

**GRAY GOOSE FARM
BASELINE DOCUMENTATION REPORT
JAFFREY, NEW HAMPSHIRE**



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May 2009

BASELINE DOCUMENTATION REPORT (BDR)
GRAY GOOSE FARM CONSERVATION EASEMENT
Jaffrey, New Hampshire

Easement name: Gray Goose Farm

Easement address: Squantum Road, Jaffrey, NH

Tax parcel #: Tax Map 242 Lot 57.4 and Tax Map 242 Lot 57.3

Date Easement Closed: September 24, 2008

Landowner: Francis Temple Pond, Trustee of the Virginia Pond Trust

Address: 586 Dye Road, Nancy, Kentucky 42544

Landowner: Lawrence Anderson

Address: 34 Waterman Road, Weare, New Hampshire 03281

Easement Grantee: Town of Jaffrey

Address: 10 Goodnow Street, Jaffrey, NH 03452

Executory Easement Grantee: None

Address: N/A

Total Acreage: 56.660 acres

Form prepared by (name, title): Jeffry N Littleton, Conservation Ecologist
Moosewood Ecological LLC

Area of Land Cover Types: Forested – 38.43 acres (68%)
Wetlands – 5.08 acres (9%)
Field – 13.15 acres (23%)

Purposes of the Easement

- Water Quality and Supply – The perpetual protection of the quality and sustainable yield of surface water and groundwater resources on, under, and adjacent to the property to:
 - Safeguard present and future public community drinking water supplies, including any stratified drift or bedrock aquifer which underlies the Property which contributes water to a community well
 - Safeguard the environmental values of the Property which are dependent on water quality and quantity;
- Habitat – The protection of the biological integrity of the unusual natural habitat, biological communities, and/or ecosystem; and
- Open Space – The preservation and conservation of open spaces, of which the Property consists.

List of Buildings or Improvements on Property

Currently, there are no buildings nor have there been any improvements located within the eased area.

Description of the Property and its Condition

See Exhibits 1-7.

USGS Quads: The Property is located within the Peterborough South, NH quadrangle.

Elevation Range: The property's elevation ranges from approximately 1,025 feet at the southeastern corner along Squantum Road to 1,115 feet at the top of the hill in the northern portion of the Property.

Waterways: The Property contains sections of two perennial streams that are hydrologically associated with the forested, shrub, and emergent wetlands. These two streams merge just east of the Property, forming a second order stream that then enters through the eastern boundary and flows through the Property to the southwest. A portion of the stream associated with the field appears to have been channelized historically. The stream exits the Property at the southwestern boundary corner along Squantum Road. It then continues to flow easterly towards the Contoocook Lake.

Groundwater Resources: The southern portion of the Property is part of a large stratified drift aquifer that is associated with the Contoocook River. This section of the Property includes two zones with estimated maximum transmissivity of 1,000 ft²/day and 2,000 ft²/day.

Agricultural Resources: Approximately 18.7 acres of the Property are classified as good agricultural soils. Portions of the upper field and forest contain farmland soils of local (14.4 acres) and statewide (4.3 acres) importance. These soils are important for the production of food, feed, fiber, forage and oilseed crops (Rosenberg 1989).

Ecological Features: The Gray Goose Farm offers a variety of upland and wetland habitats. These range from forest and field to swamp, marsh, and vernal pool. This range of habitats or natural communities owes itself to diverse species assemblages. The Property is mostly forested (68%) and is classified as a hemlock-beech-oak-pine forest community. This community is widespread and secure in New Hampshire. However, it is considered a significant wildlife habitat for a variety of species of conservation concern (discussed below). Due to previous land use history this forest is in various stages of succession, ranging from early succession sapling and shrub forests to areas that are more mature. The variance in forest structure also promotes biological diversity.

Four significant wetland communities are present and include the hemlock seepage swamp along the perennial stream in the northeast section of the Property. Seeps such as this serve as important for refugia for amphibians during the summer months and can help oxygenate streams and other wetlands. "Seeps warrant protection wherever they occur as sensitive wetland hot spots within upland forest dominated landscapes," and seeps may harbor rare plants (Sperduto and Nichols 2004). This small, inclusionary community appears to be in tact. Two other wetland communities include the open emergent marsh and the shrub swamp. These wetlands are secure and widespread

in the state. However, they most likely are performing important ecological functions, such as groundwater recharge or discharge (they are located above the underlying aquifer system), valuable wildlife habitat, and sediment trapping.

The vernal pool located in the western forested portion of the Property is another significant wetland community. These communities are important for a variety of obligate species, including wood frog, blue-spotted salamander, Jefferson's salamander, marbled salamanders, spotted salamanders, fingernail clams, and fairy shrimp. Vernal pools also function as critical feeding habitat for Blanding's and spotted turtles, as well as ribbon snakes. Most of these species are classified as species of conservation concern (NH Fish and Game 2005). While some of the canopy of the vernal pool has been removed through logging it appears to be in good condition.

Wildlife: There have been signs of a variety of mammals, including moose, mink, weasel, deer, porcupine, red squirrel, coyote, and red fox. A variety of year-round resident birds were also observed, including red-tailed hawk, American crow, wild turkey, common raven, pileated woodpecker, white-breasted nuthatch, American goldfinch, ruffed grouse, black-capped chickadee, blue jay, brown creeper, and golden-crowned kinglet. The property also contains important wildlife habitats as identified by the NH Fish and Game Department (2005), including a vernal pool, grasslands, emergent marsh, shrub swamp, and the hemlock-hardwood-pine forest. As such, a variety of other wildlife may potentially be using the property currently or at some point in the future. Among these are several species of conservation concern (NH Fish and Game Department 2005), including purple martin, eastern meadowlark, horned lark, grasshopper sparrow, wood thrush, veery, American woodcock, blue-spotted salamander, Jefferson's salamander, marbled salamander, northern leopard frog, Blanding's turtle, spotted turtle, wood turtle, eastern smooth green snake, black racer snake, ribbon snake, various bats, bobcat, and bear.

Historical Land Use: Most of the Property, if not all, was historically used for livestock grazing as evidenced by the presence of common juniper (a sign of over grazing) and barbed wire. Areas within the southern portion of the Property near the existing house were most likely used for farming. It appears that much of the Property has reverted to forest since the late 1800s and early 1900s. Selective logging occurred within the second-growth forest, but there has been no logging in the past 15-20 years (a 21-year old basal scar was observed on a hemlock that was created by one of the most recent logging events). The oldest trees (hemlock and white pine) that were recently logged were approximately 80-140 years old. Other species logged were red maple, red oak, and American beech.

Current Land Use: The Property's current land use appears to be in field and forest management and transitory recreational activities along trails/roads.

Inventory of Existing Trails/Roads: A network of existing trails/roads can be found adjacent to and within the Property. These trails/roads are mostly associated with the northern half of the Property. In this section, there are two locations where trails are currently entering the property. One of these is marked with white blazes. Many of the other woods roads are a result of the past logging operations, are in association with the previously used log landing, and are in relatively good condition.

Areas of Conservation Concern

The following areas demonstrate conservation concerns as noted in the Easement. See map in Exhibit 3.

- vernal pool;
- emergent, shrub, and forested wetlands and their adjacent uplands;
- perennial streams and adjacent uplands;
- fields;
- farmland soils of statewide and local importance; and
- stonewalls

Adjacent Conserved Lands

Nearly 3,600 acres of conservation lands are located within close proximity to the Gray Goose Farm Easement. To the south and east there is approximately 3,572 acres of contiguous conservation lands, including the Sharon Bog, Milt Street Tract, David Wilson Tract, Burgess Tract, Annette State Forest, Fenno Tract, Perry Reservation, Beulah Tract, Tophet Swamp, and Bullet Pond Reservoir. There are an additional 23 acres of conservation lands to the southwest (Jaffrey Well Field). See conserved lands map in Exhibit 8. The greatest benefit to conserving biodiversity and ecological integrity comes from expanding and linking protected areas. The protection of the Gray Goose Farm will complement and help accomplish this conservation value.

Current Conditions Related to the Use Limitations

As of the time of the signing of the Easement: (Note: some Use Limitations require Grantee approval.)

- There were no recent industrial or commercial activities being conducted on the Property.
- There was no recent subdivision of the two separate parcels on the Property.
- There were no structures or improvements on the Property.
- There had been no recent removal, filling, or other disturbances or erosion of the soil surface, above or below the water table or any changes in topography, surface, or subsurface water systems, wetlands, or wetland habitat on the Property.
- There had been no recent mining, quarrying, excavation, or extraction of ground or surface water or minerals such as rocks, gravel, sand, topsoil, or other similar materials on the Property.
- There had been no recent dumping, discharge, injection, burning, storage, or waste generated off the Property.
- There was no recent installation or placement of underground or above ground storage tanks for the storage of gaseous or liquid petroleum products on the Property.
- There were no substances which constitute a hazard to public health or the environment that was recently transported, used, stored, applied, or disposed of in any manner or to any extent on or under the Property.
- There was no recent development or construction of impervious surfaces on the Property.
- There were no obvious signs of degradation in surface water and groundwater quality by activities on the Property.
- There were no signs of groundwater withdrawal on the Property.

- There were no state or federally recognized rare, threatened, or endangered species observed nor were there signs of harm to such on the Property. In addition, there are no recent or historical records of rare species or natural communities in the NH Natural Heritage Bureau's database regarding the Property or within a one-mile radius (Exhibit 9).
- There were no signs of detrimental uses to the conservation purposes of the Easement.
- There were no signs displayed on the Property that were prohibited by the easement.
- There had been no recent defacement, movement, removal, or alteration of any stone walls or other monuments or markers that serve as legal boundaries.
- There had been no sign of recent rights of way or easements of ingress or egress created or developed into, on, over, or across the Property.

Reserved Rights of the Grantor

As of the time of the signing of the easement, the following and only Reserved Rights had not been exercised: (Note: some reserved rights require Grantee approval.)

- Residential Building Sites: The Property consists of two separate undeveloped lots (Tax Map 242 Lots 57.3 and 57.4). Grantor, heirs and assigns, reserve the right to select one 2-acre site or a combination of sites comprising no more than 2 acres within each lot to construct, occupy and use a single-family residence, with accessory buildings, a well, and a septic system, as well as a driveway for such, according to the terms of the Easement.
- Community Drinking Water Supply: Groundwater may be withdrawn by Grantor or Grantor's designee (including Grantee, if Grantor so designates) on a sustainable yield basis and exported from the property if used for a community drinking water supply for the Town of Jaffrey, according to the terms of the Easement.
- Agriculture and Forestry: Agricultural and forest management, including hothouses, greenhouses, coldframes, or other nonpermanent structures in support thereof may be conducted on the Property, according to the terms of the Easement.
- Outdoor Recreation: The construction, maintenance, signing, and use of trails for transitory recreational purposes (i.e., hiking, bicycle riding, snowmobiling, and cross-country skiing) are allowed by mutual agreement of the Grantor, heirs, or assigns, and the Grantee are permitted, according to the terms of the Easement. Ancillary improvements (i.e., trail-head parking, steps, bridges, waterbars, and culverts but not buildings or campgrounds) are also permitted, according to the terms of the Easement.

Condition of Boundaries

The boundaries were found to be in good condition although surveyor's flagging was mostly absent, except as noted below and in the boundary survey map in Exhibit 10. Also, property boundary blazes were absent. Between corner points 1 and 2, the boundary appears to run along the thread of the stream until the north-trending stone wall. The remainder of the western boundary between corner points 2-9 run along stonewalls. The northern boundary between corner points 9-13 run along two partial stonewalls with orange flagging between their end points. The eastern boundary between corner points 13-20 is mainly marked by stonewalls, except along its northern section that is marked by orange flagging for a short distance, and all corners were marked with either pins/markers or drill holes as noted below. The southern boundary runs along Squantum Road and creates an envelope around an existing home/lot. Stonewalls run along Squantum Road and corner pins/markers were located and noted below.

Corner pins/markers were found at the following boundary corner points: 13, 18, 20, 22, 23, 25, 26, and 27.

Drill holes were found at the following boundary corner points: 3, and 19

Property Surveyed by: Vorce, Soney, and Associates, Inc. Land Surveyors
85 Stratton Road
Jaffrey, NH 03452
April 6, 2006

Property Access

Presently, the Property can be accessed along its southern boundary along Squantum Road as follows. These access points are private roads and the terms of the Easement does not grant to the public access or any rights to enter the Property.

- At photo point 28, a road enters the lower field through a gap in the stonewall and continues north across the brook, into the upper field, and eventually enters the forest (photo point 33) to the log landing and other trails/roads.
- At photo point 24, a road enters the field, continues north across the brook, into the upper field, and eventually enters the forest (photo point 32) to other trails/roads.
- At photo point 21, the Property is accessible to the lower field through a gap in the stonewall.

Attached Exhibits

- Aerial Base Map
- USGS Topographic Base Map
- Existing Human Structures/Alterations and Ecological Features Map
- Photo/GPS Point Index Map
- Photo/GPS Point Index Table
- On-site Photographs
- GPS Point Coordinates Table
- Conservation Lands Map
- NH Natural Heritage Bureau Rare Elemental Occurrences Review Letter
- 2006 Boundary Survey Map

Literature Cited

NH Fish & Game Department. (2005). *New Hampshire Wildlife Action Plan*. New Hampshire Fish & Game Department, Concord, New Hampshire.

Rosenberg, Gerald L. 1989. *Soil Survey of Cheshire County, New Hampshire*. U.S. Department of Agriculture, Soil Conservation Service, in cooperation with NH Agricultural Experiment Station.

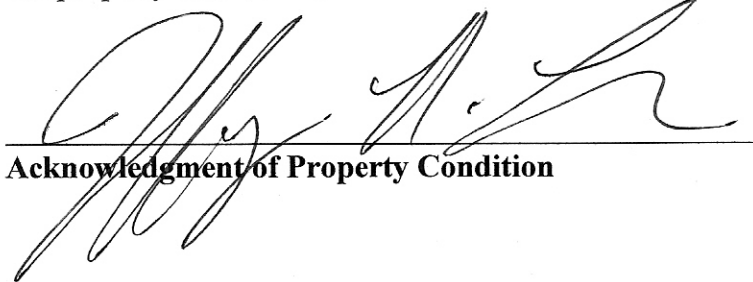
Sperduto, Daniel, and William Nichols. 2004. *Natural Communities of New Hampshire*. New Hampshire Natural Heritage Bureau and The Nature Conservancy, Concord, NH.

AFFIDAVIT OF INSPECTION

Date(s) of Inspection: November 24, 2008

Inspection Prepared By:

The property described above meets the condition of the deed.


 Date: 1/30/09
Acknowledgment of Property Condition

In compliance with Section 1:170A-14(g)(5) of the federal tax regulations, the undersigned accept and acknowledge that this Baseline Documentation Report is an accurate representation of the property at the time of the conservation easement conveyance.

LANDOWNER: The Virginia Pond Trust by Francis Temple Pond, Trustee

Date: _____

LANDOWNER: Larry Anderson

 Date: 3-13-09

AFFIDAVIT OF INSPECTION

Date(s) of Inspection: November 24, 2008

Inspection Prepared By:

The property described above meets the condition of the deed.

Date: _____

Acknowledgment of Property Condition

In compliance with Section 1:170A-14(g)(5) of the federal tax regulations, the undersigned accept and acknowledge that this Baseline Documentation Report is an accurate representation of the property at the time of the conservation easement conveyance.

LANDOWNER: The Virginia Pond Trust by Francis Temple Pond, Trustee

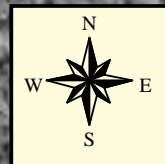
Francis Temple Pond Date: May 1, 2009

LANDOWNER: Larry Anderson

Date: _____

EXHIBIT 1

Aerial Base Map



Squantum Road

Sherwin Hill Road

Gray Goose Farm Conservation Easement

Town of Jaffrey

**1998 Digital Orthophotoquad
Base Map**

Scale
1:3,400

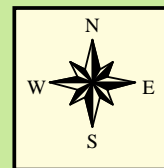
0 300 600 Feet

Map intended for planning purposes only.
Not a legal boundary survey.

Prepared by: *Jeffry N. Littleton, M.S.*
Moosewood Ecological LLC
(603) 363-8489
January 22, 2009

EXHIBIT 2

USGS Topographic Base Map



Gray Goose Farm Conservation Easement

Town of Jaffrey

US Geological Survey
Topographic Base Map

Scale
1:3,400

0 300 600 Feet

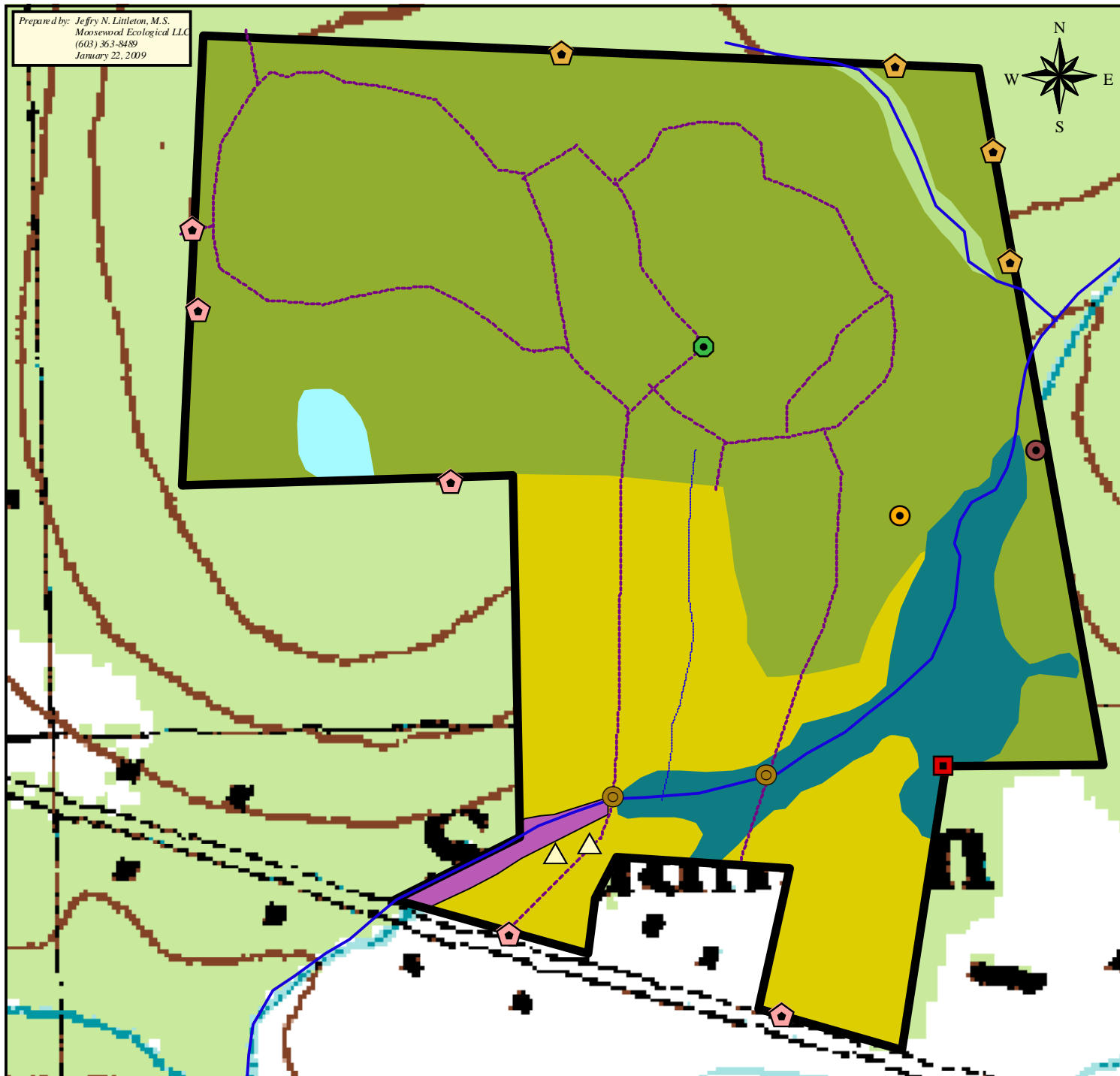
Map intended for planning purposes only.
Not a legal boundary survey.

Prepared by: Jeffry N. Littleton, M.S.
Moosewood Ecological LLC
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January 22, 2009

EXHIBIT 3

Existing Human Structure/Alterations And Ecological Features Map

Prepared by: Jeffrey N. Littleton, M.S.
Moosewood Ecological LLC
(603) 363-8489
January 22, 2009



Gray Goose Farm Conservation Easement

Town of Jaffrey

Scale
1:2,400

Map intended for planning purposes only.
Not a legal boundary survey.

Existing Human Structures and Alterations

- Barbed Wire
- Culverts
- △ Small Dump Sites
- Log Landing
- ⬠ Stonewall Ends
- ⬠ Stonewall Gap
- Existing Trails and Access Roads

0 100 200 300 400 500 Feet

Ecological Features

- Oriental Bittersweet Patch
- Porcupine Den
- Intermittent Drainage
- Perennial Stream
- Shrub Swamp
- Hemlock Seepage Swamp
- Vernal Pool
- Emergent Marsh
- Grasslands
- Hemlock-Beech-Oak-Pine Forest

*Wetland boundaries are approximate. Not intended as a jurisdictional wetlands delineation.

EXHIBIT 4

Photo/GPS Point Index Map

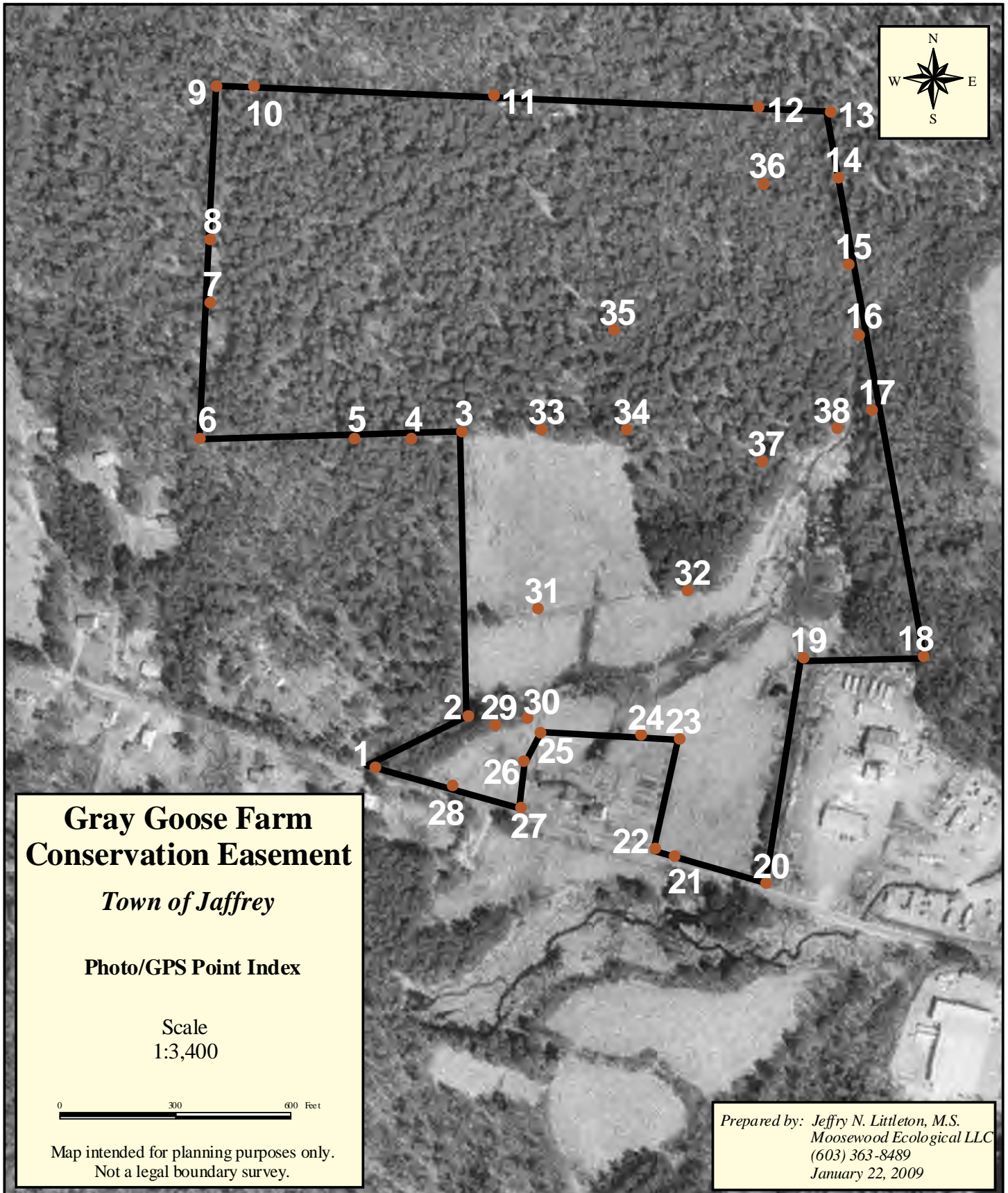


EXHIBIT 5

Photo/GPS Point Index Table

Photo/GPS point index - Gray Goose Farm

GPS Waypoint ID	Photo ID	Photo Date	Photo Direction	Photo Description
1	1	11/24/2008	E	boundary corner; shrub swamp
2	2	11/24/2008	W	boundary corner; shrub swamp
3	3	11/24/2008	NW	boundary corner
4	4	11/24/2008	N	stonewall gap
5	5	11/24/2008	N	vernal pool
6	6	11/24/2008	SW	boundary corner
7	7a	11/24/2008	W	stonewall gap
7	7b	11/24/2008	W	stonewall gap
8	8	11/24/2008	W	stonewall gap
9	9	11/24/2008	NW	boundary corner
10	10a	11/24/2008	N	trail
10	10b	11/24/2008	SW	trail
11	11	11/24/2008	N	stonewall ends
12	12	11/24/2008	N	stonewall ends
13	13	11/24/2008	NE	boundary corner
14	14	11/24/2008	W	stonewall ends
15	15	11/24/2008	SE	stonewall ends
16	16	11/24/2008	NE	perennial stream
17	17	11/24/2008	NW	porcupine den
18	18	11/24/2008	W	boundary corner
19	19	11/24/2008	NW	boundary corner
20	20	11/24/2008	N	boundary corner
21	21	11/24/2008	N	stonewall gap
22	22	11/24/2008	N	boundary corner
23	23	11/24/2008	SW	boundary corner
24	24	11/24/2008	N	road entering field
25	25	11/24/2008	E	boundary corner
26	26	11/24/2008	E	boundary corner
27	27	11/24/2008	N	boundary corner
28	28	11/24/2008	NW	stonewall gap; road entering field
29	29	11/24/2008	W	small abandoned dump
30	30	11/24/2008	W	small abandoned dump
31	31	11/24/2008	NE	field
32	32	11/24/2008	N	road entering forest
33	33a	11/24/2008	N	road entering forest
33	33b	11/24/2008	S	road entering field
34	34	11/24/2008	N	road entering forest
35	35a	11/24/2008	N	log landing
35	35b	11/24/2008	NE	scrap lumber pile

GPS Waypoint ID	Photo ID	Photo Date	Photo Direction	Photo Description
36	36	11/24/2008	NW	perennial stream; hemlock swamp
37	37	11/24/2008	N	oriental bittersweet patch
38	38	11/24/2008	S	emergent marsh

EXHIBIT 6

[Link to On-site Photographs](#)

EXHIBIT 7

GPS Point Coordinates Table

GPS point coordinates index - Gray Goose Farm

GPS Waypoint ID	Latitude	Longitude	Date
1	42.79244333	-71.99249533	24-Nov-08
2	42.79279092	-71.99156636	24-Nov-08
3	42.79481624	-71.99165848	24-Nov-08
4	42.79475966	-71.99211965	24-Nov-08
5	42.79475539	-71.99266029	24-Nov-08
6	42.79474843	-71.99413885	24-Nov-08
7	42.79570959	-71.9940459	24-Nov-08
8	42.7961726	-71.99405042	24-Nov-08
9	42.79726753	-71.99399753	24-Nov-08
10	42.79723023	-71.99364147	24-Nov-08
11	42.7971817	-71.99129856	24-Nov-08
12	42.79712998	-71.98876161	24-Nov-08
13	42.79708916	-71.98809416	24-Nov-08
14	42.79660628	-71.98798637	24-Nov-08
15	42.79601946	-71.98789811	24-Nov-08
16	42.79552166	-71.98777799	24-Nov-08
17	42.79496645	-71.98765746	24-Nov-08
18	42.79320222	-71.98717911	24-Nov-08
19	42.79318915	-71.98834863	24-Nov-08
20	42.79159575	-71.98866329	24-Nov-08
21	42.7918229	-71.98956426	24-Nov-08
22	42.79184109	-71.98975453	24-Nov-08
23	42.79262027	-71.98953392	24-Nov-08
24	42.79265715	-71.98987766	24-Nov-08
25	42.7926745	-71.99085541	24-Nov-08
26	42.79247434	-71.99098256	24-Nov-08
27	42.7921337	-71.9910528	24-Nov-08
28	42.7923036	-71.99165789	24-Nov-08
29	42.79272714	-71.9912388	24-Nov-08
30	42.79277667	-71.99098097	24-Nov-08
31	42.79351981	-71.99086438	24-Nov-08
32	42.79370673	-71.9894729	24-Nov-08
33	42.79479378	-71.99084678	24-Nov-08
34	42.79483275	-71.98999333	24-Nov-08
35	42.79552015	-71.99018276	24-Nov-08
36	42.79658684	-71.98871367	24-Nov-08
37	42.79459203	-71.9887202	24-Nov-08
38	42.79482731	-71.98799995	24-Nov-08

EXHIBIT 8

Conservation Lands Map

Gray Goose Farm Conservation Easement

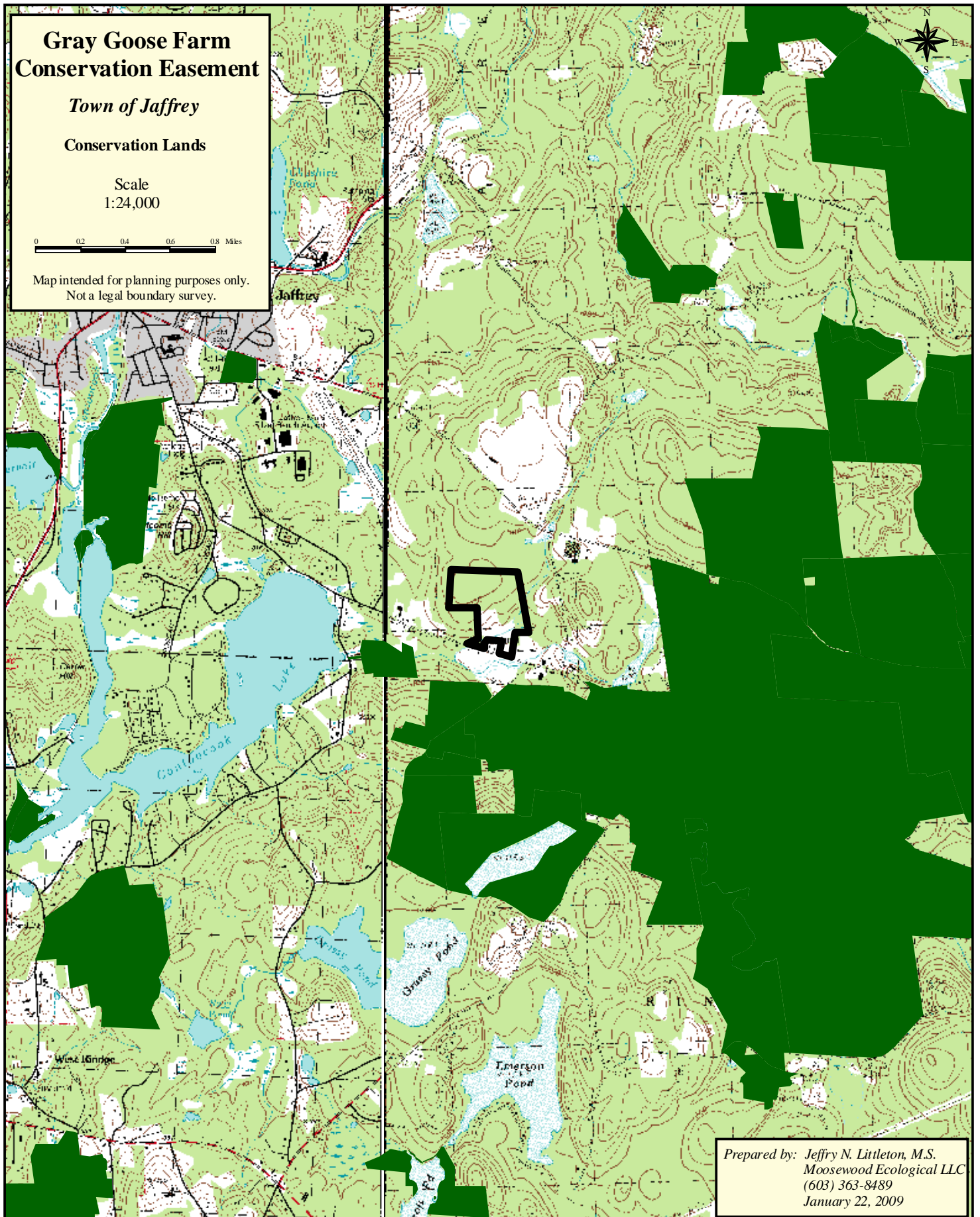
Town of Jaffrey

Conservation Lands

Scale
1:24,000

0 0.2 0.4 0.6 0.8 Miles

Map intended for planning purposes only.
Not a legal boundary survey.



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January 22, 2009

EXHIBIT 9

NH Natural Heritage Bureau Rare Elemental Occurrences Review Letter



NEW HAMPSHIRE NATURAL HERITAGE BUREAU

DRED - DIVISION OF FORESTS & LANDS

PO Box 1856 -- 172 PEMBROKE ROAD, CONCORD, NH 03302-1856

PHONE: (603) 271-2214 FAX: (603) 271-6488

To: Jeffry Littleton, Moosewood Ecological LLC
PO Box 9
Chesterfield NH 03443

From: Sara Cairns, NH Natural Heritage Bureau

Date: 2009-02-02

Re: Review by NH Natural Heritage Bureau of request dated 2009-01-29

NHB File ID: 519

Town: Jaffrey

Project type: Landowner Request

Location: Squantum Rd (Tax Map 242, Lot 57)

I have searched our database for records of rare species and exemplary natural communities on the property(s) identified in your request. Our database includes known records for species officially listed as Threatened or Endangered by either the state of New Hampshire or the federal government, as well as species and natural communities judged by experts to be at risk in New Hampshire but not yet formally listed.

NHB records on the property(s): **None**

NHB records within one mile of the property(s): **None**

A negative result (no record in our database) does not mean that no rare species are present. Our data can only tell you of known occurrences, based on information gathered by qualified biologists and reported to our office. However, many areas have never been surveyed, or have only been surveyed for certain species. An on-site survey would provide better information on what species and communities are indeed present.

NOTE: This review *cannot* be used to satisfy a permit or other regulatory requirement to check for rare species or habitats that could be affected by a proposed project, since it provides detailed information only for records actually on the property.

EXHIBIT 10

2006 Boundary Survey Map

