



Sagamore Hill National Historic Site

Resource Stewardship Strategy Lite – Process and Notes



September 2019

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Introduction

In 2018, Sagamore Hill National Historic Site (SAHI) and the Northeast Regional Office (NERO) – Natural Resources Stewardship and Science Division worked together to develop and implement a modified Resource Stewardship Strategy (RSS). Though based on the same principle as the RSS – an objective assessment of the natural/cultural resource conditions relative to the “desired conditions” and a presenting a science-based approach to achieving and maintaining the desired conditions – the modified RSS, or Resource Stewardship Strategy Lite, streamlines the data gathering process and consolidates the narrative provided in the final document.

Process

In late summer of 2018, SAHI park staff and NERO staff discussed, developed, and agreed to a tentative structure and format for the process and creation of a final product. NERO staff designed and produced a table to capture the resource concerns, parks goals, and potential management needs and strategies for the park, and presented it to SAHI staff. This table (planning matrix) can be found in IRMA and referenced for details (<https://irma.nps.gov/DataStore/Reference/Profile/2266345>). The staff agreed that the format and structure were suitable and to initiate the process by populating the matrix basic information about priority resources, priority components, possible mechanisms to accomplish desired objectives, provide the status or available information for each of the identified priority resources.

Park staff met for two days in October 2018 with two regional office staff members, who facilitated and recorded the process to discuss in more detail and refine the basic information entered into the matrix. Additionally, two members of the Northeast Regions’s (NER) Inventory and Monitoring (I&M) Northeast Coastal and Barrier Network (NCBN) team participated on the first day and for the morning portion of the second day. The I&M staff presented technical information about I&M data collection conducted at the Park (e.g. shoreline position, salt marsh vegetation and nekton monitoring, forest health, and estuarine water quality). At the beginning of the process, the group agreed that it wanted a planning document that can reviewed at least annually and in an adaptable format in order to be updated to reflect changing management goals and the status of resource management activities.

The meeting itself was an inclusive process. Park staff from all departments (e.g. natural resources, cultural resources, facilities, interpretation, administration, etc...) were invited to attend the meeting, and encouraged to contribute to their thoughts and perspectives about the resource concerns and management strategies that were identified in the first iteration of the table. The discussion was an open forum that allowed Park staff to explore the intersection of park resources and management objectives, offer technical options and opinions to resource management questions, and think in a more holistic and comprehensive way about potential management decisions. The result was an

integrated, collaborative process that enabled the Park to consider and balance the multifaceted needs – natural, cultural, and physical (facilities).

NERO staff facilitated the process and recorded the discussion. Edits and revisions to information in the matrix was captured, and entered into the matrix. NERO staff agreed to consolidate ideas where and if needed, clarify objectives and goals as described by park staff, and edit and polish the language in the table. A revised version was sent to the park for review to ensure the edits accurately reflect the intent and meaning of comments presented at the meeting. A finalized document was created based on comments.

At the end of the two day meeting, a +/- session was also conducted with the participants. Though each park is unique, their comments shed light on ways that the process might be refined to make it more effective and efficient.

RSS Lite – Nuts and Bolts – Structure and Format

Like the RSS, the RSS Lite is a “strategic plan, intended to help park managers achieve and maintain desired resource conditions over time... serves as a bridge between the park’s foundation document, other plans, and everyday management of its natural and cultural resources ...” and offers a “dynamic framework that should be routinely updated as conditions change; new issues, stressors, or threats are identified; and activities are accomplished.” (From National Park Service, U.S. Department of the Interior. Resource Stewardship Strategy Development Guide). The RSS Lite also adheres to the 5 main steps that a park goes through during an RSS:

1. Inform the process – determine what is known
2. Evaluate park resources – determine where we are now
3. Identify priority resources – determine what is essential to the park
4. Establish goals – determine where we want to be
5. Develop a range of activities – determine ways to get to the “destination”

Unlike the RSS, the RSS Lite does not export information to a desktop application. Information, ideas, goals, objectives are entered directly into a table as part of the collaborative and communal process. Rather than creating a formal summary document, only a brief narrative will accompany the table. The narrative will reference Management Policies and Director’s Orders applicable to defined priority resources in order to provide context to and a foundation for NPS policy that influences and directs management strategies.

With a heavier reliance on the planning matrix, the RSS Lite table incorporates additional categories to the general planning categories (e.g. Fundamental/Significant Resources, Components, Long-term Goals, Short-term Goals, Activities, and Supporting Notes) used in the RSS. These additional categories can be characterized as “management elements” and include:

- Current Status/Information in park
- Needed Information
- Information Synthesis
- Collaboration
- Decisions (Plan Recommendations)
- Action Possibilities
- Evaluation

The table functions as the primary reference point for park staff to discuss park priorities, develop implementation strategies, update status of work, and adjust park goals and activities as priorities are addressed or as they change.

Associated Management Policies and Director' Orders

4.4 Biological Resource Management

4.4.1 General Principles for Managing Biological Resources

4.4.1.3 Definition of Native and Exotic Species

4.4.2.2 Restoration of Native Plant and Animal Species

4.4.2.4 Management of Natural Landscapes

4.4.5 Pest Management

4.4.5.1 Pests

4.6 Water Resource Management

4.6.1 Protection of Surface Waters and Groundwaters

4.7 Air Resource Management

4.7.1 Air Quality

4.8.1.1 Shorelines and Barrier Islands

4.8.2.4 Soil Resource Management

4.9 Soundscape Management

4.10 Lightscape Management

5 Cultural Resource Management

Director's Orders

DO 18 – Wildland Fire Management

DO 39 – Ocean and Coastal Resource Management

DO 42 – Accessibility for Park Visitors

DO 47 – Sound Preservation and Noise Management

DO 77 – Natural Resource Management

DO 77-1 – Wetland Protection

DO 77-7 – Integrated Pest Management

DO 77-8 – Endangered Species

DO 77-9 – Fishing and Fishery Management (?)

Forest Management Policies

4.4 Biological Resource Management

4.4.1 General Principles for Managing Biological Resources

4.4.1.3 Definition of Native and Exotic Species

4.4.2.2 Restoration of Native Plant and Animal Species

4.4.2.4 Management of Natural Landscapes

4.4.5 Pest Management

4.4.5.1 Pests

Priority Species

Director's Orders

DO 42 – Accessibility for Park Visitors

DO 77 – Natural Resource Management

DO 77-1 – Wetland Protection

DO 77-7 – Integrated Pest Management

DO 77-8 – Endangered Species

Sensitive Species/Species of Concern

- **Birds of conservation concern:** Wood thrush, Hairy woodpecker, Chimney swift, Long-tailed duck, Prairie warbler, Common loon
- **Birds of special concern in NY:** Broad-winged hawk, Cooper's hawk, Osprey, Scarlet tanager, Sharp-shinned hawk
- **Threatened species:** Bald eagle, Least tern, Common tern, Pied-billed grebe
- **Migratory birds inventoried:** Eastern woodpewee, Scarlet tanager, Black and White warbler, Chimney swift, Rufous-sided towhee, Black-billed cuckoo, Blackburnian warbler
- **Odonota species of conservation concern:** Comet darner dragonfly and Citline forktail
- **Non-indigenous forest pests:** Peach twig boxer, Asiatic oak weevil, San Jose scale, Japanese beetle, Golden oak scale, Oystershell scale, Japanese beetle, Oak wilt, Cherry bark tortrix, Gypsy moth, Browntail moth, Pink hibiscus mealybug, Winter moth

- **Species of environmental concern:** White-tailed deer and the high volume of ticks, Lyme disease.
- **Herpetofauna of conservation concern:** Marbled salamander, Eastern box turtle, Northern diamond-backed terrapin
- **Exotic bird species:** European starling, House finch, House sparrow, and Rock dove
- **Partners in Flight species including:** Baltimore oriole, Wood thrush, Hairy woodpecker, Eastern wood-pewee, Chimney swift, Black-crowned night heron, Osprey, Snowy egret, Great blue heron, Great egret, American black duck, Black-and-white warbler, Black-billed cuckoo, Blackburnian warbler, Eastern towhee, Purple finch, Scarlet tanager, American woodcock, Pied-billed grebe, Blue-winged warbler, Cooper's hawk
- **Mammals NY state list potentially present:** Indiana bat, Small-footed myotis, and New England cottontail
- **Plants sensitive to ozone:** White snakeroot, Tree of Heaven, Common dogbane, Common milkweed, American hazelnut, Black huckleberry, Sweetgum, Tulip poplar, Virginia creeper, Sweet mock orange, Black cherry, Dwarf sumac, Black locust, Allegheny blackberry, American black elderberry, Sassafras, Saltmarsh cordgrass
- **Threatened bat species:** Northern long-eared bat

***Notes:** Forested slope on eastern boundary prevents erosion.

Landscape Features



Park map showing landscape features at Sagamore Hill National Historic Site.

Orchard

Management Policies

- 4.4 Biological Resource Management
 - 4.4.1 General Principles for Managing Biological Resources
 - 4.4.1.3 Definition of Native and Exotic Species
 - 4.4.2.2 Restoration of Native Plant and Animal Species
 - 4.4.2.4 Management of Natural Landscapes
 - 4.4.5 Pest Management
 - 4.4.5.1 Pests
 - 4.8.2.4 Soil Resource Management
- 5 Cultural Resource Management

Director's Orders

DO 42 – Accessibility for Park Visitors

DO 77 – Natural Resource Management

DO 77-7 – Integrated Pest Management

Sensitive Species/Species of Concern

- **Birds of special concern in NY:** Broad-winged hawk, Cooper's hawk, Osprey, Scarlet tanager, Sharp-shinned hawk
- **Threatened species:** Bald eagle, Least tern, Common tern, Pied-billed grebe
- **Migratory birds inventoried:** Eastern woodpewee, Scarlet tanager, Black and White warbler, Chimney swift, Rufous-sided towhee, Black-billed cuckoo, Blackburnian warbler
- **Odonota species of conservation concern:** Comet darner dragonfly and Citline forktail
- **Exotic bird species:** European starling, House finch, House sparrow, and Rock dove
- **Partners in Flight species including:** Baltimore oriole, Wood thrush, Hairy woodpecker, Eastern wood-pewee, Chimney swift, Black-crowned night heron, Osprey, Snowy egret, Great blue heron, Great egret, American black duck, Black-and-white warbler, Black-billed cuckoo, Blackburnian warbler, Eastern towhee, Purple finish, Scarlet tanager, American woodcock, Pied-billed grebe, Blue-winged warbler, Cooper's hawk
- **Mammals NY state list potentially present:** Indiana bat, Small-footed myotis, and New England cottontail



Orchard at Sagamore Hill National Historic Site. (NPS photo/Baranowski)

Shrubland

Management Policies

4.4 Biological Resource Management

4.4.1 General Principles for Managing Biological Resources

4.4.1.3 Definition of Native and Exotic Species

4.4.2.2 Restoration of Native Plant and Animal Species

4.4.2.4 Management of Natural Landscapes

4.4.5 Pest Management

4.4.5.1 Pests

4.8.2.4 Soil Resource Management

5 Cultural Resource Management

Director's Orders

DO 42 – Accessibility for Park Visitors

DO 77 – Natural Resource Management

DO 77-7 – Integrated Pest Management

DO 77-8 – Endangered Species

Sensitive Species/Species of Concern

- **Birds of special concern in NY:** Broad-winged hawk, Cooper's hawk, Osprey, Scarlet tanager, Sharp-shinned hawk.
- **Threatened species:** Bald eagle, Least tern, Common tern, Pied-billed grebe
- **Migratory birds inventoried:** Eastern woodpewee, Scarlet tanager, Black and White warbler, Chimney swift, Rufous-sided towhee, Black-billed cuckoo, Blackburnian warbler
- **Odonota species of conservation concern:** Comet darter dragonfly and Citrine forktail
- **Exotic bird species:** European starling, House finch, House sparrow, and Rock dove
- **Partners in Flight species including:** Baltimore oriole, Wood thrush, Hairy woodpecker, Eastern wood-pewee, Chimney swift, Black-crowned night heron, Osprey, Snowy egret, Great blue heron, Great egret, American black duck, Black-and-white warbler, Black-billed cuckoo, Blackburnian warbler, Eastern towhee, Purple finch, Scarlet tanager, American woodcock, Pied-billed grebe, Blue-winged warbler, Cooper's hawk
- **Mammals NY state list potentially present:** Indiana bat, Small-footed myotis, and New England cottontail

***Notes:** During the process, a question was raised whether shrubland should be considered a Fundamental Resource or a Fundamental Value.

Developed Land

Management Policies

- 4.4 Biological Resource Management
 - 4.4.1 General Principles for Managing Biological Resources
 - 4.4.1.3 Definition of Native and Exotic Species
 - 4.4.2.2 Restoration of Native Plant and Animal Species
- 4.6 Water Resource Management
 - 4.6.1 Protection of Surface Waters and Groundwaters
 - 4.8.1.1 Shorelines and Barrier Islands
 - 4.8.2.4 Soil Resource Management
- 4.9 Soundscape Management
- 4.10 Lightscape Management
- 5 Cultural Resource Management

Director's Orders

- DO 39 – Ocean and Coastal Resource Management
- DO 42 – Accessibility for Park Visitors
- DO 47 – Sound Preservation and Noise Management
- DO 77 – Natural Resource Management

Sensitive Species/Species of Concern

- **Birds of conservation concern:** Wood thrush, Hairy woodpecker, Chimney swift, Long-tailed duck, Prairie warbler, Common loon
- **Birds of special concern in NY:** Broad-winged hawk, Cooper's hawk, Osprey, Scarlet tanager, Sharp-shinned hawk
- **Threatened species:** Bald eagle, Least tern, Common tern, Pied-billed grebe
- **Migratory birds inventoried:** Eastern woodpewee, Scarlet tanager, Black and White warbler, Chimney swift, Rufous-sided towhee, Black-billed cuckoo, Blackburnian warbler
- **Odonota species of conservation concern:** Comet darner dragonfly and Citline forktail
- **Exotic bird species:** European starling, House finch, House sparrow, and Rock dove

***Notes:** Wildlife use structures in certain areas.



Area of developed land at Sagamore Hill National Historic Site. (NPS Photo/Baranowski)

Fields

Management Policies

4.4 Biological Resource Management

4.4.1 General Principles for Managing Biological Resources

4.4.1.3 Definition of Native and Exotic Species

4.4.2.2 Restoration of Native Plant and Animal Species

4.4.2.4 Management of Natural Landscapes

4.4.5 Pest Management

4.4.5.1 Pests

4.8.2.4 Soil Resource Management

5 Cultural Resource Management

Director's Orders

DO 77 – Natural Resource Management

DO 77-7 – Integrated Pest Management

DO 77-8 – Endangered Species

Sensitive Species/Species of Concern

- **Birds of conservation concern:** Wood thrush, Hairy woodpecker, Chimney swift, Long-tailed duck, Prairie warbler, Common loon

- **Birds of special concern in NY:** Broad-winged hawk, Cooper's hawk, Osprey, Scarlet tanager, Sharp-shinned hawk
- **Threatened species:** Bald eagle, Least tern, Common tern, Pied-billed grebe
- **Migratory birds inventoried:** Eastern woodpewee, Scarlet tanager, Black and White warbler, Chimney swift, Rufous-sided towhee, Black-billed cuckoo, Blackburnian warbler
- **Odonota species of conservation concern:** Comet darner dragonfly and Citline forktail
- **Exotic bird species:** European starling, House finch, House sparrow, and Rock dove
- **Endangered in NY:** Giant ironweed
- **Herpetofauna on NY state listed species of special concern:** Marbled salamander and Eastern box turtle
- **Threatened bat species:** Northern long-eared bat



One of the fields at Sagamore Hill National Historic Site. (NPS Photo/Baranowski)

Forest Ponds

Management Policies

- 4.4 Biological Resource Management
 - 4.4.1 General Principles for Managing Biological Resources
 - 4.4.1.3 Definition of Native and Exotic Species
 - 4.4.2.2 Restoration of Native Plant and Animal Species
 - 4.4.2.4 Management of Natural Landscapes

4.4.5 Pest Management

4.4.5.1 Pests

4.6 Water Resource Management

4.6.1 Protection of Surface Waters and Groundwaters

5 Cultural Resource Management

Director's Orders

DO 77 – Natural Resource Management

DO 77-1 – Wetland Protection

DO 77-7 – Integrated Pest Management

DO 77-8 – Endangered Species

Sensitive Species/Species of Concern

- **Herpetofauna on NY State listed species of special concern:** Marbled salamander, Eastern box turtle, Northern diamond-backed terrapin
- **Herpetofauna locally uncommon:** Wood frog, Spotted salamander, Gray treefrog, Eastern box turtle

***Notes:** Woodpile pond used to drain into Cold Spring Harbor but is now filled resulting in high pond water. Cold Spring Harbor drains in Long Island Sound. Vegetation buffer in place.

Beach Saltmarsh and Tidal Creek

Management Policies

4.4 Biological Resource Management

4.4.1 General Principles for Managing Biological Resources

4.4.1.3 Definition of Native and Exotic Species

4.4.2.2 Restoration of Native Plant and Animal Species

4.4.2.4 Management of Natural Landscapes

4.4.5 Pest Management

4.4.5.1 Pests

4.6 Water Resource Management

4.6.1 Protection of Surface Waters and Groundwaters

4.8.1.1 Shorelines and Barrier Islands

4.8.2.4 Soil Resource Management

Director's Orders

DO 39 – Ocean and Coastal Resource Management

DO 42 – Accessibility for Park Visitors

DO 77 – Natural Resource Management

DO 77-1 – Wetland Protection

DO 77-7 – Integrated Pest Management

DO 77-8 – Endangered Species

Sensitive Species/Species of Concern

- **Invasive species:** Common reed, Common periwinkle
- **Rare plant species:** Seabeach amaranth
- **Nursery for marine and estuarine fish species:** Winter flounder, Mummichog, Striped bass
- **Migration and wintering habitat:** Canvas backs, Greater scaup, and Black duck
- **Animal NY state list of concern:** Osprey and Diamondbacked terrapin
- **Vegetation NY state list of concern:** Carolina sealavender and Bitter panicgrass
- **Near threatened species:** Horseshoe crab

***Notes:** Eel Creek concern: Palaemonidae shrimp dominant, only 20% abundance of resident fish.



Beach saltmarsh and tidal creek at Sagamore Hill National Historic Site. (NPS Photo/Baranowski)

Native Garden

Management Policies

- 4.4 Biological Resource Management
 - 4.4.1 General Principles for Managing Biological Resources
 - 4.4.1.3 Definition of Native and Exotic Species
 - 4.4.2.2 Restoration of Native Plant and Animal Species
 - 4.4.2.4 Management of Natural Landscapes
 - 4.8.2.4 Soil Resource Management
- 5 Cultural Resource Management

Director's Orders

- DO 42 – Accessibility for Park Visitors
- DO 77 – Natural Resource Management
- DO 77-8 – Endangered Species

Sensitive Species/Species of Concern

- **Lepidoptera species of conservation concern:** Monarch butterfly

***Notes:** Monarch Wayside is significant source for pollinators

Night Sky and Natural Sound

Management Policies

- 4.9 Soundscape Management
- 4.10 Lightscape Management
- 5 Cultural Resource Management

Director's Orders

- DO 47 – Sound Preservation and Noise Management

***Notes:** Night sky and natural sound is affected by local air pollution and light pollution from surrounding properties and New York City.

Air and Sound Pollution

Management Policies

- 4.4.2.4 Management of Natural Landscapes
- 4.7 Air Resource Management
 - 4.7.1 Air Quality
- 4.9 Soundscape Management
- 5 Cultural Resource Management

Director's Orders

DO 47 – Sound Preservation and Noise Management

DO 77 – Natural Resource Management

***Notes:** Sound pollution is due to airplanes. Ozone air quality is of significant concern.