

Appendix C



Young forest stand: Erin Victory

Wilderness Review

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Introduction

A wilderness review is the process followed to identify and recommend for congressional designation National Wildlife Refuge System (NWRS) lands and waters that merit inclusion in the National Wilderness Preservation System (NWPS). Wilderness reviews are a required element of comprehensive conservation plans (CCPs), and we conduct them in accordance with the refuge planning policy outlined in 602 FW 1 and 3, including interagency and tribal coordination, public involvement and National Environmental Policy Act (NEPA) compliance.

The wilderness review process is conducted in three phases: inventory, study, and recommendation. We identify refuge lands and waters owned by the Service in fee simple that meet the minimum criteria for wilderness in the inventory phase of the review. These areas are called Wilderness Study Areas (WSAs). In the study phase, we evaluate WSA's to determine if they are suitable for wilderness designation. The findings of the study phase determine whether we will recommend the area for designation as wilderness in the final CCP. In the recommendation phase, we forward our wilderness recommendations from the Director to the Secretary of Interior (Secretary). The Secretary next forwards the final proposal to the President for consideration. The President is then responsible for formally transmitting to both houses of Congress recommendations for wilderness designation. We will conduct a wilderness review on a given refuge every 15 years through the CCP process, or sooner if significant new information becomes available affecting wilderness potential, or if a major refuge expansion occurs that warrants a reevaluation.

Site Description

The Refuge is approximately 80 acres and is located in the Town of Newbury, in Merrimack County, New Hampshire (NH) (Map 1-2). The Refuge has approximately 3,100 feet of shoreline frontage on Lake Sunapee. It is bounded on the east by NH Route 103A, to the north by property formerly owned by John Hay but now owned by The Fells, to the west by Lake Sunapee, and to the south by a private landowner. The Refuge is contiguous except for a small 1/10 acre island located a short distance from the shoreline near the north western corner of the contiguous tract (Map 1-1).

The Refuge is entirely forested except in the southwestern corner where 1.4 acres is currently being maintained in an open condition via mowing. The current forest is a result of old field succession, where-in abandoned farm fields and pastures were allowed to revert back to forest. This reforestation process started around 1890, at the time when John Hay began acquiring parcels of land that were previously used for agricultural purposes. After acquisition, these parcels were allowed to develop and mature into a forest. No timber harvesting or forest management has occurred on the property outside of salvage harvesting that occurred directly after a hurricane in 1938.

This property is very unique in that it has not been managed or manipulated by humans since it was a farm field (circa 1890) resulting in an abundance of old, large diameter trees throughout the Refuge. The disturbance to the forest from the hurricane in 1938 resulted in a second age class of trees that are now reaching seventy years old. Small scale disturbances from such agents as lightning strikes and wind events is evident and is creating the features that are more common with forests that have developed through natural processes, such as coarse woody debris on the forest floor, large snag and cavity trees, and a variety of ages of trees. As a whole the forest can be considered multi-aged, yet the age distribution is not very well balanced. The understory is lacking, but as the forest continues to mature, and natural disturbances continue to occur, an increase in the density of regeneration and shrubbery is likely. A total of five forest stands, two fens, and one small field have been identified on the Refuge.

John Hay NWR was the summer estate of historic figure John Hay, and is located in Newbury, New Hampshire on the shores of Lake Sunapee. The Service acquired the property as a donation from Alice

Hay in 1972, but officially took over management of 143 acres of the property in 1987 upon her death. The remaining 21 acres were given over by her children in 1999. In 2008, the northern half of the property was deeded to The Fells, the Friends of John Hay group, which has been actively overseeing and managing the historic estate and conducting educational programs. The Service will continue to manage the southern 80 acres of the original property as the John Hay NWR. This portion of the estate has the better wildlife habitats and opportunities for wildlife-dependent public uses.

Wilderness Inventory

The wilderness inventory is a broad look at each planning area (Wilderness Inventory Area [WIA]) to identify WSAs. A WSA is required to be a roadless area or a roadless island of any size, meet the size criteria, appear natural, and provide for solitude or primitive recreation. Section 2(c) of the Wilderness Act provides the following definition.

A wilderness, in contrast with those areas where man and his works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean in this Act an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions, and which: (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological or other features of scientific, educational, scenic, or historical value.

The wilderness inventory process was conducted by the Refuge Wilderness Review Team (the CCP Planning Team) comprised of personnel representing the Service and NH Fish and Game Department (NH FGD). After evaluating the Refuge land base, the surrounding landscape, and transportation corridors, the review team considered it most practicable to inventory and assess the Refuge as a whole due to its small size. All 80 acres of the Refuge were assessed in its present state of 95% northern forest and the remaining small meadow and wetland areas. This contiguous block was viewed in relation to its separation by major roads and other motorized corridors, including the lake shoreline. The team's first objective was to identify contiguous areas as large as possible that met the roadless criteria. Only lands currently owned by the Service in fee title were evaluated. The review team identified the Refuge as a whole unit as one WIA (Map C-1).

Evaluation of the Roadless Criteria

Permanent roads are prohibited in wilderness under Section 4(c) of the Act. For the purposes of the wilderness inventory, a "roadless area" is defined as: "A reasonably compact area of undeveloped Federal land that possesses the general characteristics of a wilderness and within which there is no improved road that is suitable for public travel by means of four-wheeled, motorized vehicles intended primarily for highway use. A route maintained solely by the passage of vehicles does not constitute a road."

As such, a WSA is required to be a roadless area or a roadless island of any size. The presence of any improved road suitable and maintained for public travel by means of motorized vehicles primarily intended for highway use would preclude WSA consideration. In addition, the review team also excluded from consideration other motorized corridors, such as the lake adjacent to the WSA. The lake in the project area is state jurisdiction waters where motorized boating and use of personal motorized watercraft is allowed. Motorized vehicles and motorized equipment are prohibited refuge uses in wilderness areas.

The following factors were the primary considerations in evaluating the roadless criteria:

- A. The area does not contain improved roads suitable and maintained for public travel by means of motorized vehicles primarily intended for highway use.
- B. The area is an island, or contains an island that does not have improved roads suitable and maintained for public travel by means of motorized vehicles primarily intended for highway use.
- C. The area is in Federal fee title ownership.

Evaluation of the Size Criteria

The size criteria can be satisfied if an area has at least 5,000 acres of contiguous roadless public land, or is sufficiently large that its preservation and use in an unimpaired condition is practicable. The following factors were the primary considerations in evaluating the size criteria:

- A. An area of more than 5,000 contiguous acres. State and private lands are not included in making this acreage determination.
- B. A roadless island of any size. A roadless island is defined as an area surrounded by permanent waters or that is markedly distinguished from the surrounding lands by topographical or ecological features.
- C. An area of less than 5,000 contiguous Federal acres that is of sufficient size as to make practicable its preservation and use in an unimpaired condition, and of a size suitable for wilderness management.
- D. An area of less than 5,000 contiguous acres that is contiguous with a designated wilderness, recommended wilderness, or area under wilderness review by another Federal wilderness managing agency such as the Forest Service, National Park Service, or Bureau of Land Management.
- E. The review team calculated the acreage of the WIA evaluated during the roadless evaluation, to see if it met the size criterion for wilderness character. The team found that the WIA was less than 5,000 acres and not of sufficient size or could be made of sufficient size as to make practicable its preservation and use in an unimpaired condition, and of a size suitable for wilderness management. The team included in the assessment Minute Island (less than an acre), which is surrounded by state waters with existing public recreational use.

Evaluation of the Naturalness Criteria

The Wilderness Act, Section 2(c), defines wilderness as an area that “generally appears to have been affected primarily by the forces of nature with the imprint of human work substantially unnoticeable.” The area must appear natural to the average visitor, rather than “pristine.” The presence of historic landscape conditions is not required.

An area may include some human impacts provided they are substantially unnoticeable in the unit as a whole. Significant hazards caused by humans, such as the presence of unexploded ordnance from military activity and the physical impacts of refuge management facilities and activities are also considered in evaluating the naturalness criteria.

An area may not be considered unnatural in appearance solely on the basis of the sights and sounds of human impacts and activities outside the boundary of the unit. The cumulative effects of these factors in

conjunction with land base size, physiographic and vegetative characteristics were considered in the evaluation of naturalness.

The following factors were the primary considerations in evaluating naturalness.

- A. The area appears to have been affected primarily by the forces of nature with the imprint of human work substantially unnoticeable.
- B. The area may include some human impacts provided they are substantially unnoticeable in the unit as a whole.
- C. Does the area contain significant hazards caused by humans, such as the presence of unexploded ordnance from military activity?
- D. The presence of physical impacts of refuge management facilities and activities.

Evaluation of the Solitude or Primitive and Unconfined Recreation Criteria

A WSA must provide outstanding opportunities for solitude or primitive and unconfined recreation. The area does not have to possess outstanding opportunities for both solitude and primitive and unconfined recreation, and does not need to have outstanding opportunities on every acre. Further, an area does not have to be open to public use and access to qualify under this criteria; Congress has designated a number of wilderness areas in the Refuge System that are closed to public access to protect resource values.

Opportunities for solitude refer to the ability of a visitor to be alone and secluded from other visitors in the area. Primitive and unconfined recreation means non-motorized, dispersed outdoor recreation activities that are compatible and do not require developed facilities or mechanical transport. These primitive recreation activities may provide opportunities to experience challenge and risk; self reliance; and adventure. These two elements are not well defined by the Wilderness Act, but can be expected to occur together in most cases. However, an outstanding opportunity for solitude may be present in an area offering only limited primitive recreation potential. Conversely, an area may be so attractive for recreation use that experiencing solitude is not an option.

The following factors were the primary considerations in evaluating outstanding opportunities for solitude or primitive unconfined recreation.

- A. The area offers the opportunity to avoid the sights, sounds and evidence of other people. A visitor to the area should be able to feel alone or isolated.
- B. The area offers non-motorized, dispersed outdoor recreation activities that are compatible and do not require developed facilities or mechanical transport.

Evaluation of the Supplemental Values Criteria

The Wilderness Act states that an area of wilderness may contain ecological, geological, or other features of scientific, educational, scenic or historical value. Supplemental values of the area are optional, but the degree to which their presence enhances the area's suitability for wilderness designation should be considered. The evaluation should be based on an assessment of the estimated abundance or importance of each of the features.

Wilderness Inventory Conclusions

The Refuge Wilderness Review Team inventoried the lands and waters in fee title ownership within the John Hay National Wildlife Refuge, and found that no lands met the minimum criteria to be WSAs. The review team identified one WIA, the refuge unit in its entirety, and found that it did not meet the minimum criteria. The team considered various configurations of the land base to see if a larger roadless WIA could be created, but determined none could be made larger. The team considered refining the WIA by eliminating areas with no obvious wilderness character; however, they determined that further refinement of the WIA would result in much smaller areas with unmanageable boundaries. The Refuge is bounded by NH Route 103A for over 1000 feet on its eastern boundary. From a refuge administration and management standpoint, effective law enforcement, visitor services, and public safety programs within the refined areas would not be practicable. As a result, the team concluded that refining the size of the WIA would not make practicable its preservation and use in an unimpaired condition, and they would not be of a size suitable for wilderness management.

The team determined that the WIA, as identified on Map C-1, does not meet the criteria for a WSA as defined by the Wilderness Act. In conclusion, we do not recommend this WIA be evaluated further as a WSA. A summary of our CCP Planning Team Wilderness Review findings are listed in Table C.1.

Table C.1. John Hay NWR Wilderness Review Finding Summary.

Refuge unit and acreage	(1) has at least 5,000 acres of land or is of sufficient size to make practicable its preservation and use in an unconfined condition, or is a roadless island;	(2) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable;	(3a) has outstanding opportunities for solitude;	(3b) has outstanding opportunities for a primitive and unconfined type of recreation;	(4) contains ecological, geological or other features of scientific, educational, scenic, or historical value.	Parcel qualifies as a wilderness study area (meets criteria 1, 2, and 3a or 3b)
John Hay NWR 80acres	No, the Refuge is bounded by NH Route 103 A for over 1000 feet on its eastern boundary.	Yes, impacts of recreational use is substantially obscured by the forces of nature.	No, the small NWR does not offer sights and sounds of wilderness, as it is in a populated residential and recreational lake area. Homes, state parks, ski resorts and other improvements are visible from the NWR.	No. Due to its small size in a populated area, these opportunities do not exist.	Yes. The partnership with the adjacent Fells maintains the historic buildings and grounds of the John Hay family. The old and young successional stages of the northern forest habitat supports several priority bird species.	No

Map C-1

