occidentalis</i>	West, Patty	07/2/1998	U
PEFO-00366	2793	80-26	Boraginaceae	<i>Lappula occidentalis</i> var. <i>cupulata</i>	528677	<i>Lappula redowskii</i> var. <i>cupulatum</i>	Kierstead, J.R.	04/26/1980	U
PEFO-00599	13640		Boraginaceae	<i>Lappula occidentalis</i> var. <i>cupulata</i>	528677	<i>Lappula occidentalis</i>	Hansen, Monica	06/12/1998	U
PEFO-00366	34319	80-26	Boraginaceae	<i>Lappula occidentalis</i> var. <i>cupulata</i>	528677	<i>Lappula redowskii</i> var. <i>cupulatum</i>	Kierstead, J.R.	04/26/1980	U

Table A3, continued. Updated and annotated herbarium specimens for Petrified Forest National Park.

Accession #	Catalog #	Collection #	Family	Current scientific name	TSN	Original scientific name	Reviewers	Review date	Updated/annotated
PEFO-00599	13645	04/27/1998	Brassicaceae	<i>Alyssum alyssoides</i>	23030	<i>Lesquerella gordonii</i>	Hill, M.	7/11/2005	A
PEFO-00366	34348	4/18/1981	Brassicaceae	<i>Descurainia incana</i> ssp. <i>incisa</i>	523967	<i>Descurainia richardsonii</i> ssp. <i>incisa</i>	Kierstead, J.R.		U
PEFO-00366	2771	80-69	Brassicaceae	<i>Erysimum capitatum</i> var. <i>purshii</i>	531286	<i>Erysimum asperum</i> var. <i>purshii</i>	Kierstead, J.R.	05/29/1980	U
PEFO-00213	1781	78	Brassicaceae	<i>Lesquerella rectipes</i>	23224	<i>Lesquerella arizonica</i>	Hill, M.	7/11/2005	A
PEFO-00213	1782	104	Brassicaceae	<i>Lesquerella rectipes</i>	23224	<i>Lesquerella intermedia</i>	Hill, M.	7/11/2005	A
PEFO-00599	13654	04/27/1998	Brassicaceae	<i>Lesquerella rectipes</i>	23224	<i>Lesquerella intermedia</i>	Hill, M.	7/11/2005	A
PEFO-00214	1832	274	Cactaceae	<i>Echinocereus fendleri</i> var. <i>rectispinus</i>	527828	<i>Echinocereus fendleri</i> var. <i>rectispinus</i>	Fleming		U
PEFO-00214	1827	267	Cactaceae	<i>Escobaria vivipara</i> var. <i>arizonica</i>	528092	<i>Mammillaria arizonica</i>	Fleming	1942	U
PEFO-00214	1828	264	Cactaceae	<i>Opuntia erinacea</i> var. <i>hystricina</i>	195274	<i>Opuntia hystricina</i>	Fleming	1942	U
PEFO-00214	1829	266	Cactaceae	<i>Opuntia erinacea</i> var. <i>utahensis</i>	195276	<i>Opuntia rhodantha</i>	Fleming	1942	U
PEFO-00217	1914	8/12/1958	Cactaceae	<i>Sclerocactus papyracanthus</i>	505080	<i>Toumeyia papyracantha</i>	Stephenson	1958	U
PEFO-00213	1755	205	Capparaceae	<i>Wisizenia refracta</i> ssp. <i>refracta</i>	22664	<i>Wisizenia refracta</i> var. <i>mellitoides</i>	Fleming	8/1941	U
PEFO-00272	2342	7/19/1960	Chenopodiaceae	<i>Atriplex rosea</i>	20563	<i>Atriplex rosae</i>	Stephenson		U
PEFO-00272	2339		Chenopodiaceae	<i>Chenopodium fremontii</i> var. <i>fremontii</i>	527321	<i>Chenopodium arizonicum</i>	Stephenson		U
PEFO-00272	2297	7/11/1960	Chenopodiaceae	<i>Chenopodium salinum</i>	20631	<i>Chenopodium rubrum</i>	Stephenson		A
PEFO-00599	13953	6/24/1998	Chenopodiaceae	<i>Chenopodium salinum</i>	20631	<i>Chenopodium glaucum</i>	Hansen, Monica		A
PEFO-00217	1899	9/10/1958	Chenopodiaceae	<i>Corispermum americanum</i> var. <i>rydbergii</i>	566225	<i>Chorispermum nitidum</i>	Stephenson	1958	U
PEFO-00272	2304	7/14/1960	Chenopodiaceae	<i>Cycloloma atriplicifolium</i>	20685	<i>Cycloloma atriplicifolium</i>	Stephenson		U
PEFO-00366	19662	80-216	Chenopodiaceae	<i>Krascheninnikovia lanata</i>	503290	<i>Krascheninnikovia lanata</i>	Kierstead, J.R.	9/15/1980	U
PEFO-00599	13970	07/08/1998	Chenopodiaceae	<i>Krascheninnikovia lanata</i>	503290	<i>Krascheninnikovia lanata</i>	West, Patty	07/8/1998	U
PEFO-00366	2760	81-4	Chenopodiaceae	<i>Krascheninnikovia lanata</i>	503290	<i>Ceratoides lanata</i>	Kierstead, J.R.	04/18/1981	U
PEFO-00272	2319	7/11/1960	Chenopodiaceae	<i>Krascheninnikovia lanata</i>	503290	<i>Eurotia lanata</i>	Stephenson		U
PEFO-00366	19661	4/18/1981	Chenopodiaceae	<i>Krascheninnikovia lanata</i>	503290	<i>Krascheninnikovianata</i>	Kierstead, J.R.	4/18/1981	U
PEFO-00213	1796	167	Chenopodiaceae	<i>Salsola tragus</i>	520950	<i>Salsola kali</i>	Stephenson	8/10/1958	U

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Accession #	Catalog #	Collection #	Family	Current scientific name	TSN	Original scientific name	Reviewers	Review date	Updated/annotated
PEFO-00599	13993	07/9/1998	Chenopodiaceae	<i>Salsola tragus</i>	520950	<i>Salsola kali</i>	West, Patty	07/9/1998	U
PEFO-00365	2734	9/10/1976	Chenopodiaceae	<i>Suaeda moquinii</i>	505404	<i>Suaeda torreyana</i>	Goldberg	09/10/1976	U
PEFO-00599	13974	07/8/1998	Chenopodiaceae	<i>Suaeda moquinii</i>	505404	<i>Suaeda moquinii</i>	West, Patty	07/8/1998	U
PEFO-00272	2330		Chenopodiaceae	<i>Suaeda moquinii</i>	505404	<i>Suaeda torreyana</i>			U
PEFO-00599	12693	09/12/1997	Chenopodiaceae	<i>Zuckia brandegeei</i> var. <i>arizonica</i>	530924	<i>Zuckia brandegei</i>	Wright, Karen	09/12/1997	U
PEFO-00272	2334		Chenopodiaceae	<i>Zuckia brandegeei</i> var. <i>arizonica</i>	530924	<i>Zuckia arizonensis</i>	Stephenson		U
PEFO-00365	2733	9/12/1976	Chenopodiaceae	<i>Zuckia brandegeei</i> var. <i>arizonica</i>	530924	<i>Zuckia arizonica</i>	Goldberg	09/12/1976	U
PEFO-00217	1895	9/1/58	Cyperaceae	<i>Cyperus squarrosus</i>	501940	<i>Cyperus aristatus</i>	Stephenson	1958	A
PEFO-00217	1897	8/12/1958	Cyperaceae	<i>Eleocharis palustris</i>	40019	<i>Eleocharis parshii</i>	Stephenson	1958	U
PEFO-00217	1896	7/16/1958	Cyperaceae	<i>Schoenoplectus acutus</i> var. <i>acutus</i>	531332	<i>scirpus acutus</i>	Stephenson	1958	U
PEFO-00599	13946	06/17/1998	Cyperaceae	<i>Schoenoplectus americanus</i>	508141	<i>Cyperus esculentus</i>	Dekoker, T.	7/5/2005	A
PEFO-00213	1813	06/26/1941	Cyperaceae	<i>Schoenoplectus maritimus</i>	521093	<i>Scirpus palludosus</i>	Fleming	1941	U
PEFO-00366	34350	81-5	Ephedraceae	<i>Ephedra cultleri</i>	508106	<i>Ephedra nevadensis</i>	Kierstead, J.R.		A
PEFO-00214	1835	6/1/1942	Ephedraceae	<i>Ephedra cultleri</i>	508106	<i>Ephedra nevadensis</i>	Kierstead, J.R.	7/1/1981	A
PEFO-00213	1749	6/14/1941	Euphorbiaceae	<i>Chamaesyce albomarginata</i>	501400	<i>Euphorbia albomarginata</i>	Fleming	8/1941	U
PEFO-00366	34355	80-222	Euphorbiaceae	<i>Chamaesyce revoluta</i>	501456	<i>Euphorbia revoluta</i>	Kierstead, J.R.		U
PEFO-00599	13978	07/8/1998	Fabaceae	<i>Alhagi maurorum</i>	500956	<i>Alhagi mamorum</i>	West, Patty	07/8/1998	U
PEFO-00272	2315	7/7/1960	Fabaceae	<i>Alhagi maurorum</i>	500956	<i>Alhagi camelorum</i>	Stephenson		U
PEFO-00217	1904	7/16/1958	Fabaceae	<i>Astragalus brandegeei</i>	25442	<i>Astragalus brandegei</i>	Stephenson	1958	U
PEFO-00550	4903	5/20/1993	Fabaceae	<i>Astragalus mollissimus</i> var. <i>thompsoniae</i>	192649	<i>Astragalus mollissimus</i> var. <i>thompsonae</i>	Knight, Ferral		U
PEFO-00599	13655	04/27/1998	Fabaceae	<i>Astragalus mollissimus</i> var. <i>thompsoniae</i>	192649	<i>Astragalus mollissimus</i>	West, Patty	07/2/1998	U
PEFO-00366	2776	80-40	Fabaceae	<i>Astragalus mollissimus</i> var. <i>thompsoniae</i>	192649	<i>Astragalus mollissimus</i> var. <i>thompsonae</i>	Kierstead, J.R.	05/22/1982	U
PEFO-00213	1766	5/23/1941	Fabaceae	<i>Astragalus mollissimus</i> var. <i>thompsoniae</i>	192649	<i>Astragalus thompsonae</i>	Fleming	8/1941	U
PEFO-00599	13664	05/28/1998	Fabaceae	<i>Astragalus mollissimus</i> var. <i>thompsoniae</i>	192649	<i>Astragalus mollissimus</i>	West, Patty	04/28/1998	U

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PEFO-00366	19637	80-49	Fabaceae	<i>Astragalus mollissimus</i> var. <i>thompsoniae</i>	192649	<i>Astragalus mollissimus</i>	Kierstead, J.R.	5/22/1980	U
PEFO-00538	10397		Fabaceae	<i>Astragalus mollissimus</i> var. <i>thompsoniae</i>	192649	<i>Astragalus mollissimus</i> var. <i>thompsoniae</i>	Knight, Ferral		U
PEFO-00366	19638	80-13	Fabaceae	<i>Astragalus mollissimus</i> var. <i>thompsoniae</i>	192649	<i>Astragalus mollissimus</i>	Kierstead, J.R.	4/26/1980	U
PEFO-00599	13965		Fabaceae	<i>Caesalpinia jamesii</i>	26505	<i>Caesalpinia jamesii</i>	Hansen, Monica	07/31/1998	U
PEFO-00213	1752		Fabaceae	<i>Caesalpinia jamesii</i>	26505	<i>Hoffmanseggia jamesii</i>	Fleming	8/1941	U
PEFO-00366	34356	80-183	Fabaceae	<i>Dalea candida</i> var. <i>oligophylla</i>	192889	<i>Dalea oligophylla</i>	Kierstead, J.R.		U
PEFO-00599	17361		Fabaceae	<i>Dalea candida</i> var. <i>oligophylla</i>	192889	<i>Dalea candida</i>	Wright, Karen & Patty West	8/26/1996	U
PEFO-00599	13961		Fabaceae	<i>Dalea candida</i> var. <i>oligophylla</i>	192889	<i>Dalea candida</i>	West, Patty	07/06/1998	U
PEFO-00213	1756	195	Fabaceae	<i>Dalea candida</i> var. <i>oligophylla</i>	192889	<i>Petalostemum candidum</i>	Fleming	8/1941	U
PEFO-00272	2325		Fabaceae	<i>Glycyrrhiza lepidota</i>	26719	<i>Glycyrrhiza lepidota</i>	Stephenson		U
PEFO-00599	13638		Fabaceae	<i>Lupinus pusillus</i> ssp. <i>intermontanus</i>	26101	<i>Lupinus pusillus</i>	Hansen, Monica	06/12/1998	U
PEFO-00212	1697	43	Fabaceae	<i>Lupinus pusillus</i> ssp. <i>intermontanus</i>	26101	<i>Lupinus brevicaulis</i>	Jepson	5/1940	U
PEFO-00213	1762	120	Fabaceae	<i>Psoralidium lanceolatum</i>	504645	<i>Petalostemum flavescens</i>	Kierstead, J.R.	9/4/1998	U
PEFO-00272	2306		Fabaceae	<i>Psoralidium lanceolatum</i>	504645	<i>Psoralea lanceolata</i>	Stephenson		U
PEFO-00599	14516		Hydrophyllaceae	<i>Nama densum</i>	31401	<i>Nama hispidum</i>	Dekoker, T.	7/5/2005	A
PEFO-00272	2317		Lamiaceae	<i>Stachys rothrockii</i>	32348	<i>Mentha arvensis</i>	Kierstead, J.R.	9/4/1998	U
PEFO-00218	1973		Linaceae	<i>Linum puberulum</i>	29219	<i>Linum neomexicanum</i>	Kierstead, J.R.	9/4/1998	U
PEFO-00217	1912		Malvaceae	<i>Malvella leprosa</i>	21846	<i>Sida hederacea</i>	Stephenson	1958	U
PEFO-560	5043		Malvaceae	<i>Malvella leprosa</i>	21846	<i>Sida hederacea</i>	Hansen, M.	9/4/1998	U
PEFO-00366	34324	80-175	Malvaceae	<i>Sphaeralcea hastulata</i>	21942	<i>Sphaeralcea subhastata</i>	Kierstead, J.R.	08/29/1980	U
PEFO-00366	2783		Malvaceae	<i>Sphaeralcea hastulata</i>	21942	<i>Sphaeralcea subhastata</i>	Kierstead, J.R.	08/29/1980	U
PEFO-00366	34362	80-154	Malvaceae	<i>Sphaeralcea hastulata</i>	21942	<i>Sphaeralcea subhastata</i>	Kierstead, J.R.		U
PEFO-00599	13969		Malvaceae	<i>Sphaeralcea incana</i> ssp. <i>cuneata</i>	21945	<i>Sphaeralcea incana</i>	Hansen, Monica	08/4/1998	U

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PEFO-00599	14045	8/7/1998	Malvaceae	<i>Sphaeralcea incana</i> ssp. <i>cuneata</i>	21945	<i>Sphaeralcea incana</i>	Hansen, Monica	2/5/1999	U
PEFO-00366	2784	8/29/1980	Malvaceae	<i>Sphaeralcea incana</i> ssp. <i>cuneata</i>	21945	<i>Sphaeralcea incana</i> var. <i>cuneata</i>	Kierstead, J.R.	08/29/1980	U
PEFO-00366	34363	8/29/1980	Malvaceae	<i>Sphaeralcea incana</i> ssp. <i>cuneata</i>	21945	<i>Sphaeralcea incana</i> var. <i>cuneata</i>	Kierstead, J.R.		U
PEFO-00599	14269	8/7/1998	Malvaceae	<i>Sphaeralcea parvifolia</i>	21953	<i>Sphaeralcea parviflora</i>	Hansen, Monica & Jch	1/25/1999	U
PEFO-00217	1965	8/27/1958	Nyctaginaceae	<i>Boerhaavia spicata</i>	19678	<i>Boerhaavia Torreyana</i>	Stephenson	1958	U
PEFO-00217	1903		Nyctaginaceae	<i>Mirabilis glabra</i>	19643	<i>Oxybaphus glaber</i>	Stephenson	1958	U
PEFO-00213	1768	6/15/1941	Nyctaginaceae	<i>Tripterocalyx carnea</i>	19619	<i>Abronia fragrans</i>	Kierstead, J.R.	9/4/1998	U
PEFO-00366	2768	9/15/1980	Nyctaginaceae	<i>Tripterocalyx carnea</i> var. <i>wootonii</i>	530749	<i>Tripterocalyx carnea</i> var. <i>wootonii</i>	Kierstead, J.R.	09/15/1980	U
PEFO-00366	34332	9/15/1980	Nyctaginaceae	<i>Tripterocalyx carnea</i> var. <i>wootonii</i>	530749	<i>Tripterocalyx carnea</i> var. <i>wootonii</i>	Kierstead, J.R.	09/15/1980	U
PEFO-00272	2286	6/6/1960	Onagraceae	<i>Calylophus lavandulifolius</i>	501160	<i>Oenothera procer</i>	Stephenson		A
PEFO-00213	1746	6/26/1941	Onagraceae	<i>Gaura mollis</i>	565206	<i>Gaura parviflora</i>	Fleming	8/1941	U
PEFO-00599	13958	06/30/1998	Onagraceae	<i>Gaura mollis</i>	565206	<i>Gaura parviflora</i>	Hansen, Monica	06/30/1998	U
PEFO-00599	14028	08/6/1998	Onagraceae	<i>Oenothera caespitosa</i>	565328	<i>Oenothera caespitosa</i>	West, Patty	09/1/1998	U
PEFO-00214	1826	6/1942	Onagraceae	<i>Oenothera caespitosa</i> ssp. <i>caespitosa</i>	566058	<i>Oenothera caespitosa</i> var. <i>montana</i>	Fleming	1942	U
PEFO-00213	1730	6/14/1941	Orobanchaceae	<i>Orobancha ludoviciana</i> ssp. <i>multiflora</i>	524383	<i>Orobancha multiflora</i>	Fleming	8/1941	U
	2654	7/1967	Papaveraceae	<i>Argemone polyanthem</i>	18926	<i>Argemone platyceras</i>	Baxter, S.		A
PEFO-00366	2798	5/22/1980	Plantaginaceae	<i>Plantago patagonica</i>	32907	<i>Plantago patagonica</i> var. <i>graphalioides</i>	Kierstead, J.R.	05/22/1980	U
PEFO-00599	13680	05/27/1998	Plantaginaceae	<i>Plantago patagonica</i>	32907	<i>Plantago patagonica</i>	West, Patty	05/27/1998	U
PEFO-00366	34322	5/22/1980	Plantaginaceae	<i>Plantago patagonica</i>	32907	<i>Plantago patagonica</i> var. <i>graphalioides</i>	Kierstead, J.R.	05/22/1980	U
PEFO-00213	1729	5/19/1941	Plantaginaceae	<i>Plantago patagonica</i>	32907	<i>Plantago purshii</i>	Fleming	8/1941	U
PEFO-00217	1950	5/20/1958	Poaceae	<i>Achnatherum aridum</i>	507932	<i>Stipa arida</i>	Stephenson	1958	U
PEFO-00217	1864	9/1/1958	Poaceae	<i>Achnatherum speciosum</i>	507958	<i>Stipa speciosa</i>	Stephenson	1958	U
PEFO-00216	1860	5/21/1958	Poaceae	<i>Aristida purpurea</i> var. <i>fendleriana</i>	531154	<i>Aristida fendleriana</i>	Stephenson	1958	U

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PEFO-00216	1861	127	Poaceae	<i>Aristida purpurea</i> var. <i>longiseta</i>	185314	<i>Aristida longiseta</i>	Stephenson	1958	U
PEFO-00366	34375	80-170	Poaceae	<i>Aristida purpurea</i> var. <i>longiseta</i>	185314	<i>Aristida longiseta</i>	Kierstead, J.R.		U
PEFO-00217	1885		Poaceae	<i>Bromus diandrus</i>	40498	<i>Bromus rigidus</i>	Stephenson	1958	U
PEFO-00217	1947		Poaceae	<i>Cenchrus spinifex</i>	565054	<i>Cenchrus pauciflorus</i>	Stephenson	1958	U
PEFO-00599	14537		Poaceae	<i>Dasyochloa pulchella</i>	512087	<i>Erioneuron pulchellum</i>	West, Patty	9/1/98	U
PEFO-00599	13992		Poaceae	<i>Dasyochloa pulchella</i>	512087	<i>Erioneuron pulchellum</i>	West, Patty	07/9/1998	U
PEFO-00216	1841		Poaceae	<i>Dasyochloa pulchella</i>	512087	<i>Tridens puchellus</i>	Stephenson	1957	U
PEFO-00217	1946		Poaceae	<i>Echinochloa crus-galli</i>	502210	<i>Echinochloa crus-galli</i> var. <i>zelayensis</i>	Stephenson	1958	U
PEFO-00213	1814		Poaceae	<i>Elymus elymoides</i> ssp. <i>elymoides</i>	525113	<i>Sitanion hystrix</i>	Stephenson		U
PEFO-00216	1837		Poaceae	<i>Enneapogon desvauxii</i>	41709	<i>Enneapogon desvauxii</i>	Stephenson	1957	U
PEFO-00217	1877		Poaceae	<i>Eragrostis barrelleri</i>	40772	<i>Eragrostis spectabilis</i>	Kierstead, J.R.	9/4/1998	U
PEFO-00217	1878		Poaceae	<i>Eragrostis mexicana</i>	40749	<i>Eragrostis arida</i>	Stephenson	1958	U
PEFO-00216	1840		Poaceae	<i>Eragrostis mexicana</i>	40749	<i>Eragrostis orcuttiana</i>	Hill, M.	7/11/2005	U
PEFO-00216	1846		Poaceae	<i>Eragrostis mexicana</i>	40749	<i>Eragrostis orcuttiana</i>	Stephenson	1958	U
PEFO-00217	1906		Poaceae	<i>Eragrostis pectinacea</i> var. <i>pectinacea</i>	527900	<i>Eragrostis diffusa</i>	Stephenson	1958	U
PEFO-00216	1839		Poaceae	<i>Eragrostis pectinacea</i> var. <i>pectinacea</i>	527900	<i>Eragrostis diffusa</i>	Stephenson	1957	U
PEFO-00216	1863		Poaceae	<i>Hesperostipa comata</i> ssp. <i>comata</i>	525116	<i>Stipa comata</i>	Stephenson	1958	U
PEFO-00366	20562	80-51	Poaceae	<i>Hesperostipa comata</i> ssp. <i>comata</i>	525116	<i>Stipa comata</i>	Kierstead, J.R.	5/22/1980	U
PEFO-00599	14534		Poaceae	<i>Hesperostipa comata</i> ssp. <i>comata</i>	525116	<i>Stipa comata</i>	West, Patty	09/1/1998	U
PEFO-00599	13661		Poaceae	<i>Hesperostipa comata</i> ssp. <i>comata</i>	525116	<i>Stipa comata</i>	West, P. & M. Hansen	05/28/1998	U
PEFO-00217	1893		Poaceae	<i>Hordeum murinum</i> ssp. <i>leporinum</i>	524161	<i>Hordeum pussillum</i>	Stephenson	1958	U
PEFO-00217	1968		Poaceae	<i>Leptochloa fusca</i> ssp. <i>fascicularis</i>	566046	<i>Leptochloa fasciculatum</i>	Stephenson	1958	U

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PEFO-00217	1883	7/15/1978	Poaceae	<i>Leptochloa fusca</i> ssp. <i>fascicularis</i>	566046	<i>Festuca elatior</i>	Stephenson	1958	U
PEFO-00217	1891	7/17/1958	Poaceae	<i>Lolium perenne</i>	40893	<i>Lolium perenne</i>	Stephenson	1958	U
PEFO-00217	1884	7/12/1958	Poaceae	<i>Lolium pratense</i>	507983	<i>Bromus inermis</i>	Stephenson	1958	U
PEFO-00216	1856	8/20/1958	Poaceae	<i>Panicum capillare</i>	40914	<i>Panicum capillare</i> var. <i>typica</i>	Stephenson	1958	U
PEFO-00217	1865	7/24/1958	Poaceae	<i>Piptatherum micranthum</i>	507991	<i>Oryzopsis micrantha</i>	Stephenson	1958	U
PEFO-00217	1886	8/20/1958	Poaceae	<i>Poa pratensis</i>	41088	<i>Poa arida</i>	Stephenson	1958	U
PEFO-00272	2293	7/14/1960	Poaceae	<i>Polypogon viridis</i>	504522	<i>Agrostis alba</i>	Hansen, M.	9/4/1998	U
PEFO-00272	2294	7/14/1960	Poaceae	<i>Polypogon viridis</i>	504522	<i>Agrostis semiverticillata</i>	Hansen, M.	9/4/1998	U
PEFO-00217	1881	7/15/1958	Poaceae	<i>Puccinellia distans</i>	41197	<i>Puccinellia airoides</i>	Stephenson	1958	U
PEFO-00599	13701	06/3/1998	Poaceae	<i>Puccinellia nuttalliana</i>	41200	<i>Puccinellia nuttalliana</i>	West, Patty	08/11/1998	U
PEFO-00217	1880	7/17/1958	Poaceae	<i>Puccinellia nuttalliana</i>	41200	<i>Puccinellia fasciculata</i>	Kierstead, J.R.	9/4/1998	U
PEFO-00217	1876	8/21/1958	Poaceae	<i>Schedonnardus paniculatus</i>	42063	<i>Schedonnardus paniculatus</i>	Stephenson	1958	U
PEFO-00217	1948	8/4/1958	Poaceae	<i>Sorghum halepense</i>	42111	<i>Sorghum halepense</i>	Stephenson	1958	U
PEFO-00216	1844	10/ 8/1957	Poaceae	<i>Sporobolus coromandelianus</i>	507183	<i>Sporobolus pulvinatus</i>	Stephenson	1957	U
PEFO-00217	1890	6/20/1958	Poaceae	<i>Thinopyrum ponticum</i>	522542	<i>Agropyren pseudorepens</i>	Stephenson	1958	U
PEFO-00599	14005	07/15/1998	Poaceae	<i>Thinopyrum ponticum</i>	522542	<i>Elytriga elongata</i>	Hansen, Monica	07/31/1998	U
PEFO-00217	1882	5/14/1958	Poaceae	<i>Vulpia octoflora</i> var. <i>octoflora</i>	530863	<i>Festuca octoflora</i>	Stephenson	1958	U
PEFO-00366	34333	4/26/1980	Polemoniaceae	<i>Gilia clokeyi</i>	31118	<i>Gilia opthalmoides</i>	Day, Alva Cas	U	U
PEFO-00366	2791	4/26/1980	Polemoniaceae	<i>Gilia clokeyi</i>	31118	<i>Gilia opthalmoides</i>	Hill, M.	7/11/2005	U
PEFO-00366	34321	5/29/1980	Polemoniaceae	<i>Gilia rigidula</i> ssp. <i>acerosa</i>	31171	<i>Gilia rigidula</i> var. <i>acerosa</i>	Kierstead, J.R.	05/29/1980	U
PEFO-00212	1691	5/23/1941	Polemoniaceae	<i>Gilia rigidula</i> ssp. <i>acerosa</i>	31171	<i>Gilia rigidula</i> var. <i>acerosa</i>	Jepson	5/1940	U
PEFO-00366	2790	5/29/1980	Polemoniaceae	<i>Gilia rigidula</i> ssp. <i>acerosa</i>	31171	<i>Gilia rigidula</i> var. <i>acerosa</i>	Kierstead, J.R.	05/29/1980	U
PEFO-00599	12676	07/25/1996	Polygonaceae	<i>Eriogonum corymbosum</i> var. <i>aureum</i>	195444	<i>Eriogonum corymbosum</i>	Wright, Karen	07/25/1896	U
PEFO-00599	13990	07/9/1998	Polygonaceae	<i>Eriogonum corymbosum</i> var. <i>aureum</i>	195444	<i>Eriogonum corymbosum</i>	Hansen, Monica	1998	U
PEFO-00366	2752	80-213	Polygonaceae	<i>Eriogonum corymbosum</i> var. <i>aureum</i>	195444	<i>Eriogonum corymbosum</i> var. <i>glutinosum</i>	Kierstead, J.R.	09/15/1980	U
PEFO-00365	2731	76-338	Polygonaceae	<i>Eriogonum corymbosum</i> var. <i>aureum</i>	195444	<i>Eriogonum corymbosum</i> var. <i>glutinosum</i>	Goldberg	09/10/1976	U

Table A3, continued. Updated and annotated herbarium specimens for Petrified Forest National Park.

Accession #	Catalog #	Collection #	Family	Current scientific name	TSN	Original scientific name	Reviewers	Review date	Updated/annotated
PEFO-00213	1795	177	Polygonaceae	<i>Eriogonum corymbosum</i> var. <i>aureum</i>	195444	<i>Eriogonum areum</i>	Fleming		U
PEFO-00599	14538		Polygonaceae	<i>Eriogonum corymbosum</i> var. <i>aureum</i>	195444	<i>Eriogonum corymbosum</i>	Wright, Karen		U
PEFO-00272	2300		Polygonaceae	<i>Polygonum lapathifolium</i>	20860	<i>Polygonum coccinum</i>	Stephenson		U
PEFO-00272	2329		Polygonaceae	<i>Polygonum ramosissimum</i>	20921	<i>Polygonum ramosissimum</i>	Stephenson		U
PEFO-00599	13949		Polygonaceae	<i>Rumex obtusifolius</i>	20939	<i>Rumex obtusifolius</i>	West, Patty	06/1998	U
PEFO-00213	1802	128	Polygonaceae	<i>Rumex salicifolius</i>	20974	<i>Rumex hymenosepalus</i>	Kierstead, J.R.	9/4/1998	U
PEFO-00272	2309		Polygonaceae	<i>Rumex salicifolius</i>	20974	<i>Rumex mexicanus</i>	Stephenson		U
PEFO-00217	1901		Ranunculaceae	<i>Clematis ligusticifolia</i>	18702	<i>Clematis linguistifolia</i>	Stephenson	1958	U
PEFO-00213	1808	83	Salicaceae	<i>Populus +acuminata</i>	22450	<i>Populus acuminata</i>	Fleming	1941	U
PEFO-00599	14042		Salicaceae	<i>Populus +acuminata</i>	22450	<i>Populus X acuminata</i>	Hansen, Monica & Jch		U
PEFO-00366	2750	80-42	Salicaceae	<i>Populus deltoides</i> ssp. <i>wislizeni</i>	524563	<i>Populus fremontii</i>	Kierstead, J.R.	6/14/2000	A
PEFO-00213	1807	123	Salicaceae	<i>Populus deltoides</i> ssp. <i>wislizeni</i>	524563	<i>Populus fremontii</i>	Hill, M.	7/11/2005	A
PEFO-00599	14531		Salicaceae	<i>Populus deltoides</i> ssp. <i>wislizeni</i>	524563	<i>Populus deltoides</i>	Hammond, H.D.	1/25/1999	U
PEFO-00213	1803	46	Santalaceae	<i>Comandra umbellata</i> ssp. <i>pallida</i>	523879	<i>Comandra pallida</i>	Fleming		U
PEFO-00366	2751	80-31	Santalaceae	<i>Comandra umbellata</i> ssp. <i>pallida</i>	523879	<i>Comandra pallida</i>	Kierstead, J.R.	05/22/1980	U
PEFO-00599	13682		Santalaceae	<i>Comandra umbellata</i> ssp. <i>pallida</i>	523879	<i>Comandra umbellata</i>	Hansen, Monica	05/27/1998	U
PEFO-00366	34327	80-31	Santalaceae	<i>Comandra umbellata</i> ssp. <i>pallida</i>	523879	<i>Comandra pallida</i>	Kierstead, J.R.	05/22/1980	U
PEFO-00366	34378	81-10	Scrophulariaceae	<i>Castilleja applegatei</i> ssp. <i>martinii</i>	525154	<i>Castilleja angustifolia</i> var. <i>dubia</i>	Hill, M.	7/11/2005	A
PEFO-00366	34328	80-21	Scrophulariaceae	<i>Castilleja applegatei</i> ssp. <i>martinii</i>	525154	<i>Castilleja chromosa</i>	Kierstead, J.R.	04/26/1980	U
PEFO-00211	1685	210	Scrophulariaceae	<i>Castilleja applegatei</i> ssp. <i>martinii</i>	525154	<i>Castilleja chromosa</i>	Jepson	1939	U
PEFO-00366	2797	80-21	Scrophulariaceae	<i>Castilleja applegatei</i> ssp. <i>martinii</i>	525154	<i>Castilleja chromosa</i>	Kierstead, J.R.	04/26/1980	U

Table A3, continued. Updated and annotated herbarium specimens for Petrified Forest National Park.

Accession #	Catalog #	Collection #	Family	Current scientific name	TSN	Original scientific name	Reviewers	Review date	Updated/annotated
PEFO-00217	1928		Scrophulariaceae	<i>Cordylanthus wrightii</i> ssp. <i>wrightii</i>	523902	<i>Cordylanthus wrightii</i> var. <i>pauciflorus</i>	Stephenson	1958	U
PEFO-00560	5041		Scrophulariaceae	<i>Penstemon lentus</i>	33721	<i>penstemon jamesii</i>	Hill, M.	7/11/2005	A
PEFO-00217	1926		Solanaceae	<i>Nicotiana attenuata</i>	30571	<i>Nicotiana attenuata</i>	Stephenson	1958	U
PEFO-00217	1924		Solanaceae	<i>Physalis hederifolia</i> var. <i>fendleri</i>	529625	<i>Physalis fendleri</i>	Stephenson	1958	U
PEFO-00217	1917		Solanaceae	<i>Quincula lobata</i>	504721	<i>Physalis lobata</i>	Kierstead, J.R.	10/17/1980	U
PEFO-00217	1923		Solanaceae	<i>Solanum jamesii</i>	30437	<i>Solanum nodiflorum</i>	Stephenson	1958	U
PEFO-00217	1910		Zygophyllaceae	<i>Tribulus terrestris</i>	29057	<i>Tribulus terrestris</i>	Stephenson	1958	U

Table A4. Updated and annotated herbarium specimens for Petroglyph National Monument.

Accession #	Catalog #	Collection #	Family	Current scientific name	TSN	Original scientific name	Reviewers	Review date	Updated / annotated
PETR-00012	10015	94-1	Brassicaceae	<i>Dimorphocarpa wislizeni</i>	502067	<i>Dithyrea wislizeni</i>	Hill, Mar-Elise	6/14/2005	U
PETR-00012	10017	94-3	Brassicaceae	<i>Descurainia pinnata</i> ssp. <i>halictorum</i>	22831	<i>Descurainia pinnata halictorum</i>	Barlow-Irlick, Patricia		U
PETR-00012	10032	94-19	Boraginaceae	<i>Cryptantha cinerea</i> var. <i>cinerea</i>	527549	<i>Cryptantha cinerea</i> var. <i>jamesii</i>	Barlow-Irlick, Patricia		U
PETR-00012	10033	93-80	Asteraceae	<i>Thymophylla acerosa</i>	505493	<i>Dyssodia acerosa</i>	Hill, Mar-Elise	6/14/2005	U
PETR-00012	10039	93-61	Asteraceae	<i>Psilostrophe tagetina</i> var. <i>tagetina</i>	529900	<i>Psilostrophe tagetina</i> var. <i>grandiflora</i>	DeKoker, T.	6/14/2005	A
PETR-00012	10040	93-46	Fabaceae	<i>Caesalpinia jamesii</i>	26505	<i>Hoffmannseggia jamesii</i>	DeKoker, T.	6/14/2005	U
PETR-00012	10041	93-23	Poaceae	<i>Munroa squarrosa</i>	41882	<i>Erioneuron pulchellum</i>	DeKoker, T.	6/14/2005	U
PETR-00012	10049	93-28	Poaceae	<i>Achnatherum hymenoides</i>	507943	<i>Oryzopsis hymenoides</i>	Hill, Mar-Elise	6/15/2005	U
PETR-00012	10054	93-23	Poaceae	<i>Munroa squarrosa</i>	41882	<i>Erioneuron pulchellum</i>	Hill, Mar-Elise	6/15/2005	U
PETR-00012	10001	93-79	Asteraceae	<i>Iva ambrosiifolia</i>	36027	<i>Ambrosia acanthicarpa</i>	DeKoker, T.	6/14/2005	A
PETR-00012	10005	93-75	Malvaceae	<i>Abutilon parvulum</i>	21669	<i>Sida filicaulis</i>	Hill, Mar-Elise	6/15/2005	A
PETR-00012	10007	93-73	Euphorbiaceae	<i>Tragia ramosa</i>	28433	<i>Tragia stylaris</i>	DeKoker, T.	6/14/2005	A
PETR-00012	10011	93-69	Solanaceae	<i>Nicotiana obtusifolia</i> var. <i>obtusifolia</i>	531463	<i>Nicotiana trigonophylla</i>	Hill, Mar-Elise	6/15/2005	U
PETR-00012	10057		Nyctaginaceae	<i>Boerhaavia spicata</i>	19678	<i>Boerhaavia spicata</i>	Barlow-Irlick, Patricia		U
PETR-00012	10063	93-91	Asteraceae	<i>Ericameria nauseosa</i> ssp. <i>nauseosa</i> var. <i>nauseosa</i>	531871	<i>Chrysothamnus nauseosus</i>	DeKoker, T.	6/14/2005	U
PETR-00012	10075	93-108	Poaceae	<i>Aristida purpurea</i> var. <i>fendleriana</i>	531154	<i>Aristida purpurea</i>	Barlow-Irlick, Patricia		U
PETR-00012	10082	93-101	Asteraceae	<i>Senecio spartioides</i> var. <i>multicapitatus</i>	531525	<i>Senecio multicapitatus</i>	Hill, Mar-Elise	6/14/2005	U
PETR-00012	10085	5/18/1995	Asteraceae	<i>Malacothrix fendleri</i>	38047	<i>Malacothrix sonchoides</i>	Hill, Mar-Elise	6/15/2005	A
PETR-00012	10086	9/10/1995	Malvaceae	<i>Sphaeralcea fendleri</i>	21936	<i>Sphaeralcea angustifolia</i>	Hill, Mar-Elise	6/15/2005	A
PETR-00012	10088	9/10/1995	Solanaceae	<i>Datura wrightii</i>	30521	<i>Datura meteloides</i>	Hill, Mar-Elise	6/15/2005	U
PETR-00012	10097	93-62	Asteraceae	<i>Senecio spartioides</i> var. <i>multicapitatus</i>	531525	<i>Senecio multicapitatus</i>	Hill, Mar-Elise	6/14/2005	U
PETR-00012	10100	93-59	Brassicaceae	<i>Dimorphocarpa wislizeni</i>	502067	<i>Dithyrea wislizeni</i>	Hill, Mar-Elise	6/15/2005	U
PETR-00012	10102	9/15/1993	Asteraceae	<i>Machaeranthera pinnatifida</i> ssp. <i>pinnatifida</i> var. <i>pinnatifida</i>	531712	<i>Haplopappus spinulosus</i>	Barlow-Irlick, Patricia		U

Table A4, continued. Updated and annotated herbarium specimens for Petroglyph National Monument.

Accession #	Catalog #	Collection #	Family	Current scientific name	TSN	Original scientific name	Reviewers	Review date	Updated / annotated
PETR-00012	10108	93-51	Poaceae	<i>Aristida purpurea</i> var. <i>fendleriana</i>	531154	<i>Aristida purpurea</i> var. <i>purpurea</i>	Hill, Mar-Elise	6/15/2005	U
PETR-00012	10111	93-20	Fabaceae	<i>Psoralea scoparius</i>	504647	<i>Dalea scoparia</i>	DeKoker, T.	6/14/2005	U
PETR-00012	10118	93-46	Fabaceae	<i>Caesalpinia jamesii</i>	26505	<i>Hoffmannseggia jamesii</i>	DeKoker, T.	6/14/2005	U
PETR-00012	10120	93-44	Asteraceae	<i>Senecio flaccidus</i> var. <i>douglasii</i>	530312	<i>Senecio douglasii</i> var. <i>longilobus</i>	DeKoker, T.	6/14/2005	U
PETR-00012	10126	93-38	Poaceae	<i>Setaria viridis</i>	41231	<i>Setaria leucopila</i>	DeKoker, T.	6/14/2005	A
PETR-00012	10129	93-35	Poaceae	<i>Dasyochloa pulchella</i>	512087	<i>Erioneuron pulchellum</i>	DeKoker, T.	6/14/2005	U
PETR-00012	10131	93-33	Poaceae	<i>Pleuraphis jamesii</i>	507993	<i>Hilaria jamesii</i>	DeKoker, T.	6/14/2005	U

Table A5. Updated and annotated herbarium specimens for Walnut Canyon, Wupatki, and Sunset Crater National Monuments.

Accession #	Cata- log #	Collec- tion #	Collection date	Family	Current scientific name	TSN	Original scientific name	Reviewers	Review date	Updated / annotated
WACA-00183	2500	55	10/13/1946	Aceraceae	<i>Acer negundo</i>	28749	<i>Acer negundo</i> ssp. <i>interius</i>	Kearney, T.H.	1946	U
WACA-00183	2505	NP	09/19/1971	Anacardiaceae	<i>Toxicodendron rhydbergii</i>	28822	<i>Toxicodendron rhydbergii</i>	Rominger, J.M.	1971	U
WACA-00183	2504	144	04/ 1/1947	Anacardiaceae	<i>Toxicodendron rhydbergii</i>	28822	<i>Toxicodendron rhydbergii</i>	Lehr	1980	U
WUPA-00171	3088	NP	05/13/1939	Apiaceae	<i>Lomatium foeniculaceum</i>	29704	<i>Lomatium foeniculaceum</i> ssp. <i>macdougallii</i>	McDougall, W.B.	05/21/1959	U
WACA-00183	2900	NP	05/05/1952	Apiaceae	<i>Lomatium foeniculaceum</i>	29704	<i>Lomatium foeniculaceum</i> ssp. <i>macdougallii</i>	Kearney, T.H.	1952	U
WACA-00183	2901	WC-4	05/05/1952	Apiaceae	<i>Lomatium foeniculaceum</i>	29704	<i>Lomatium foeniculaceum</i> ssp. <i>macdougallii</i>	Kearney, T.H.	1952	U
WACA-00183	2506	NP	06/30/1965	Asclepiadaceae	<i>Asclepias asperula</i>	30249	<i>Asclepias asperula</i> capri-cornu	Clark, Art		U
WACA-00183	2507	NP	1936	Asclepiadaceae	<i>Asclepias asperula</i>	30249	<i>Asclepias asperula</i> capri-cornu	Kearney, T.H.	1936	U
WUPA-00170	2580	132	08/ 8/1938	Asteraceae	<i>Ambrosia cf. acanthicarpa</i>	36495	<i>Franseria</i>	Christie, K.	2005	A
WUPA-00171	2946	154	08/ 9/1938	Asteraceae	<i>Artemisia campestris</i> ssp. <i>borealis</i> var. <i>scouleriana</i>	531553	<i>Artemisia pacifica</i>			U
WUPA-00171	2947	NP	08/ 3/1965	Asteraceae	<i>Artemisia campestris</i> ssp. <i>borealis</i> var. <i>scouleriana</i>	531553	<i>Artemisia pacifica</i>			U
WACA-00183	2563	9358	07/12/1967	Asteraceae	<i>Artemisia campestris</i> ssp. <i>borealis</i> var. <i>scouleriana</i>	531553	<i>Artemisia pacifica</i>	Clark, Art	1967	U
WACA-00183	2564	9358	07/27/1966	Asteraceae	<i>Artemisia campestris</i> ssp. <i>borealis</i> var. <i>scouleriana</i>	531553	<i>Artemisia pacifica</i>	Clark, Art	1966	U
WACA-00183	2561	9358	08/ 5/1965	Asteraceae	<i>Artemisia ludoviciana</i> ssp. <i>mexicana</i>	183738	<i>Artemisia ludoviciana</i> ssp. <i>mexicana</i>	Rominger, J.M.	1965	U
WACA-00183	2562	9358	08/ 5/1965	Asteraceae	<i>Artemisia ludoviciana</i> ssp. <i>mexicana</i>	183738	<i>Artemisia ludoviciana</i> ssp. <i>mexicana</i>	Rominger, J.M.	1965	U
WACA-00183	2527	NP	08/ 4/1952	Asteraceae	<i>Brickellia eupatorioides</i> var. <i>chlorolepis</i>	526974	<i>Brickellia chlorolepis</i>	Kearney, T.H.	1952	U
WACA-00183	2526	WC-73	09/27/1952	Asteraceae	<i>Brickellia eupatorioides</i> var. <i>chlorolepis</i>	526974	<i>Brickellia chlorolepis</i>	Kearney, T.H.	1952	U
WUPA-00170	2551	G230	07/ 3/1976	Asteraceae	<i>Chaetopappus ericoides</i>	501376	<i>Chaetopappa ericoides</i>			U
WUPA-00170	2552	1521	05/18/1976	Asteraceae	<i>Chaetopappus ericoides</i>	501376	<i>Chaetopappa ericoides</i>			U
WUPA-00170	2553	1516	05/15/1976	Asteraceae	<i>Chaetopappus ericoides</i>	501376	<i>Chaetopappa ericoides</i>	Rominger, J.M.		U
WUPA-00170	2554	1525	05/15/1976	Asteraceae	<i>Chaetopappus ericoides</i>	501376	<i>Chaetopappa ericoides</i>	Rominger, J.M.		U
WUPA-00170	2555	87	06/28/1966	Asteraceae	<i>Chaetopappus ericoides</i>	501376	<i>Chaetopappa ericoides</i>			U

Table A5, continued. Updated and annotated herbarium specimens for Walnut Canyon, Wupatki, and Sunset Crater National Monuments.

Accession #	Catalog #	Collection #	Family	Current scientific name	TSN	Original scientific name	Reviewers	Review date	Updated / annotated
WUPA-00170	2556	43964	05/ 9/1961	Asteraceae	<i>Chaetopappus ericoides</i>	501376	<i>Aster arenosus</i>	McDougall, W.B.	U
WUPA-00170	2557	17		Asteraceae	<i>Chaetopappus ericoides</i>	501376	<i>Chaetopappa ericoides</i>	McDougall, W.B.	U
WUPA-00170	2560	MNA #327	05/22/1940	Asteraceae	<i>Chaetopappus ericoides</i>	501376	<i>Chaetopappa ericoides</i>	DeKoker, T.	U
WUPA-00170	2570	NP	06/19/1966	Asteraceae	<i>Cirsium ochrocentrum</i>	36392	<i>Cirsium calcareum</i>	DeKoker, T.	A
WUPA-00170	2571	G368	08/17/1976	Asteraceae	<i>Cirsium ochrocentrum</i>	36392	<i>Cirsium arizonicum</i>	DeKoker, T.	A
WACA-00183	2575	NP	07/16/1953	Asteraceae	<i>Cirsium rothrockii</i>	36410	<i>Cirsium calcareum</i>	DeKoker, T.	A
WUPA-00170	2603	43	09/19/1939	Asteraceae	<i>Ericameria nauseosa</i>	507594	<i>Chrysothamnus</i>	DeKoker, T.	A
WUPA-00170	2604	98	08/19/1966	Asteraceae	<i>Ericameria nauseosa</i>	507594	<i>Chrysothamnus viscid</i>	DeKoker, T.	A
WUPA-00170	2605	79	10/20/1939	Asteraceae	<i>Ericameria nauseosa</i>	507594	<i>Chrysothamnus nauseosus</i>	McDougall, W.B.	U
WUPA-00170	2606	78	10/20/1939	Asteraceae	<i>Ericameria nauseosa</i>	507594	<i>Chrysothamnus</i>	DeKoker, T.	A
WUPA-00170	2602	77	10/20/1939	Asteraceae	<i>Ericameria nauseosa</i>	507594	<i>Chrysothamnus</i>	DeKoker, T.	A
WUPA-00170	2607	NP	09/13/1940	Asteraceae	<i>Ericameria nauseosa</i>	507594	<i>Chrysothamnus nauseosus</i>	Peebles, R.H.	U
WUPA-00170	2608	NP	09/13/1940	Asteraceae	<i>Ericameria nauseosa</i>	531871	<i>Chrysothamnus nauseosus</i>	Peebles, R.H.	U
WUPA-00170	2609	NP	10/15/1941	Asteraceae	<i>Ericameria nauseosa</i>	507594	<i>Chrysothamnus nauseosus</i>	Whiting, A.F.	U
WUPA-00170	2610	1526	05/15/1976	Asteraceae	<i>Ericameria nauseosa</i>	507594	<i>Chrysothamnus nauseosus</i>	Rominger, J.M.	U
WACA-00183	2569	NP	09/19/1971	Asteraceae	<i>Ericameria nauseosa</i>	507594	<i>Chrysothamnus nauseosus</i>	Salomonson, Michael	U
WACA-00183	2570	38	10/ 6/1946	Asteraceae	<i>Ericameria nauseosa</i>	507594	<i>Chrysothamnus nauseosus</i> var. <i>consimilis</i>	Kearney, T.H.	U
WACA-00183	2571	WC-101	09/18/1953	Asteraceae	<i>Ericameria nauseosa</i>	507594	<i>Chrysothamnus viscidiflorus</i>	DeKoker, T.	A
SUCR-00056	1237	NP		Asteraceae	<i>Ericameria nauseosa</i>	507594	<i>Chrysothamnus nauseosus</i>	Humbles And Whitefield	U
WUPA-00171	2949	NP	10/ 3/1962	Asteraceae	<i>Ericameria nauseosa</i> ssp. <i>Nauseosa</i> var. <i>hololeuca</i>	531867	<i>Chrysothamnus nauseosus</i> var. <i>gnapalodes</i>	McDougall, W.B.	U
WACA-00183	2660	NP	07/24/1952	Asteraceae	<i>Heliomeris multiflora</i>	528361	<i>Heliomeris longifolia</i> var. <i>annua</i>	DeKoker, T.	A
WACA-00183	2661	18	09/29/1946	Asteraceae	<i>Heliomeris multiflora</i>	528364	<i>Heliomeris multiflora</i> var. <i>multiflora</i>	Kearney, T.H.	U
WACA-00183	2664	WC-91	09/ 5/1953	Asteraceae	<i>Heliomeris multiflora</i>	528364	<i>Heliomeris multiflora</i> var. <i>multiflora</i>	Kearney, T.H.	U

Table A5, continued. Updated and annotated herbarium specimens for Walnut Canyon, Wupatki, and Sunset Crater National Monuments.

Accession #	Catalog #	Collection #	Family	Current scientific name	TSN	Original scientific name	Reviewers	Review date	Updated / annotated	
WACA-00183	2662	NP	09/16/1951	Asteraceae	<i>Heliomeris multiflora</i>	528364	<i>Heliomeris multiflora</i> var. <i>multiflora</i>	Kearney, T.H.	1951	U
WACA-00183	2665	NP	09/16/1951	Asteraceae	<i>Heliomeris multiflora</i>	528364	<i>Heliomeris multiflora</i> var. <i>multiflora</i>	Kearney, T.H.	1951	U
WACA-00183	2663	NP	09/4/1949	Asteraceae	<i>Heliomeris multiflora</i>	528365	<i>Heliomeris multiflora</i> var. <i>nevadensis</i>	Kearney, T.H.	1949	U
WACA-00183	2617	WC-63	08/26/1952	Asteraceae	<i>Lactuca pulchella</i>	528669	<i>Lactuca tatarica</i> var. <i>pulchella</i>	Kearney, T.H.	1952	U
WUPA-00170	2563	G245	07/4/1976	Asteraceae	<i>Machaeranthera canescens</i> ssp. <i>canescens</i> var. <i>incana</i>	531700	<i>Aster tephrodes</i>			U
WUPA-00170	2564	137	08/9/1938	Asteraceae	<i>Machaeranthera canescens</i> ssp. <i>canescens</i> var. <i>incana</i>	531700	<i>Aster tephrodes</i>	McDougall, W.B.		U
WACA-00183	2644	NP	06/19/1936	Asteraceae	<i>Packera neomexicana</i> var. <i>neomexicana</i>	566280	<i>Senecio neomexicanus</i>	Kearney, T.H.	1936	U
WUPA-00170	2620	G333	07/31/1976	Asteraceae	<i>Senecio flaccidus</i>	530313	<i>Senecio flaccidus</i> var. <i>flaccidus</i>	Green, L.T. iii		U
WUPA-00170	2621	G249	07/4/1976	Asteraceae	<i>Senecio flaccidus</i>	530313	<i>Senecio flaccidus</i> var. <i>flaccidus</i>	Green, L.T. iii		U
WUPA-00170	2622	G235	07/3/1976	Asteraceae	<i>Senecio flaccidus</i>	530313	<i>Senecio flaccidus</i> var. <i>flaccidus</i>	Green, L.T. iii		U
WUPA-00170	2623	97	08/19/1966	Asteraceae	<i>Senecio flaccidus</i>	530313	<i>Senecio flaccidus</i> var. <i>flaccidus</i>	Mack, Jim		U
WUPA-00170	2624	61-1939	09/28/1939	Asteraceae	<i>Senecio flaccidus</i>	505126	<i>Senecio longilobus</i>	Peebles, R.H.		U
WUPA-00170	2625	34-1939	08/30/1939	Asteraceae	<i>Senecio flaccidus</i>	505126	<i>Senecio longilobus</i>	Peebles, R.H.		U
WUPA-00170	2626	NP	06/27/1939	Asteraceae	<i>Senecio flaccidus</i>	530313	<i>Senecio flaccidus</i> var. <i>flaccidus</i>	McDougall, W.B.	04/22/1959	U
WACA-00183	2639	NP	07/7/1965	Asteraceae	<i>Senecio flaccidus</i>	530313	<i>Senecio flaccidus</i> var. <i>flaccidus</i>	Clark, Art	1965	U
WACA-00183	2640	NP	07/13/1966	Asteraceae	<i>Senecio flaccidus</i>	530313	<i>Senecio flaccidus</i> var. <i>flaccidus</i>	Clark, Art	1966	U
WACA-00183	2641	NP	07/13/1966	Asteraceae	<i>Senecio flaccidus</i>	530313	<i>Senecio flaccidus</i> var. <i>flaccidus</i>	Clark, Art	1966	U
WACA-00183	2642	WC-90	09/5/1953	Asteraceae	<i>Senecio flaccidus</i>	530313	<i>Senecio flaccidus</i> var. <i>flaccidus</i>	Kearney, T.H.	1953	U

Table A5, continued. Updated and annotated herbarium specimens for Walnut Canyon, Wupatki, and Sunset Crater National Monuments.

Accession #	Cata- log #	Collec- tion #	Collection date	Family	Current scientific name	TSN	Original scientific name	Reviewers	Review date	Updated / annotated
WACA-00183	2638	WC-90	09/5/1953	Asteraceae	<i>Senecio flaccidus</i>	530313	<i>Senecio flaccidus</i> var. <i>flaccidus</i>	Kearney, T.H.	1953	U
WUPA-00170	2629	G204	06/10/1976	Asteraceae	<i>Stephanomeria minor</i> var. <i>minor</i>	566323	<i>Stephanomeria tenuifolia</i>	Green, L.T. iii		U
WUPA-00170	2630	G226	07/ 3/1976	Asteraceae	<i>Stephanomeria minor</i> var. <i>minor</i>	566323	<i>Stephanomeria tenuifolia</i>	Green, L.T. lii		U
WUPA-00170	2631	2628	08/17/1976	Asteraceae	<i>Stephanomeria minor</i> var. <i>minor</i>	566323	<i>Stephanomeria tenuifolia</i>	Green, L.T. lii		U
WACA-00183	2651	NP	07/17/1949	Asteraceae	<i>Stephanomeria minor</i> var. <i>minor</i>	566323	<i>Stephanomeria tenuifolia</i>	Kearney, T.H.	1949	U
WACA-00183	2666	WC-109	09/20/1953	Asteraceae	<i>Symphotrichum falcatum</i> var. <i>falcatum</i>	566331	<i>Aster falcatus</i>	Kearney, T.H.	1953	U
WACA-00183	2667	26	09/15/1940	Asteraceae	<i>Symphotrichum falcatum</i> var. <i>falcatum</i>	566331	<i>Aster falcatus</i>	Kearney, T.H.	1940	U
WACA-00183	2610	NP	09/25/1971	Asteraceae	<i>Tetranneuris acaulis</i> var. <i>arizonica</i>	530624	<i>Tetranneuris acaulis arizonica</i>	Salomonson, Michael	1971	U
WACA-00183	2612	1591	06/ 1/1940	Asteraceae	<i>Tetranneuris acaulis</i> var. <i>arizonica</i>	530624	<i>Tetranneuris acaulis arizonica</i>	Kearney, T.H.	1940	U
WACA-00183	2613	NP	07/ 8/1949	Asteraceae	<i>Tetranneuris acaulis</i> var. <i>arizonica</i>	530624	<i>Tetranneuris acaulis arizonica</i>	Kearney, T.H.	1949	U
WUPA-00170	2635	21	08/9/1938	Asteraceae	<i>Xanthium</i> cf. <i>strumarium</i>	38692	<i>Xanthium strumarium</i> var. <i>canadensis</i>	Whiting, A.F.		A
WUPA-00171	2942	NP	06/ 2/1973	Boraginaceae	<i>Cryptantha setosissima</i>	31870	<i>Cryptantha crassipala</i>	Christie, K.	2005	A
	5440	5	5/10/1935	Boraginaceae	<i>Cryptantha</i> sp.	31765	<i>Cryptantha fendleri</i>	Christie, K.	2005	A
WUPA-00170	25489	105	6/24/1983	Boraginaceae	<i>Heliotropium curassavicum</i>	31635	Unknown	Dekoker, T.	2005	A
WUPA-00170	2512	20/1939	05/13/1939	Boraginaceae	<i>Heliotropium curassavicum</i> var. <i>oculatum</i>	528374	Unknown	Dekoker, T.	2005	A
WACA-00183	2816	NP	06/19/1936	Brassicaceae	<i>Erysimum capitatum</i>	22932	<i>Erysimum inconspicuum</i>	Christie, K.	2005	U
WACA-00183	2815	NP	07/17/1965	Brassicaceae	<i>Erysimum capitatum</i>	22932	<i>Erysimum inconspicuum</i>	Christie, K.	2005	U
WUPA-00170	2530	12	08/ 9/1938	Chenopodia- ceae	<i>Atriplex obovata</i>	20552	<i>Atriplex confertifolia</i>	Christie, K.	2005	A
WACA-00183	2542	NP	08/ 3/1949	Chenopodia- ceae	<i>Chenopodium berlandieri</i> var. <i>sinuatum</i>	527315	<i>Chenopodium berlandieri</i> ssp. <i>pseudopetiolare</i>	Smithsonian	1949	U
WACA-00183	2545	21	09/29/1946	Chenopodia- ceae	<i>Chenopodium graveolens</i>	20611	<i>Chenopodium graveolens</i> var. <i>neomexicanum</i>	Kearney, T.H.	1946	U

Table A5, continued. Updated and annotated herbarium specimens for Walnut Canyon, Wupatki, and Sunset Crater National Monuments.

Accession #	Cata- log #	Collec- tion #	Collection date	Family	Current scientific name	TSN	Original scientific name	Reviewers	Review date	Updated / annotated
WUPA-00170	2654	1505	04/22/1976	Cupressaceae	<i>Juniperus</i>	18047	<i>Juniperus monosperma</i>	DeKoker, T.	2005	A
WACA-00183	2450	126	03/13/1947	Cupressaceae	<i>Juniperus deppeana</i>	194834	<i>Juniperus deppeana</i> var. <i>pachyphloea</i>	Kearney, T.H.	1947	U
WUPA-00171	2979	479	05/20/1976	Euphorbiaceae	<i>Euphorbia brachycera</i>	28049	<i>Euphorbia lurida</i>	McMillan, D.J.	05/20/1976	U
WUPA-00171	2980	479	05/20/1976	Euphorbiaceae	<i>Euphorbia brachycera</i>	28049	<i>Euphorbia lurida</i>	McMillan, D.J.	05/20/1976	U
WUPA-00171	2981	G340	08/12/1976	Euphorbiaceae	<i>Euphorbia brachycera</i>	28049	<i>Euphorbia lurida</i>	Green, L.T. iii		U
WUPA-00171	2982	NP	07/ 5/1951	Euphorbiaceae	<i>Euphorbia brachycera</i>	28049	<i>Euphorbia lurida</i>	McDougall, W.B.	05/20/1959	U
WUPA-00171	2983	NP	05/13/1939	Euphorbiaceae	<i>Euphorbia brachycera</i>	28049	<i>Euphorbia lurida</i>	Nichol, A.A.	05/13/1939	U
WUPA-00170	2769	NP	05/18/1959	Fabaceae	<i>Astragalus allochrous</i>	25408	<i>Astragalus</i>	Christie, K.	2005	A
WUPA-00170	2771	1514	05/15/1973	Fabaceae	<i>Astragalus praelongus</i>	25639	<i>Astragalus episcopus</i>	Christie, K.	2005	A
WUPA-00170	2787	85	06/26/1966	Fabaceae	<i>Caesalpinia drepanocarpa</i>	184647	<i>Hoffmanseggia drepano- carpa</i>	Mack, Jim		U
WUPA-00170	2791	NP	10/15/1941	Fabaceae	<i>Caesalpinia drepanocarpa</i>	184647	<i>Hoffmanseggia jamesii</i>	Christie, K.	2005	A
WUPA-00170	2788	G244	07/ 4/1976	Fabaceae	<i>Caesalpinia jamesii</i>	26505	<i>Hoffmanseggia jamesii</i>	Green, L.T. iii		U
WUPA-00170	2789	1558	05/18/1976	Fabaceae	<i>Caesalpinia jamesii</i>	26505	<i>Hoffmanseggia jamesii</i>	Rominger, J.M.		U
WUPA-00170	2790	NP	08/ 9/1976	Fabaceae	<i>Caesalpinia jamesii</i>	26505	<i>Hoffmanseggia jamesii</i>	Crowley, P.		U
WUPA-00171	3015	NP	05/13/1939	Fabaceae	<i>Lathyrus laetivirens</i>	503341	<i>Lathyrus leucanthus</i> var. <i>laetivirens</i>	McDougall, W.B.	05/25/1959	U
WUPA-00171	3025	NP	05/13/1939	Fabaceae	<i>Thermopsis montana</i>	508158	<i>Thermopsis divaricarpa</i>	Christie, K.	2005	A
WACA-00183	2678	WC-2	10/18/1951	Fagaceae	<i>Quercus emoryi</i>	19328	<i>Quercus pauciloba</i>	Christie, K.	2005	A
WACA-00183	2743	NP	06/ 5/1990	Linaceae	<i>Linum australe</i>	29232	<i>Linum aristatum</i>	Christie, K.	2005	A
	5464	14	5/28/1935	Nyctaginaceae	<i>Mirabilis multiflora</i> var. <i>multiflora</i>	529220	<i>Quamoclidion multiflorum</i>	Whiting, A.F.		U
WUPA-00170	2829	49/1939	09/21/1939	Nyctaginaceae	<i>Mirabilis oxybaphoides</i>	19657	<i>Allionia incarnata</i>	Christie, K.	2005	A
WUPA-00170	2841	326	05/22/1940	Onagraceae	<i>Camissonia multijuga</i>	27527	<i>Camissonia walkeri</i>	Christie, K.	2005	A
WUPA-00171	3046	NP	07/25/1951	Pinaceae	<i>Pinus strobiformis</i>	183380	<i>Pinus flexilis</i>	Christie, K.	2005	A
WUPA-00170	2723	NP	NP	Poaceae	<i>Achnatherum aridum</i>	507932	<i>Stipa arida</i>			U
WACA-00183	2466	44	08/18/1949	Poaceae	<i>Bromus porteri</i>	40486	<i>Bromus anomalus</i>	Christie, K.	2005	A
	0	1529	05/18/76	Poaceae	<i>Dasyochloa pulchella</i>	512087	<i>tridens pulchellus</i>	Rominger, J.M.		U
	0	G 241	03/07/76	Poaceae	<i>Dasyochloa pulchella</i>	512087	<i>tridens pulchellus</i>	Green, L.T. iii		U
	0	NP		Poaceae	<i>Dasyochloa pulchella</i>	512087	<i>tridens pulchellus</i>	Np		U

Table A5, continued. Updated and annotated herbarium specimens for Walnut Canyon, Wupatki, and Sunset Crater National Monuments.

Accession #	Cata- log #	Collec- tion #	Collection date	Family	Current scientific name	TSN	Original scientific name	Reviewers	Review date	Updated / annotated
WUPA-00171	2999	NP	10/ 9/1983	Poaceae	<i>Elymus elymoides</i> ssp. <i>brevifolius</i>	525111	<i>Sitanion longifolium</i>	Cinnamon, Steven K.	1983	U
WUPA-00171	3000	NP	07/28/68	Poaceae	<i>Elymus elymoides</i> ssp. <i>brevifolius</i>	525111	<i>Sitanion longifolium</i>	Button, Ken- neth		U
WUPA-00171	3002	NP	07/28/1968	Poaceae	<i>Hesperostipa comata</i> ssp. <i>comata</i>	525116	<i>Stipa comata</i>	Button, Ken- neth	07/28/1968	U
WUPA-00171	3003	NP	07/28/1968	Poaceae	<i>Hesperostipa comata</i> ssp. <i>comata</i>	525116	<i>Stipa comata</i>	Button, Ken- neth	07/28/1968	U
WUPA-00170	2869	13	05/18/0000	Polemoniaceae	<i>cf. Gilia sinuata</i>	31088	<i>Gilia inconspicua</i>	Christie, K.	2005	A
WUPA-00170	2870	311	04/10/1940	Polemoniaceae	<i>cf. Gilia sinuata</i>	31088	<i>Gilia inconspicua</i>	Christie, K.	2005	A
WUPA-00170	2871	31	05/22/1952	Polemoniaceae	<i>cf. Gilia sinuata</i>	31088	<i>Gilia tenuiflora</i>	Christie, K.	2005	A
WUPA-00171	3047	G339	08/10/1976	Polemoniaceae	<i>Ipomopsis aggregata</i> ssp. <i>formosissima</i>	524176	<i>Ipomopsis aggregata</i>	Christie, K.	2005	U
WUPA-00171	3048	NP	09/03/1983	Polemoniaceae	<i>Ipomopsis aggregata</i> ssp. <i>formosissima</i>	524176	<i>Ipomopsis aggregata</i>	Christie, K.	2005	U
WUPA-00171	3049	G339	08/10/1976	Polemoniaceae	<i>Ipomopsis aggregata</i> ssp. <i>formosissima</i>	524176	<i>Ipomopsis aggregata</i>	Christie, K.	2005	U
WUPA-00171	3050	475	05/20/1976	Polemoniaceae	<i>Ipomopsis aggregata</i> ssp. <i>formosissima</i>	524176	<i>Ipomopsis aggregata</i>	Christie, K.	2005	U
WUPA-00171	3051	NP	07/28/1968	Polemoniaceae	<i>Ipomopsis aggregata</i> ssp. <i>formosissima</i>	524176	<i>Ipomopsis aggregata</i>	Christie, K.	2005	U
WUPA-00171	3052	NP	06/08/1951	Polemoniaceae	<i>Ipomopsis aggregata</i> ssp. <i>formosissima</i>	524176	<i>Ipomopsis aggregata</i>	Christie, K.	2005	U
WUPA-00171	3053	NP	08/27/1951	Polemoniaceae	<i>Ipomopsis aggregata</i> ssp. <i>formosissima</i>	524176	<i>Ipomopsis aggregata</i>	Christie, K.	2005	U
WUPA-00170	2860	NP	09/04/1983	Polemoniaceae	<i>Ipomopsis longiflora</i> ssp. <i>longiflora</i>	524182	<i>Gilia longiflora</i> var. <i>longi- flora</i>	Cinnamon, Steven K.	09/04/1983	U
WUPA-00170	2861	115	08/29/1966	Polemoniaceae	<i>Ipomopsis longiflora</i> ssp. <i>longiflora</i>	524182	<i>Gilia longiflora</i> var. <i>longi- flora</i>	Mack, Jim	08/29/1966	U
WUPA-00170	2862	59/1939	09/28/1939	Polemoniaceae	<i>Ipomopsis longiflora</i> ssp. <i>longiflora</i>	524182	<i>Gilia longiflora</i> var. <i>longi- flora</i>	Peebles, R.H.		U
WUPA-00170	2863	114	08/27/1963	Polemoniaceae	<i>Ipomopsis longiflora</i> ssp. <i>longiflora</i>	524182	<i>Gilia longiflora</i> var. <i>longi- flora</i>	Gustafson, Terry		U
WUPA-00170	2864	81	07/07/1938	Polemoniaceae	<i>Ipomopsis longiflora</i> ssp. <i>longiflora</i>	524182	<i>Gilia longiflora</i> var. <i>longi- flora</i>	Whiting, A.F.	1938	U
	5467	40	1935	Polygonaceae	<i>Eriogonum corymbosum</i>	21103	<i>Eriogonum aureum</i>	Whiting, A.F.		U

Table A5, continued. Updated and annotated herbarium specimens for Walnut Canyon, Wupatki, and Sunset Crater National Monuments.

Accession #	Catalog #	Collection date	Family	Current scientific name	TSN	Original scientific name	Reviewers	Review date	Updated / annotated
WACA-00183	2827	08/09/1952	Ranunculaceae	<i>Aquilegia desertorum</i>	18734	<i>Aquilegia elegantula</i>	Christie, K.	2005	A
WACA-00183	2848	07/ 7/1986	Rosaceae	<i>Potentilla hippiana</i>	24718	<i>Potentilla glandulosa</i>	Clark, Art	1986	U
WACA-00183	2698	07/17/1965	Rubiaceae	<i>Galium microphyllum</i>	502714	<i>galium</i>	Christie, K.	2005	A
	5474	5/27/1935	Solanaceae	<i>Nicotiana obtusifolia</i>	508057	<i>Nicotiana trigonophylla</i>	Whiting, A.F.		U
WACA-00183	2914	07/ 9/1952	Vitaceae	<i>Vitis arizonica</i>	28612	<i>Vitis arizonica</i> var. <i>glabra</i>	Kearney, T.H.	1952	U

Table A6. Updated and annotated herbarium specimens for Yucca House National Monument.

Accession #	Catalog #	Collec- tion #	Collection date	Family	Current scientific name	TSN	Original scientific name	Reviewers	Review date	Updated/ annotated
YUHO-00021	YUHO 136	864	4/30/1992	Brassicaceae	<i>Erysimum capitatum</i>	22932	<i>Erysimum asperum</i>	Litzinger, William	08/10/1994	U
YUHO-00021	YUHO 135	869	4/30/1992	Cupressaceae	<i>Juniperus osteosperma</i>	194859	<i>Sabina osteosperma</i>	Litzinger, William	08/10/1994	U
YUHO-00001	YUHO 13	817	6/14/1985	Cyperaceae	<i>Carex praegracilis</i>	39767	<i>Juncus tenuis</i>	Rink, Glenn	6/2005	A
YUHO-00001	YUHO 11	813	6/14/1985	Cyperaceae	<i>Schoenoplectus acutus</i> var. <i>acutus</i>	507785	<i>Scirpus tabernaemontanii</i>	Rink, Glenn	6/2005	A
YUHO-00001	YUHO 12	815	6/16/1985	Cyperaceae	<i>Schoenoplectus maritimus</i>	521093	<i>Scirpus fluviatilis</i>	Rink, Glenn	6/2005	A
YUHO-00001	YUHO 6	805	6/20/1985	Fabaceae	<i>Astragalus praelongus</i>	25639	<i>Astragalus oophorus</i>	Hill, Mar-Elise	6/1	A
YUHO-00001	YUHO 8	810	6/16/1985	Onagraceae	<i>Oenothera elata</i> ssp. <i>hookeri</i>	524353	<i>Oenothera hookeri</i>	Colyer, Marilyn	07/14/1985	U
YUHO-00001	YUHO 1	800	6/16/1985	Poaceae	<i>Sporobolus airoides</i>	42128	<i>Muhlenbergia asperifolia</i>	Rink, Glenn	6/2005	A
YUHO-00001	YUHO 10	812	6/16/1985	Polygonaceae	<i>Rumex crispus</i>	20937	<i>Rumex hymenosepalus</i>	Rink, Glenn	6/2005	A
YUHO-00001	YUHO 4	803	6/16/1985	Ranunculaceae	<i>Myosurus minimus</i>	503898	<i>Eleocharis palustris</i>	Hill, Mar-Elise	6/2005	A
YUHO-00001	YUHO 3	802	6/16/1985	Scrophulariaceae	<i>Penstemon brevis</i>	33834	<i>Penstemon</i> sp.	Rink, Glenn	6/2005	A
YUHO-00021	YUHO 136	864	4/30/1992	Brassicaceae	<i>Erysimum capitatum</i>	22932	<i>Erysimum asperum</i>	Litzinger, William	08/10/1994	U

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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National Park Service
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