

Compatibility Determination

USE: Hunting

REFUGE NAME: Pondicherry Division of the Silvio O. Conte National Fish and Wildlife Refuge, hereafter referred to as the Refuge, located in Jefferson and Whitefield, Coos County, New Hampshire.

DATE ESTABLISHED: Pondicherry Division was established on December 22, 2000 when the initial 670 acres was purchased.

ESTABLISHING AND ACQUISITION AUTHORITY: *Silvio O. Conte National Fish and Wildlife Refuge Act (Public Law 102-212) Land and Water Conservation Fund Act of 1965*

REFUGE PURPOSE(S): The following purposes were legislated for the Refuge with the passage of the Silvio O. Conte National Fish and Wildlife Refuge Act.

- (1) to conserve, protect and enhance the Connecticut River populations of Atlantic salmon, American shad, river herring, shortnose sturgeon, bald eagles, peregrine falcons, osprey, black ducks, and other native species of plants fish and wildlife;
- (2) to conserve, protect and enhance the natural diversity and abundance of plant, fish and wildlife species and the ecosystem upon which these species depend within the refuge;
- (3) to protect species listed as endangered or threatened, or identified as candidates for listing, pursuant to the Endangered Species Act of 1973 as amended (16 U.S. 1531 et seq.);
- (4) to restore and maintain the chemical, physical and biological integrity of wetland and other waters within the refuge;
- (5) to fulfill the international treaty obligations of the United States relating to fish and wildlife and wetlands; and
- (6) to provide opportunities for scientific research, environmental education, and fish and wildlife oriented recreation and access to the extent compatible with the other purposes stated in this section.

NATIONAL WILDLIFE REFUGE SYSTEM MISSION: To administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.

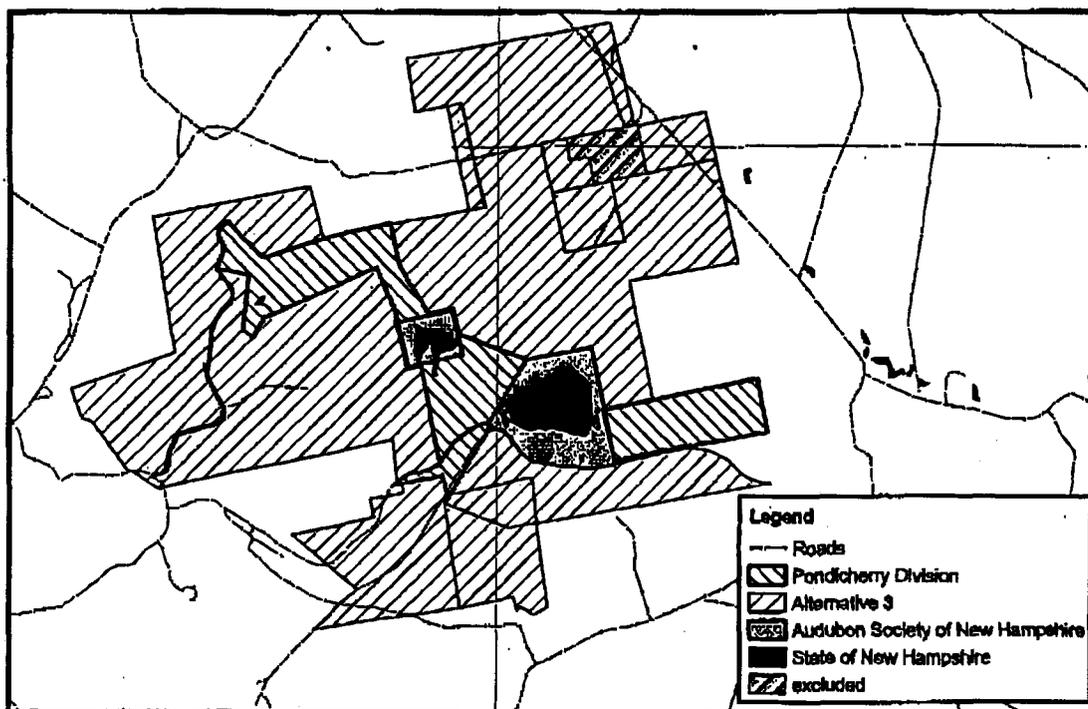
DESCRIPTION OF USE:

(a) **What is the use? Is the use a priority public use?** The use is the hunting of big game, small game, and waterfowl on the Pondicherry Division of the Silvio O. Conte National Fish and Wildlife Refuge. Hunting was identified as one of six priority public uses by Executive Order 12996 (March 25, 1996), and legislatively mandated by the National Wildlife Refuge System Administration Act of 1966, as

amended by the National Wildlife Refuge System Improvement Act of 1997 (Public Law 105-57).

(b) **Where would the use be conducted?** The Pondicherry Division consists of a matrix of high quality black spruce-tamarack, spruce-fir, northern hardwoods, bogs and wetlands in Jefferson and Whitefield, New Hampshire. Figure 1 displays the landownership pattern within the proposed acquisition boundary (labeled as Alternative 3 on the map). Within that boundary are Cherry and Little Cherry ponds, owned and managed by the State of New Hampshire. Surrounding these ponds is the Audubon Society of New Hampshire sanctuary. Together the two properties comprise 296 acres. These ponds and Audubon property have been closed to hunting since the sanctuary was established in 1964, while the surrounding area, including the area within the acquisition boundary (Alternative 3) has traditionally been open to hunting.

Figure 1: Land ownership at the Pondicherry Division of the Silvio O. Conte National Fish and Wildlife Refuge.



In addition to the large state ponds, surface water within the proposed Refuge boundary includes a section of the John's River (also owned and managed by the State of New Hampshire), Mud Pond, and numerous beaver ponds. Mud Pond and the beaver ponds, currently owned by Hancock, would become part of the Pondicherry Division.

The entire Pondicherry Division would be open to sport hunting for big game, small game, and waterfowl in compliance with regulations established by the State of New Hampshire. This area

is particularly noted for excellent ruffed grouse hunting, and the state supports continuation of hunting under new federal ownership (Will Staats, New Hampshire Fish and Game Department, personal communication). Although the waterfowl hunting could occur anywhere on the Refuge, the only areas likely to contain ducks and geese are the John's River, some of the larger beaver ponds, and possibly Mud Pond. Public access to the Refuge can be gained from the south via the state rail-trail, from the north on Highway 116, or from the east by either the Turnpike Road or the Presidential Rail-Trail. Although certain sections of the Refuge boundary are accessible by car, truck, snowmobile, all-terrain vehicle, or bicycle, no motorized or mechanized vehicles would be allowed on Refuge property.

(c) **When would the use be conducted?** The Refuge generally would be open to hunting under the regulations set by the State of New Hampshire (Table 1). Specific seasons, times and/or bag limits on the Refuge may be more restrictive or liberal than the state's, depending on management priorities and population levels. However, deviations from state regulations would be considered in consultation with the New Hampshire Fish and Game Department, and the public during development of a Hunt Plan and establishment of Refuge-specific regulations. For most species the daily hunting period would begin one-half hour before sunrise and continue until one-half hour after sunset, if allowed by state regulation (Table 1). Night hunting will not be allowed on the Refuge.

Table 1: New Hampshire 2003 hunting season dates. Actual dates may vary each year.

Game Species	2003 Season Opening	2003 Season Closing	State Hunting Hours
White-tailed Deer	September 15	December 15	½ hour before sunrise to ½ hour after sunset
Black Bear	September 1	December 7	½ hour before sunrise to ½ hour after sunset
Moose	October 18	October 26	½ hour before sunrise to ½ hour after sunset
Turkey – Spring	May 3	May 31	½ hour before sunrise to ½ hour after sunset
Turkey – Fall	September 15	December 15	½ hour before sunrise to ½ hour after sunset
Migratory Birds	October 2	December 14	½ hour before sunrise to sunset
Small Game	Varies by Species generally opening in September or October	Varies by species, generally closes in December or March	Typically ½ hour before sunrise to ½ hour after sunset

(d) How would the use be conducted?

This area, excluding the Audubon property, Cherry, and Little Cherry ponds, has a long history of hunting under the New Hampshire Game and Fish Department's regulations. The Department wants to see hunting continue on the Pondicherry Division (Will Staats, New Hampshire Fish and Game Department, personal communication). Allowing hunting at Pondicherry will support the Department's effort in meeting game species population objectives and will retain a priority, wildlife-dependent use traditionally associated with this land for many years.

Hunting pressure on the Refuge does not seem to have been too high during Hancock's ownership tenure, probably due to the small resident population, remote location, and the amount of land in the vicinity with public access (e.g. White Mountain National Forest). This land has simultaneously supported both hunting and non-hunting wildlife recreation for many years without apparent conflict. Reasons for this may include a concentration of wildlife observation near the Audubon ponds and the dispersed nature of hunting on the former Hancock lands. Based on historical uses the Refuge does not anticipate substantial conflicts among user groups, however the Refuge will monitor and evaluate these activities and the results will be thoroughly reviewed when the Hunt Plan is developed. As a safety measure, signs will be placed at key entry points informing visitors of an ongoing hunting season, and suggesting that they wear blaze orange when entering the Refuge.

Hunting on the Refuge would generally follow the regulations established by the New Hampshire Fish and Game Department. Additional Refuge-specific requirements will be considered and discussed with the Department and the public during development of the Refuge Hunt Plan. Some of these are described below.

Requirements to be Considered for all Hunters

- Hunting would be allowed on the Refuge using firearms or archery equipment meeting the standards published in the Department regulations. This includes, but may not be limited to, rifles, shotguns, muzzleloaders, and bows and arrows.
- Hunters, except for those in pursuit of ducks, geese, and turkey would be required to wear at least 400 square inches of solid-colored hunter orange clothing or material in a conspicuous manner on the head, chest, and back.
- Hunting dogs may be used in compliance with state regulations, but must be accompanied by the hunter, under control, and not pose a threat to non-target wildlife, Refuge staff or other visitors.
- Except for administrative purposes, motorized vehicles of any kind would be prohibited from the Refuge. Night hunting would not be allowed on the Refuge.
- Only approved, non-toxic shot could be in possession while hunting upland game and waterfowl.

Migratory Game Birds

- Temporary blinds and legal decoys could be employed, but would have to be removed at

the end of each day.

White-tailed Deer, Moose, and Black Bear

- Hunters could take these animals using state authorized firearms or archery equipment during the appropriate season.
- Baiting for black bears would not be authorized on the Refuge.

Turkey

- The fall turkey season is limited to archery only; while spring hunters could use either shotguns or archery.
- Spring turkey hunters could only use approved, non-toxic shot.

Upland Game Species

- The Refuge may consider adopting shorter seasons for some species during development of the Hunt Plan to better comply with the National Wildlife Refuge System mission and Conte Refuge purposes.

(e) Why is this use being proposed? Hunting is one of the priority public uses defined by Executive Order 12996 (March 25, 1996) and the National Wildlife Refuge System Administration Act of 1966, as amended by the National Wildlife Refuge System Improvement Act of 1997 (Public Law 105-57). This legitimate and appropriate use of a National Wildlife Refuge is generally considered compatible, as long as it does not materially interfere with or detract from the fulfillment of the National Wildlife Refuge System mission or the purposes of the national wildlife refuge.

Sport hunting is a tool managers use to maintain acceptable wildlife populations. In New Hampshire, the Fish and Game Department establishes hunting seasons and bag limits to meet population objectives and to offer people the opportunity to experience a traditional outdoor recreational activity. Game species population objectives are a function of factors such as habitat limitations and landowner tolerances, and each year the seasons and bag limits are designed to remove the harvestable surplus without long-term negative impacts to the population as a whole. The ability to effectively manage game species populations depends in large part on the ability of hunters to access land with quality habitat. Opening the Refuge to hunting will aid the state in meeting its management objectives and preserve a wildlife-dependent priority public use long associated with this land. The Fish and Game Department has indicated it supports hunting at the Pondicherry Refuge (Will Staats, New Hampshire Fish and Game Department, personal communication).

The Service intends to continue the tradition of wildlife-related recreation on the Refuge by allowing hunting in compliance with state regulations. This priority public use historically occurred on the former Hancock lands that will comprise the Refuge. By allowing this use to continue, hunters can experience this traditional recreational activity, aid the Refuge and state in maintaining acceptable game species population levels, gain a better appreciation of the Refuge's high quality wildlife habitats, and become better informed about the Pondicherry Division, the Silvio O. Conte National Fish and Wildlife Refuge, and the National Wildlife Refuge

System.

AVAILABILITY OF RESOURCES: Sufficient Refuge resources in terms of personnel and budget are available to administer hunting on the Refuge. The Pondicherry Division is approximately three hours from the Turners Falls, Massachusetts headquarters, but New Hampshire Game Wardens have the authority to enforce state hunting regulations on Refuge lands. This was how game laws were administered when the land was owned and managed by Hancock Timber Resources Group. In addition, the active Friends Group keeps Refuge staff apprised of issues and opportunities based on their frequent visits to both Service and Audubon lands. Conte staff will be responsible for on-site evaluations to resolve public use issues, monitor and evaluate impacts, maintain boundaries and signs, and meet with state officials, adjacent landowners and the interested public, when necessary.

Annualized costs associated with the administration of hunting on the Refuge are estimated below:

Project Leader (GS-14) - Coordination with the Friends Group, Congressional delegation and other interested parties - \$1,000.

Assistant Manager (GS-12) - On-site issue meetings with the Friends Group, hunters, and other interested parties, patrols, infrastructure maintenance, visitor use impact monitoring - \$2,500.

Law Enforcement Officer (GS-7/9) - Refuge patrol and coordination with New Hampshire Game Wardens during key periods of the hunting seasons. Estimate 10 days of patrol - \$2,000

Vehicle Mileage and Maintenance - \$700

Placement and Removal of Signs Related to Hunt Activities - \$500

GRAND TOTAL FOR FULL HUNT SEASON = \$6,700

Silvio O. Conte NFWR Budget Allocation for Fiscal Year 2003:

Salaries \$493,422

Operations \$239,100

Base Maintenance \$86,284

Total Available Funds..... \$818,806

Based on a review of the budget allocated for recreational use management, I certify that funding is adequate to ensure compatibility and to administer and manage the recreational use described above.

ANTICIPATED IMPACTS OF THE USE: Hunting can result in positive or negative impacts to the wildlife resource. A positive effect of allowing hunters access to the Refuge will be a

Silvio O. Conte National Fish and Wildlife Refuge - Pondicherry Division

better appreciation and more complete understanding of the wildlife and habitats associated with northern New England ecosystems. This can translate into more widespread and stronger support for the Refuge, the National Wildlife Refuge System and the Service.

Direct Effects

Direct impacts are those that have an immediate affect on wildlife. Anticipated direct impacts include disturbance to wildlife by human presence which typically results in a temporary displacement without long- term effects to individuals or groups of animals. People hunting upland game are expected to use the former logging roads to access the interior of the Refuge. Once off these roads use will be dispersed, depending on the location of game species. Those in pursuit of waterfowl would spend most of their time at the John's River, possibly Mud Pond, or at any of the numerous beaver ponds. Effects on non-target wildlife should not be significant because the majority of the Refuge will experience minimal, transitory use. Refuge staff will monitor hunting to ensure that use levels do not detrimentally impact wildlife populations or their habitats.

Repeated visits to view rare or susceptible wildlife (e.g. vagrant birds, deer-in winter yards) could pose a problem. No species listed by the U.S. Fish and Wildlife Service as endangered or threatened are resident on the Refuge, nor are there any wildlife concentration areas. However, four birds recognized by the New Hampshire Fish and Game Department as endangered (northern harrier (*Circus cyaneus*)) or threatened (common loon (*Gavia immer*), osprey (*Pandion haliaetus*) and Cooper's hawk (*Accipiter cooperii*)) are species the warrant additional consideration. Of these, the common loon would be unlikely to use the Refuge's forested habitats. Osprey, while present in the area during the summer, apparently have not yet nested on the Refuge nor the Audubon lands. Another bird, the spruce grouse, is an uncommon year-round resident in the Pondicherry area that attracts bird enthusiasts. Each of these birds can be affected by frequent human disturbance during the mating, nesting or brood rearing seasons. Most hunting would take place during the fall, after the breeding season, which should minimize potential conflicts. To date there is no evidence that disturbance by people engaged in hunting nor any other activity are detrimentally affecting these species. The Friends Group and local Audubon members will be the best source of information regarding conflicts because they are on frequently on site and know where these birds can be found. It will be important for the Refuge to monitor, evaluate and, if necessary, manage public use patterns should impacts reach a level that detrimentally impacts non-target species.

Indirect Effects

Indirect impacts are those which ultimately, but not immediately affect wildlife. Repeated visitation to any particular locale at the Pondicherry Division could cause damage to vegetation and therefore, wildlife habitat. Substantial, widespread habitat degradation could, through time, result in negative effects to wildlife by reducing available cover, food, nesting habitat, etc. Impacts to wildlife habitat are expected to be minimal and limited to the area immediately along the trails and old logging roads. These routes have been in existence for many years and the only discernable impact is limited soil compaction on the path itself. This issue is not a problem during late season hunts because the ground is frozen and generally there is a protective layer of snow. No infrastructure developments in support of this priority public use, other than

Silvio O. Conte National Fish and Wildlife Refuge - Pondicherry Division

informational signs, are anticipated for the near future.

Another potential indirect impact is the ingestion of spent lead shot by birds, especially waterfowl. Birds pick up lead shot when they are feeding in the bottom muck of ponds or taking in grit to aid digestion. Once in a bird's gizzard, the lead absorbed into the body ultimately causing death. Lead has been implicated as a significant mortality factor for some duck species and was banned nationwide for waterfowl hunting in 1991. Due to the suitable wetland habitat on the Refuge and proximity to the Audubon sanctuary, lead shot could pose a threat to migratory birds. This concern will be alleviated by requiring all shotgun hunters to use only approved non-toxic shot.

People can be vectors for invasive plants when seeds or other propagules are moved from one area to another. Once established, invasives can out compete native plants, thereby altering habitats and indirectly impacting wildlife. Fortunately, at this time, invasive plants are a minor problem at the Pondicherry Refuge. Recent inventories found little evidence of undesirable weeds. There is a small infestation of purple loosestrife (*Lythrum salicaria*) and a single Morrow's honeysuckle (*Lonicera morrowii*) on the Audubon land near Cherry Pond that could present a problem for the Refuge, but Audubon members are diligently working to eradicate these plants. The threat of invasive plant establishment will always be an issue requiring annual monitoring, and when necessary, treatment. In the event undesirable invasive species are found on the Refuge, staff will work to eradicate the weeds and educate the visiting public about the problem through the Friends Group, news releases, and postings on the trail head kiosk at Hazen Road and other popular access points.

Cumulative Effects

Effects that are minor when considered alone, but collectively may be important are known as cumulative effects. Incremental increases in activities by people engaged in the variety of allowed uses on the Refuge could, cumulatively result in detrimental consequences to wildlife and/or habitats. This area has been used by hunters for many years and acquisition by the Service should not result in a substantial change in hunting pressure because this activity was allowed by the former owners. It appears that overall use of the Refuge is well within the acceptable capacities, based on observations by the Friends Group and Conte staff. The number of people going to the Refuge is somewhat constrained by the 1.5 mile distance to the rail-trail parking lot on Hazen Road and a lack of other developed entry points, but visitation has increased since the Refuge was originally established in 2000 (Dave Govatski, personal communication). There is no evidence that cumulatively, hunting along with the other public uses on the Refuge lands prior to acquisition have had an unacceptable effect on the wildlife resource. Although a substantial increase in the cumulative impacts from public use is not expected in the near term, it will be important for Refuge staff to monitor use and respond if necessary to conserve the existing high quality wildlife resources.

Recently, Audubon secured an agreement with the State of New Hampshire to build a trail within the railroad right-of-way northeast of Waumbek Junction to enhance visitor safety. This improvement is not expected to substantially increase public use on the Refuge, because the trail is a safety feature to keep people off the active rail line. It will not decrease access distance, nor

will it be a substantial improvement over the currently used railroad right-of-way.

PUBLIC REVIEW AND COMMENT: A public notice was published in the Coos County Democrat on September 2, 2003 to inform the public that this Draft Compatibility Determination was available for public review for a 15-day period ending September 17, 2003. No comments on the draft were received.

DETERMINATION:

THIS USE IS COMPATIBLE WITH THE FOLLOWING STIPULATIONS
THIS USE IS NOT COMPATIBLE

X

(Check One)

STIPULATIONS NECESSARY TO ENSURE COMPATIBILITY: The following stipulations will be adopted to ensure compatibility:

Minimize or avoid negative impacts to wildlife and habitat:

1. Refuge staff will monitor and evaluate the effects of hunting in collaboration with the New Hampshire Fish and Game Department, Friends Group and Audubon in an effort to discern and respond to unforeseen impacts to wildlife and habitats through an adaptive management process.
2. Hunters will be prohibited from harassing, baiting, and playing recorded or artificial wildlife calls and songs to attract wildlife unless it is a legal hunting practice in the State of New Hampshire and specifically authorized by the Refuge.
3. Plant collection will be prohibited except for harvesting fruits and mushrooms for personal consumption (this does not necessarily apply to management activities).
4. All dogs must be accompanied and under control, and not pose a threat or nuisance to non-target Refuge wildlife or visitors.

Visitor safety:

1. Signs and notices will be posted at conspicuous Refuge entry points to disseminate important information to hunters and other Refuge visitors.
2. Use signs at conspicuous entry points to make visitors aware of hunting season dates and recommend that they wear blaze orange if entering the woods.
3. Hire a Law Enforcement Officer (Park Ranger) to aid in providing for visitor safety, monitor compliance with laws and regulations, perform outreach to visitors, and provide feedback to management staff about visitor use and associated impacts that will help enable adaptive management.

Minimize or avoid conflicts between different types of uses:

1. Pertinent public use information and updates will be disseminated through the Friends Group, local media, and posted on the state kiosk at the Hazen Road trail head and/or any

future kiosk constructed on Service-owned lands.

2. Signs will inform visitors that hunters may be in the field during the state hunting seasons.
3. Make visitors aware that hunting is one of the priority, wildlife-dependent uses on National Wildlife Refuges.
4. Monitor and evaluate the various compatible visitor uses and through an adaptive management process resolve or minimize conflicts among user groups.

JUSTIFICATION: Hunting is a priority wildlife-dependent use for the National Wildlife Refuge System through which the public can develop an appreciation for fish and wildlife (Executive Order 12996, March 25, 1996 and The National Wildlife Refuge System Administration Act of 1966, as amended by the National Wildlife Refuge System Improvement Act of 1997 (Public Law 105-57)). The Service's policy is to provide expanded opportunities for wildlife-dependent uses when compatible and consistent with sound fish and wildlife management and ensure that they receive enhanced attention during planning and management. Hunting was an ongoing activity, when the Service purchased the Pondicherry Division from Hancock Timber Resources Group. Based on historical hunting on the Refuge, managed by the Fish and Game Department, this priority wildlife-dependent use should not materially interfere with or detract from the fulfillment of the National Wildlife Refuge System mission or the purposes of the Silvio O. Conte National Fish and Wildlife Refuge. On the contrary, allowing hunting at the Pondicherry Division will help the Conte Refuge meet the sixth legislated purpose - Provide opportunities for scientific research, environmental education, and fish and wildlife-oriented recreation and access to the extent compatible with the other purposes stated in this section.

Signature: Refuge Manager:

Andrew C. French 9-19-03
(Signature and Date)

Concurrence: Regional Chief:

Anthony D. Lejeune 9-19-2003
(Signature and Date)

Mandatory 15-year re-evaluation date:

9-19-2018