NATURAL RESOURCE INVENTORY
of the
WHITE OAK POND WATERSHED
Ashland, Center Harbor, & Holderness, NH
FINAL REPORT

[White Oak Pond as seen from the northeast shoreline]

Compiled by:

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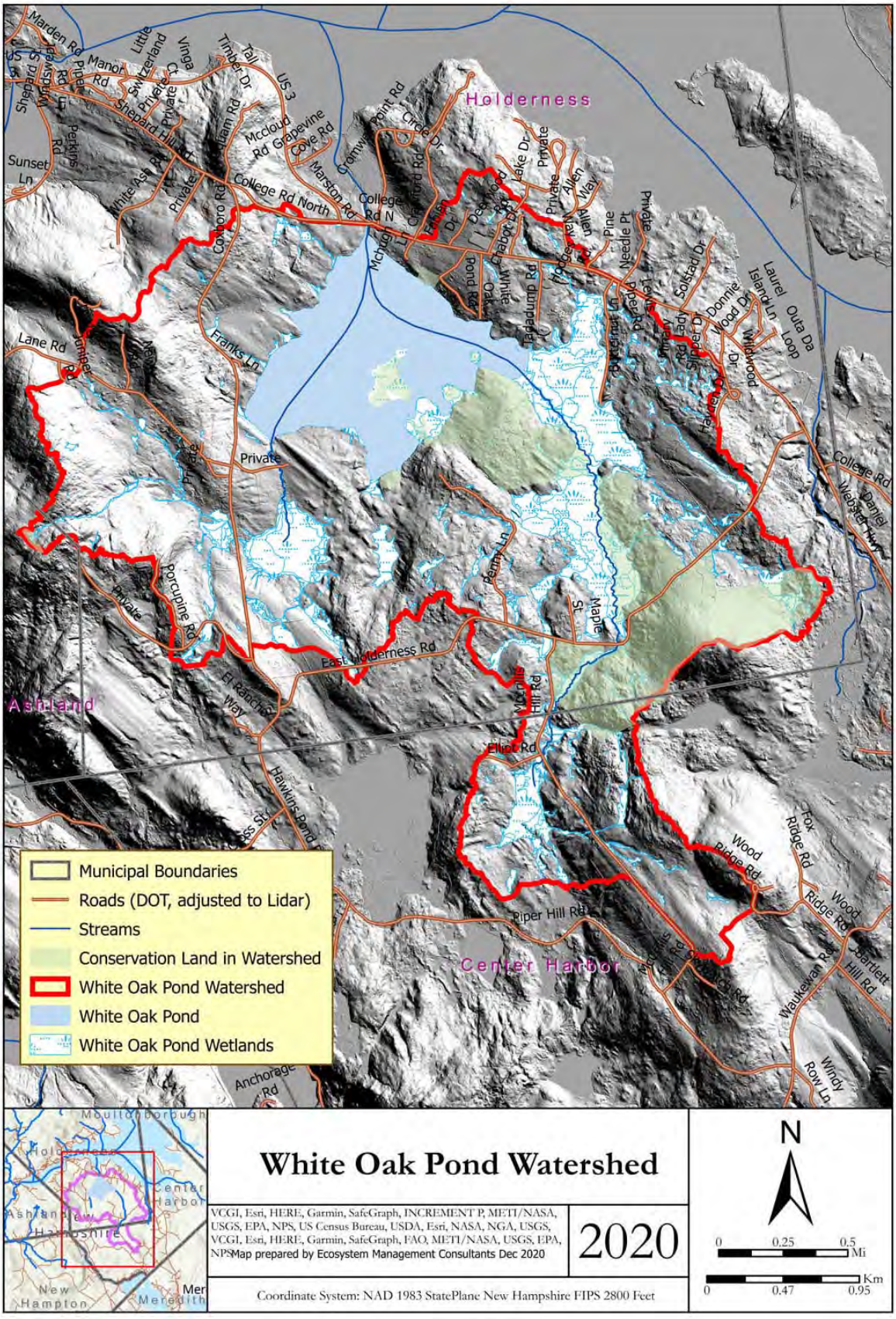
Submitted to:

Squam Lakes Conservation Society
December 2020


Municipal Boundaries
Roads (DOT, adjusted to Lidar)
Streams
Conservation Land in Watershed
White Oak Pond Watershed
White Oak Pond
White Oak Pond Wetlands
Holderness
Ashland
Center Harbor
Moultonborough
White Oak Pond Watershed
VCGI, Esri, HERE, Garmin, SafeGraph, INCREMENT P, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, Esri, NASA, NGA, USGS, VCGI, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS
Map prepared by Ecosystem Management Consultants Dec 2020
2020
Coordinate System: NAD 1983 StatePlane New Hampshire FIPS 2800 Feet
N
0 0.25 0.5 Mi
0 0.47 0.95 Km

PROFILE

The White Oak Pond watershed drains northerly into Squam Lake at Piper Cove from an elevation of roughly 1100 feet on McCrillis Hill in Center Harbor to its outlet along Route 3 in Holderness at 583 feet.

Outside of the 298-acre pond, the watershed is largely forested with scattered residences and farmland. The pond provides a peaceful backdrop apart from the nearby Squam Lakes. Residents and visitors alike enjoy the quiet waters of the pond by fishing, canoeing, kayaking and boating with < 7.5 hp boats.

White Oak Pond Watershed Association (WOPWA)
P.O. Box 565
Holderness, NH 03245

The White Oak Pond Watershed Association (WOPWA) is an organization which was established to promote the conservation of the natural, scenic and historic resources of the watershed, and to protect the quality of the waters and tributaries of the pond.

CONTACT

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WEBSITE:
http://www.wopwa.org/

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WHITE OAK POND WATERSHED

Center Harbor & Holderness, NH

GENERAL FEATURES

[HUC 10: 0107000105O1] – 2982 ACRES
White Oak Pond – elev.: 583 feet; size: 298 acres; max. depth: 34.5 feet
2 Perennial Streams – 11,944 feet or 2.26 miles
13 Wetland Complexes – 411.8 ac.

LAND COVER
69.0% Forested
13.2% Wetland & Streams (with islands)
10.6% Open water
4.2% Active Agriculture
3.0% Developed (Roads, Houses, Outbuildings, Gardens, etc.)

LAND USE

Center Harbor
39 parcels
Acreage: 358.6; min.: .008 ac.; max.: 39.8 ac.; mean: 9.2 ac.
Conservation: 18.5 acres (N = 1, .6% of watershed)
Agriculture: 3 parcels w/ fields > 1.0 acres (6.9 ac., .2% of watershed)
Forestry: 79% forested, 12 lots > 10 acres

Holderness & Ashland
226 parcels
Acreage: 2273.8 ac.; min.: .00036 ac., max.: 178.6 ac., mean: 10.0 ac.
Conservation: 366.5 acres (N = 13, 12.4% of watershed)
Agriculture: 24 parcels w/fields > 1.0 acres (118.8 ac. or 4.0%)
Forestry: 66% forested, 47 lots > 10 acres

PRIOR RESEARCH

2001-2002: Squam Lakes Watershed Study (SLA)
Plot A-4 Deepwater Marsh off Franks Island
Biotic Integrity Index: 6.86 (Taxa Richness – 46)
Common Fish: Pickerel, Hornpout, Sunfish, Bass
Exemplary Natural Communities: NE Acidic Pondshore/Lakeshore, Southern New England Basin Swamp
1979 – present: WOPWA water quality monitoring
[http://des.nh.gov/organization/divisions/water/wmb/vlap/index.htm]

SUMMARY

The 2982-acre White Oak Pond watershed lies at the head of Mill Brook along Route 3 in Holderness, New Hampshire. It includes the 298-acre, 35-foot deep White Oak Pond (and islands) and its two primary drainage systems in Holderness, Ashland, and Center Harbor. The watershed forms the western part of the 28,094-acre Squam Lake Drainage (HUC 010700010502) and lies immediately above Piper Cove on Squam Lake. The two perennial streams total 2.26 miles, with the largest one rising on the north slopes of McCrillis Hill in Center Harbor and flowing northerly, and the slightly smaller one draining an unnamed hill in the eastern corner of Ashland and flowing easterly through a large beaver marsh on Coxboro Road.

The watershed is primarily forested, although ponds, wetlands and other surface waters make up a substantial portion of the area (23.8%). Forests are primarily mixed hardwoods and conifers, with an abundance of white pine and red oak that have regenerated from former pastureland. Forested wetlands make up the plurality of the hydric soils areas, where red maple swamps are the most common. Other commercially viable timber species include red spruce, eastern hemlock, sugar maple, yellow birch, beech, and white oak. The latter species is near the northern limit of its natural range, yet can be found commonly on warm, south-facing slopes in Holderness and in the lowlands near White Oak Pond.

The area was well known to indigenous peoples for several millennia. Archaeological excavations at the nearby Squam Lakes Natural Science Center reveal a largely residential culture that persisted for several thousand years in the Archaic and early Woodland Period. Artifacts have been found throughout the Squam region, and it is likely that White Oak Pond was regularly hunted and fished, particularly given the exceptional white sucker run on Mill Brook at its outlet.

Historically, the watershed was settled during the rapid wave of colonial expansion in the 1760s following the French and Indian War. Land grants continued to be sought and early farms began to appear in good numbers by the time of the American Revolution. Clearing for pasture was not only necessary for the livestock that allowed settlers to survive the winters, it was a requirement under most of the early land grants. By the 1820s, nearly the entire watershed was cleared for pasturage, and/or harvested of its timber for buildings, firewood, and other wood products. The 'agrarian age' of the region ended relatively quickly in the mid to late 19th century after farmers vacated to the Midwest where land was more fertile and the Erie Canal and the new railroad lines provided faster shipping routes. The loss of manpower during the Civil War accelerated farm abandonment and by the 1870s most of the land had begun to grow back to forest. Less than four percent of the watershed is in active agricultural production today.

In the Squam Lakes Region, the late 19th and 20th centuries have be characterized by the resettlement of the land by seasonal visitors. Roughly 40% of the current home ownership in the Squam Lakes watershed can be attributed to non-permanent residents. The same can be said of the White Oak Pond watershed, which also supports many of the services along Route 3 that cater to tourism in the area. Some of these development pressures have stressed the natural ecosystems of the watershed, and currently present an abiding concern for the ecological integrity of White Oak Pond.

This report presents the findings of a broad-based natural resource inventory of the watershed and not only highlights some of its salient natural attributes but also provides some recommendations for their protection and conservation.

CONTENTS

WHITE OAK POND NATURAL RESOURCES INVENTORY (NRI)

I. Introduction

A grant from the NH Association of Conservation Commissions (NHACC) has allowed the Squam Lakes Conservation Society (SLCS) to solicit contract work to study and report on the natural resources of the White Oak watershed. The grant was awarded in early 2020 and work began soon thereafter. Ecosystem Management Consultants (EMC) began fieldwork on this project in the spring and early summer of 2020, and completed the mapping work in the fall of 2020. During this eight month period, data was gathered from a variety of field and remote sources on the diversity and quality of the natural resources of the nearly three thousand acre watershed.

An initial synopsis of the watershed was provided by EMC in April 2020 after the first field investigation:

> *White Oak pond represents one of the most significant sub-watersheds of Squam Lake. It includes 2951 acres of aggrading forest land that purifies 44 inches of snowmelt and precipitation per year, which flows through two perennial and seven intermittent tributaries into the pond itself. A mix of land uses has continuously provided essential ecosystem services to Native Americans for thousands of years and post-colonial settlers for hundreds of years. Cold water fisheries, clear, fresh water to power mills, and productive agricultural and forest land has helped shape the character of Squam Lake and its residents. Extensive wetlands, including one town-designated prime wetland, ensure good water quality and downstream flood damage prevention. White Oak pond itself has a broad range of aquatic habitats that supports a rich diversity of wildlife. Common loons are regular visitors, feeding on an abundance of fish. White suckers run regularly up Mill Brook in numbers that exceed several hundred individuals per run. Perch, bass, and hornpout provide both anglers and migratory waterfowl with ample food sources. Swallows, flycatchers, and bats regularly hawk insects that emerge from highly productive organic mats that are replete with aquatic vegetation. The aesthetic backdrop of small islets, shallow coves, and rocky shorelines provide an exquisite, remote feel to boaters, canoeists, and kayakers.*

A second summary was provided in September, as shown in the Frontispiece above. This summary was amended for this report after the final field and office work was completed.

Given the proximity of the White Oak Pond watershed to the Squam Lakes, not to mention to the headquarters of both the SLCS and the Squam Lakes Association, the importance and value of the watershed cannot be understated. The second order Mill Brook flows from the White Oak Pond dam and culvert directly into Squam Lake. Activities upstream of this location have a direct and consequential effect on the quality of water flowing into the lake. The riparian habitat that exists along and above White Oak Pond provide a mostly contiguous opportunity for fish and wildlife to move up and down the watershed. The flood storage capacity of the pond and the extensive wetland systems adjacent to it provide essential flood damage prevention value that protects not only Route 3 but a number of properties along it.

It is within this context that the NRI has been crafted and presented. It is the hope of the author that this information may continue to inform the general public and provide a road map for greater protection of the natural resources of this important watershed.

II. Methods

Office

All available GIS data layers were reviewed in advance of the first site visit in April 2020. These included the following:

Resource Layer	Source(s) (Date) / Comments
aquatic resource barriers	Aquatic Resource Mapper (NHDES, 2020)
aerial photos, leaf on, Color	NAIP's (NHGRANIT, 2009; GoogleEarth 2018)
aerial photos, leaf off, Color	NHDOT (NHGRANIT, 2010,2015)
aquifers, limit, material, capacity, WT	USGS (2000)
bedrock aquifers	USGS -NH
bedrock geology	Lyons et al. 1997, NHGRANIT (1998)
climate resiliency	TNC (2019)
conservation land	NH GRANIT (Updated June 2020)
contours - 2-foot	NHGRANIT (2018)
digital raster graphics (DRG's)	USGS (1987)
drinking water, WPA, PWS, private wells	NHDES (OneStop Secure, 2020)
exemplary natural communities	NH Natural Heritage (2019)
favorable gravel well areas	SPNHF (2010)
forest matrix blocks, resilient landscapes	TNC (2017, 2018)
highest ranked wildlife habitat	NHF&G (WAP, 2020)
hydrography, NHD	NHGRANIT (Jan 2006), USGS (2011)
Lidar imagery	NHGRANIT (2018)
NH land cover assessment	Landsat TM, NHGRANIT (2012)
NH wildlife action plan	NHFG (2005), latest update 2020
parcels	NH GRANIT 2018 (Grafton & Belknap Counties)
political boundaries - DLG's	USGS (2012)
railroads	USGS (1993)
rare & endangered species	NH Natural Heritage (latest data, plus personal records)
roads	NH DOT/NHGRANIT (Nov 2016)
soils - Rockingham Co.	NRCS (2004, 2016)
unfragmented lands	ARM Fund (2020)/GRanitViewer
watersheds, sub-watersheds	USGS / NHGRANIT (2010) / Center Harbor NRI (EMC, 2010)
wetlands	Landsat TM (2001), NWI (1998), USGS (1987)
wildlife habitat	NHF&G (2005) Updated 2010, 2015, 2020

Initial remote data was downloaded from the associated GIS data sites as noted above, and uploaded onto an ARCGIS Desktop 10.0 platform. In June 2020, more recent GIS data (i.e. 2018 onward) was uploaded onto an ARCGIS Pro 2.3 platform. Data enhancements were performed on many of the downloaded data layers as follows:

- Aquatic Resource Barriers – registered culverts were checked using the Aquatic Resource Mapper; unregistered culverts and bridges were mapped where visible using aerial photography, Lidar imagery and 2-foot contours
- Climate Resiliency – Data was obtained from TNC staff in February 2019 and color coded according to *Resilient Sites Datasets Guide* (February 2019)
- Conservation Land – Parcels were checked against SLCS records for any updates

- Hydrography – all perennial surface waters were remapped according to Lidar and 2-foot contour data; intermittent streams were also mapped using Lidar and 2010 aerial photography
- Rare & Endangered Species – NH Natural Heritage records were updated with field observations
- Roads – NHDOT roadway alignments were corrected according to Lidar data
- Soils – Hydric soils and upland 'island' soils were corrected using Lidar, 2-foot contours, and field observations; NRCS hydric soil polygons were clipped by site specific mapping and residual areas were merged with adjacent upland soil polygons
- Watersheds – the White Oak Pond watershed was remapped using Lidar and 2-foot contours; field site checks provided some visual confirmation where questionable drainages were identified remotely
- Wetlands – all wetlands were delineated, using color infrared aerial photography, Lidar, and 2-foot contours; wetlands were classified by NWI cover type and hydric soil type using aerial photography and field observations (where accessible)
- Wildlife Habitat – all wildlife habitat types were downloaded from the 2020 Wildlife Action Plan; some habitat areas were reassigned as Significant Ecological Areas (SEAs) using aerial photography and field observations

Additional remote data that were utilized in the preparation of this report included the following:

1) NHDES One Stop Program – for up-to-date well inventories, current status (active/inactive), potential contaminant risk sites (PCT), dam inventory data, remediation sites, hazardous waste generators, NPDES outfall locations, solid waste facilities, junkyards, underground and above ground storage tanks, source water protection areas, impaired surface waters, water supply intake protection areas, and wellhead protection areas; the well inventory data included public water supply entities, public water supply wells, registered water users, and private water well inventories
2) NH eBird – for local and regional bird data
3) NH Geological Survey – for bedrock well potential yield information
4) NH Lay Lakes Monitoring Program and White Oak Pond Watershed Association – for data on the 12 environmental monitoring sites in the White Oak Pond watershed

Field

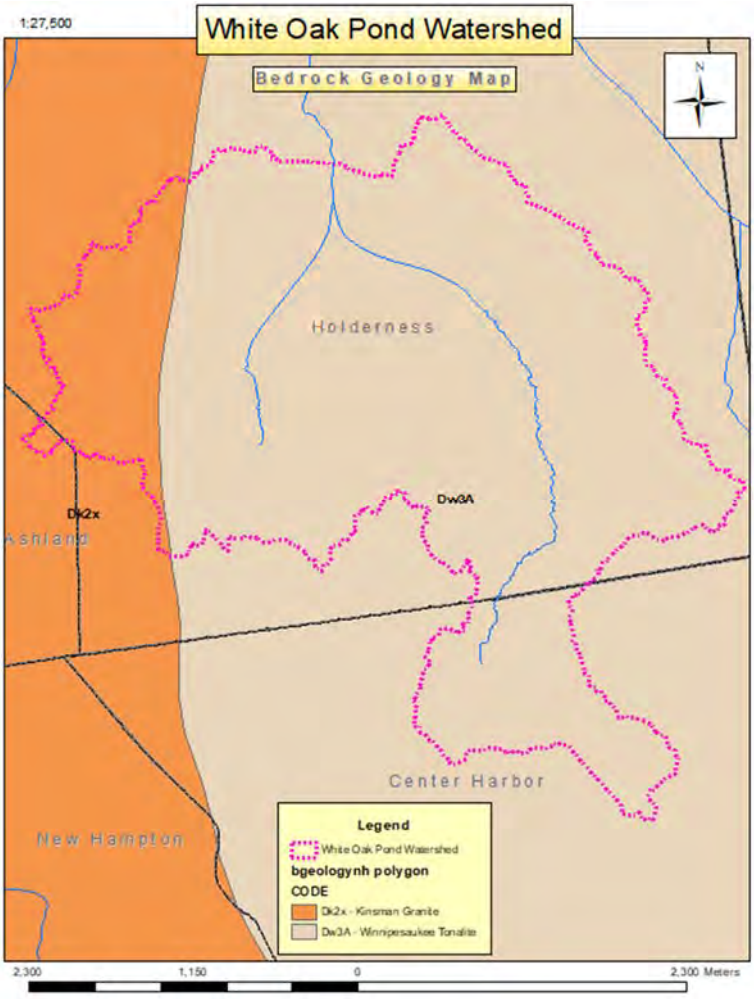
Field site visits took place on April 25, June 16, October 9, and December 6, 2020. During all but the June site visit a hand-held iPhone 11 with Gaia GPS software was used to record field data. Digital photographs recorded salient field features using the iPhone or a Canon Powershot SX20IS digital camera. The April site visit included an extensive kayak tour of the pond and the Lamb Swamp inlet area. The June site visit included a roadside tour of wetland and stream crossings. The October site visit focused on the Bennett property and the Eastman Brown Preserve. The final site visit included checks of the watershed divide areas and more stream crossing sites.

Field data was processed by uploading the Gaia GPS data using ArcGIS 10.x. Waypoints were corrected to within their given range of precision based on visible features on aerial photographs and Lidar. Track routes were uncorrected, and used to estimate precision of hand-held GPS data. All natural resource attributes of note were recorded using standardized field sheets, which included observations on birds, fungi, plants, wildlife sign, water condition, observable land use, and rare or exemplary species and/or

natural communities. Field data were also derived from the 2001-2002 Squam Lakes Watershed Project that EMC completed for the Squam Lakes Association. Notable among these records included data from the long-term monitoring plot A-4 that was established at Frank's Island.

III. Results / Discussion of Findings

A. Bedrock and Soils



The 1997 *Bedrock Geology of New Hampshire* (Lyons et al.) shows two bedrock formations for the area covered by the White Oak Pond watershed. Both data back to over 400 MYA during the Devonian Age. Both are granitic plutons that arose during the Acadian Orogeny. The Kinsman Quartz Monzonite (Granite) Formation (denoted as 'D2kx') that underlies the western part of the watershed is comprised of medium to coarse-grained mixture of plagioclase and alkali feldspar, augite, and quartz. It is typically characterized by fairly large blebs of perthite. The Winnipesaukee Tonalite (Quartz Diorite) Formation that underlies the eastern half of the property (denoted as 'Dw3a') is comprised of fine to medium-grained oligoclase feldspar or andesine, horneblende, and quartz. It typically has a salt-and-pepper look and underlies most of the Squam Lakes and Winnipesaukee basins. Both formations are very similar in that they weather to an iron and magnesium-rich, low to medium pH mineral substrate through frost cleaving and physical erosion.

The largest weathering event over the past 100,000 years has been the Wisconsin period of glaciation. The massive ice sheet that covered the northern half of North America was over 1.5 miles thick in most locales in New England. This event lasted over the course of over 20,000 years and brought about vast changes in the surface topography of the region. Over 20 feet of surface material or 'overburden' was removed and in some cases replaced by the slow movement of over 350 metric tons of vertical ice pressure per square meter. In the White Oak Pond watershed, at least two major glacial events took place. First, the land was scoured, particularly east of the small fault line that exists between the two bedrock types, as was evidenced by the 'grooves' in the Lidar imagery (see Frontispiece). This included the removal of tens of feet of overburden and the displacement of that material to the south. Second, during the downwasting event at the end of the glacial period, the melting ice temporarily dammed up

the outflow stream and allowed for ponding to occur over most of the low lying parts of the watershed. The latter yielded fine sand deposits as small kames on either side of Lamb Swamp, and very fine silt loam base to the glacio-lacustrine materials underlying White Oak Pond.

The deposition of glacial pond water silts was finally covered by a thin mantle of glacial till, which also spread across most of the upland portions of the watershed. This glacial till contains stones and boulders in a loose assortment of mostly fine rock fragments and became the parent material for soil development in the uplands. In the smaller wetland basin areas, aggregations of very fine sand and silt has provided an impervious layer above which the water table becomes "perched" during the wettest times of the year. In spite of the fairly coarse sands and loams that were dumped by the glacier in the surrounding uplands, high water tables and hydric soils characterize these smaller basins.

Soils

View of "Lamb Swamp," the SE inlet fen-marsh to White Oak Pond

Soil types in the White Oak Pond watershed vary from well drained, sandy or loamy glacial tills in the uplands, to moderately well-drained tills in low lying benches, and to poorly or very poorly drained organic muck and peat in wetland areas. The Becket, Monadnock and Hermon series soils best fit the field-determined morphology of the upland glacial tills. Immediately downslope are relatively thin tills that overlie a somewhat impervious layer that correlates well with then Skerry series soil. Poorly drained soils in hardpans along upland drainageways and in small basins have water tables that saturate to the surface for more than a week or two during the growing season, and therefore match the Pillsbury series soil. Slightly larger basins that lie within the broader bench areas typically have a mixture of poorly drained sands and stony or bouldery loams that best fit the Lyme & Moosilauke series soils. Finally, in the very poorly drained marshes and deep swamps are Meadowsedge soils that are true *histosols* in the sense that they have more than 16 inches of organic material at the surface (and typically more than 50 inches in this series). Based on scattered soil test evidence, some of these mucky-peat organic soils in Lamb Swamp are over six feet in depth!

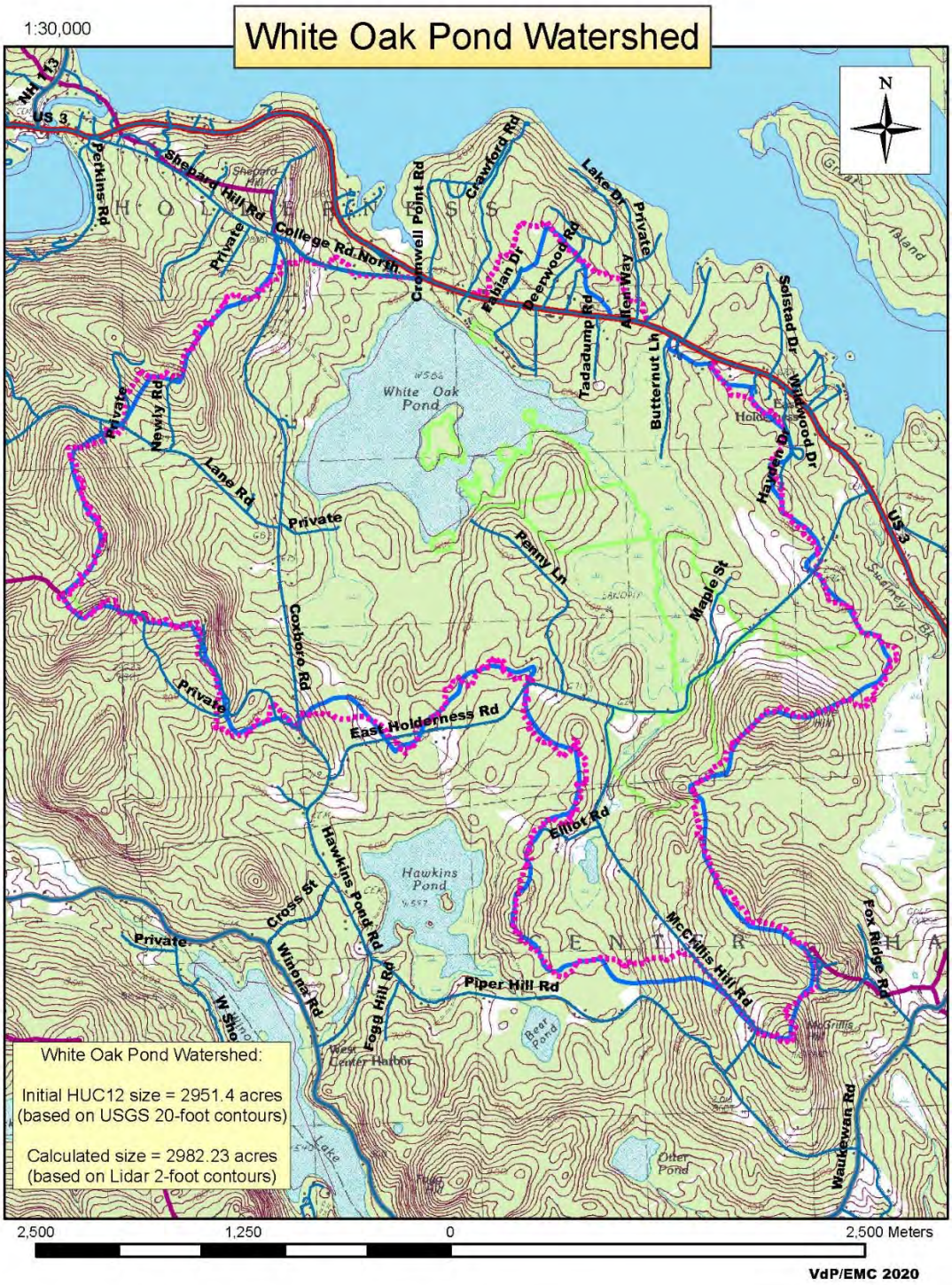
Most of the watershed soil types are rated fair to poor for growing crops and fair to good for growing trees. Surface stoniness and water saturation are two limiting factors for plant growth that affects roughly 55% of the watershed. Steep slopes (>25%) occur across roughly one quarter of the watershed and this can also limit agricultural or silvicultural activities. Although just 4% of the watershed is currently under some form of agricultural production (hay, Christmas trees, orchard, etc.), over 40% contains prime farmland (34 acres), soils of statewide importance (73 acres), or soils of local importance (1129 acres). All of these soils are within important forest soil group IA. A more detailed breakdown of the important forest soil groups and their representation in the watershed is as follows:

Important Forest Soil Groups in White Oak Pond Watershed

IForSoiGrp	# of units	Primary Series	# Acres	% of wshd
IA	75	Monadnock, Hermon, Skerry, Becket, Waumbek	1332	44.7
IB	24	Lyman, Tunbridge, Becket, Waumbek	358	12.0
IC	4	Adams	26	.9
IIA	26	Tunbridge-Lyman-Rock, Hermon	629	21.1
IIB	11	Lyme, Pillsbury, Moosilauke	79	2.6
NC	10	Catden, Meadowsedge, Chocorua, Ossipee, Water	558	18.7
Total	**150**		**2982**	**100**

Source: Natural Resource Conservation Service, https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx

Left: soil and vegetation "caps" on stumps near Bayberry Island indicate a much higher water table currently than what was present before WWII; prior to that time, the pond was much smaller in size, which allowed white pine to grow in areas now inundated by water; during WWII, the pond level was raised to float and store logs for the war effort; some of these cut and stamped logs can still be found today as vertical, underwater hazards for boaters; meanwhile, water inundation in the adjacent marshes have ensured that low lying areas remain as fens and marshes.



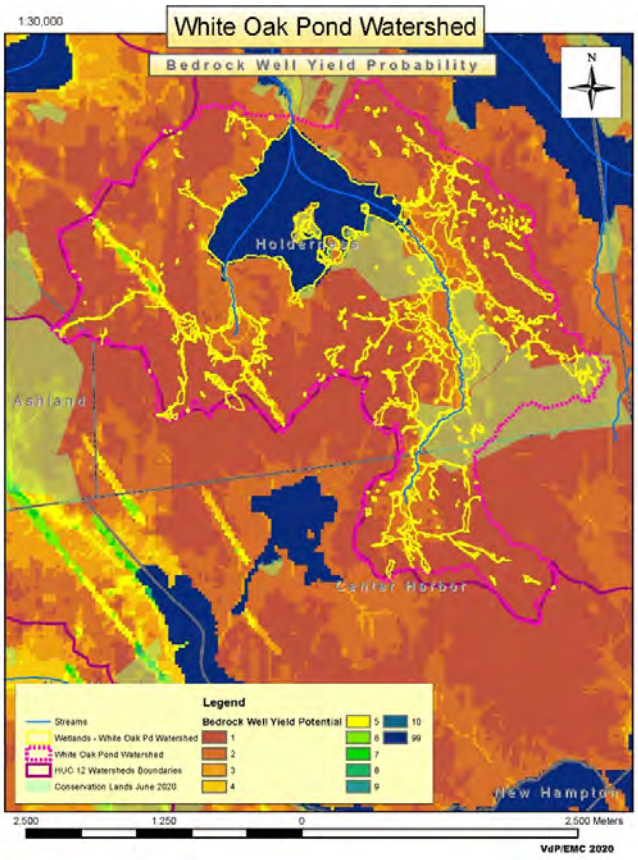
The above map illustrates the difference between the NHDES-derived watershed boundaries for the White Oak Pond watershed (in blue) and the results of the mapping effort for this project (pink dashes). The size changed slightly, increasing by 67 acres, however the inclusion and exclusion of land areas exceeded 95% of the watershed boundary. This was largely a result of improved map data layers (e.g. Lidar and 2-foot contours), which allowed for much tighter mapping of the boundary. The December site visit was completed with the expressed purpose of field checking areas where culverts, driveways, and ditches have altered the way that water flows into or away from the watershed divide. Notable occurrences of the latter was observed on McCrillis Hill Road, along Porcupine Drive, at upper Coxboro Road, and near Camp Deerwood.

B. Water Resources & Wetlands

The 2982-acre White Oak Pond watershed is among the wettest of the other +/- 10 watersheds in the Squam Lakes Drainage. Nearly one quarter of the land area contains water at or near the surface. The 298-acre White Oak Pond itself comprises the largest single unit of surface water in the watershed, yet without it, the land area is still comprised of 13.8% wetland compared to a statewide average of about 12.5%. The largest single contributor to these saturated/inundated soils is the Lamb Swamp, so called, the 255-acre fen-marsh and swamp southeast of White Oak Pond. This system has been designated as an exemplary natural community by the NH Natural Heritage Bureau, and is labeled as a "Southern New England Basin Swamp." It is also a prime wetland in the Town of Holderness.

Aquifers

A single, low-yield aquifer is mapped by NHDES for the Lamb Swamp area and is roughly 230 acres in size (see map A-3). This aquifer includes a 15-acre area outside of the watershed on the north side of Route 3. The map unit extends to the edge of Squam Lake. The transmissivity rate for this unit is 2,000 acre-feet per day. Although modest in yield, it provides an essential contribution to the regulation of flow and water depth to White Oak Pond. It also lies adjacent and just downstream of the Holderness transfer station and former landfill, and for this reason has been actively monitored by the state at two separate test wells for the past 30 years. A second, low-yield aquifer is mapped by NHDES for the outflow area of White Oak Pond. Just 8.6 acres of this 56-acre aquifer falls within the drainage area for White Oak Pond, so its contribution is fairly slight. The remainder of this unit extends to Squam Lake around Piper Cove.



The most frequent drinking water source in the White Oak Pond watershed is from bedrock wells. The map at left illustrates the bedrock yield potential based on a probability model created by the NH office of the United States Geological Survey. Colors range from a deep umber brown for low yield probability wells to a deep green (and dark blue) for high yield probability wells. Map data for the White Oak Pond watershed shows a fairly low yield probability across the entire watershed. This is not surprising given the fact that the two primary bedrock types are granite with a tight matrix, few joint fractures, and no major faults or slippage. The other data contained in this map includes wetlands (in yellow) and conservation lands (in green shading). Surface waters are shown in dark blue (code 99).

Surface Waters

White Oak Pond dam at elevated average water level of 1.9 ft.

White Oak Pond is the principal surface water body in the watershed. The entire pond measures 298 acres, yet the outer limits include 28 acres of four named islands, partly inundated pondshores, and several floating bog mats. In spite of its size, White Oak is fairly shallow. Maximum depth at the White Oak Pond "Deep" monitoring station is just 11.2 meters (36.7 feet), yet more recent measurements at this station has maxed out at 10.5 meters (34.5 feet). For this reason, it has likely been tradition to call this a "pond" instead of a lake, even though its size exceeds the size of many "lakes" in New Hampshire. Nonetheless, this pond is large enough (i.e. > 10 acres) to be designated as a 'Great Pond" by the state of New Hampshire, and is therefore regulated under RSA 483-B, the Shoreland Water Quality Protection Act.

White Oak Pond is otherwise very 'pond-like' in its nature. The shorelines are typically mucky and soft, very few sandy littoral zones exist, and aquatic bed vegetation persists throughout the shallow depths of the pond during the growing season. Aerial photo mapping of the pond's cover types, for example, yielded nearly 15 acres of organic or sand-based shoreline that supports submerged aquatic vegetation. The seven upland island areas (e.g. Frank's Island, Bayberry Island, Haskell Island, etc.) mostly lack wave-washed shorelines that are more typical of a larger lake. This fact was not missed by the NH Natural Heritage Bureau who designated the only other exemplary natural community as a "Northeast Acidic Pondshore." Plot A-4, which was placed in this area as a part of the Squam Lakes Association's study of the larger watershed, further demonstrated this fact by tallying only three mayfly species yet nine dragonfly species and 14 midge genera among the benthic samples.

Above: the NE Acidic Pondshore at Frank's Island near Plot A-4 that was laid out in 2002 in the foreground

White Oak Pond has two perennial and at least seven intermittent streams feeding directly into it, plus another 26 intermittent systems that feed into the perennial stream drainages. A total of 11,944 (2.26 miles) of perennial stream was mapped and tallied for the watershed. The larger of these two streams, Lamb Swamp Brook, rises on the north slopes of McCrillis Hill in Center Harbor, flows down and across the road into the Johnson-Perkins prime wetland, crosses back under McCrillis Hill Road and finally dumps into Lamb Swamp just below East Holderness Road. This is a largely beaver-mediated wetland, and several braids of the stream can be seen in any aerial photograph image of the basin. The smaller of the two perennial streams rises in Ashland on the east side of an unnamed hill above Porcupine Road, and descends the steep slopes above Coxboro Road before dropping into the large beaver marsh just southwest of White Oak Pond. This stream is also beaver impounded in its lower part where two fairly large beaver marshes straddle Coxboro Road and can be seen in winter.

Above: intermittent stream & wetland system near the watershed divide along East Holderness Road

Roughly five miles of intermittent stream was tallied on the basis of mapped, channelized systems associated with wetlands. Sixty-one separate units were identified as having an R4SB (NWI) code, and many of these were mapped in association with forested seeps along the banks of the stream. Some of the larger intermittent streams had beaver and/or manmade impoundments along them, particularly west of Coxboro Road and north of East Holderness Road east of the Eastman-Brown easement. Given the challenges of mapping intermittent stream systems under conifer cover, it is very likely that the five mile figure is very conservative.

Wetlands

As noted above, the White Oak Pond watershed has an abundance of wetlands. As defined by the state and federal government, wetlands include "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions." A total of 23.8% of the watershed contained these conditions, or 13.8% when not including White Oak Pond.[1] Wetlands varied by cover type and soil type, with at least eight different cover types recognized by the National Wetlands Inventory (NWI) and 10 different hydric soil types recognized by the Natural Resource Conservation Service (NRCS).

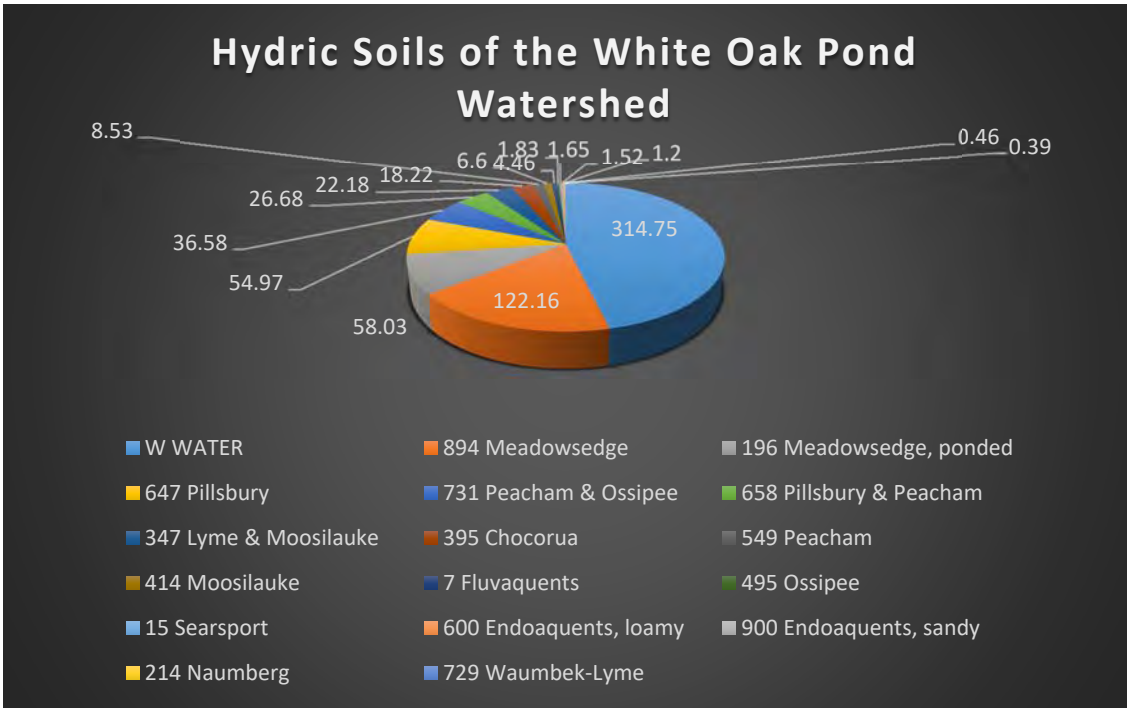
The following table summarizes these types:

[1] Technically, any area in White Oak Pond that is on average deeper than 6.6 feet is a "deepwater body" and not a wetland; however, the absence of a precise bathymetric map prevented distinguishing these areas.

Wetlands by NWI Cover Type in the White Oak Pond Watershed

NWI Cover Type	Name	# Units	Acreage	% of total
PAB	Palustrine Aquatic Bed	13	32.11	4.5
PEM	Palustrine Emergent Marsh	23	39.04	5.5
PFO (Rip)	Palustrine Forested Swamp (Riparian)	28	9.83	1.4
PFO	Palustrine Forested Swamp	302	195.35	27.5
PSS	Palustrine Scrub-Shrub	41	83.3	11.7
PUB/PUS	Palustrine Unconsolidated Bottom/Shore	31	294.75	41.5
R2, R3	Riverine, Lower/Upper Perennial	9	5.6	.8
R4SB	Riverine, Intermitttent	60	16.6	2.3
U	Upland 'Island'	38	29.59	4.2
Total		**545**	**706.17**	**99.4**

Source: Aerial photography, Lidar imagery, 2-foot contour maps, field observations; Note: the remaining wetland types were either culverts (N = 24) or ditches (N = 16).



Hydric Soils of the White Oak Pond Watershed

Vernal Pools

Vernal pools are recognized by the state and federal government as unique and special types of surface waters. Although not all of them are jurisdictional wetlands, all of them have surface inundation for a long enough period of time to support certain types of wildlife. Most commonly, vernal pools are associated with certain groups of amphibians, namely, wood frogs and spotted salamanders. Yet in New Hampshire, and possibly in the White Oak Pond watershed, there are other *Ambystomid* salamanders present in vernal pools, namely the blue-spotted salamander in the *Ambystoma jeffersonianum-laterale* complex. There are also a host of other animal species that regularly occur in vernal pools and which are recognized by the state in the following definition:

> Env-Wt 104.44 "Vernal pool" means a surface water or wetland, including an area intentionally created for purposes of compensatory mitigation, that provides breeding habitat for amphibians and invertebrates that have adapted to the unique environments provided by such pools and that:
>
> (a) Is not the result of on-going anthropogenic activities that are not intended to provide compensatory mitigation, including but not limited to:
>
> (1) Gravel pit operations in a pit that has been mined at least every other year; and
>
> (2) Logging and agricultural operations conducted in accordance with all applicable New Hampshire statutes and rules; and
>
> (b) Typically has the following characteristics:
>
> (1) Cycles annually from flooded to dry conditions, although the hydroperiod, size, and shape of the pool might vary from year to year;
>
> (2) Forms in a shallow depression or basin;
>
> (3) Has no permanently flowing outlet;
>
> (4) Holds water for at least 2 continuous months following spring ice-out;
>
> (5) Lacks a viable fish population; and
>
> (6) Supports one or more primary vernal pool indicators, or 3 or more secondary vernal pool indicators.

Primary indicators are defined as follows: "Env-Wt 103.64 'Primary vernal pool indicators' means the presence or physical evidence of breeding by marbled salamander, wood frog, spotted salamander, jefferson-blue spotted salamander complex, or fairy shrimp." Secondary indicators are defined as:

> "Env-Wt 104.15 'Secondary vernal pool indicators' means physical evidence used by wildlife biologists or certified wetland scientists who are familiar with vernal pool habitats as evidence of the presence of a vernal pool, if primary vernal pool indicators are absent and other vernal pool characteristics suggest vernal pool habitat. Secondary vernal pool indicators include but are not limited to caddisfly larvae and cases (Limnephilidae, Phryganeidae, or Polycentropodidae), clam shrimp and their shells (Laevicaudata, Spinicaudata), fingernail clams and their shells (Sphaeriidae), aquatic beetle larvae (Dytiscidae, Gyrinidae, Haliplidae, and Hydrophilidae), dragonfly larvae and exuviae (Aeshnidae, Libellulidae), spire-shaped snails and their shells (Physidae, Lymnaeidae), flat spire snails and their shells (Planorbidae), damselfly larvae and exuviae (Coenagrionidae, Lestidae), and truefly larvae and pupae (Culicidae, Chaoboridae, and Chironomidae), and those identified in the third edition of "Identifying and Documenting Vernal Pools in New Hampshire" published by NHF&G, available at https://wildlife.state.nh.us/nongame/documents/vernalpool-manual.pdf and as noted in Appendix B."

In general, it is fairly easy to observe secondary indicators, even outside of the active breeding season of spring, yet the other physical characteristics under 104.44(b) need to also be present.

For this study, vernal pools were identified on the landscape primarily using the same remote sources that were used in the wetland mapping, namely, the 2010 Color infrared aerial photographs, Lidar, and the 2-foot contour coverage. In most cases, especially under a hardwood canopy, vernal pools were easily recognized as being dark 'spots' in shallow basins in upland till positions. These locations were frequent along low flat ridgelines, in broad, glacial benches, and near the edges of the larger wetlands where post-glacial meltwater scour created braided sloughs in old flow channels.

A total of 40 vernal pools were identified in this way as being within or immediately adjacent to the White Oak Pond watershed (see the Wetland Map A-5). Typically, these pools were a part of a small, isolated PFO1E or PFO1/4E wetland complex in Pillsbury or Lyme & Moosilauke soils. Areas mapped as Pillsbury soils were often hardwood dominated and along ridgelines and small sub-watershed divides. Areas mapped as Lyme & Moosilauke soils usually involved stony to boulder basins with a hemlock-hardwood canopy. With only a few exceptions where field observations were made, these *potential* vernal pools will need to be confirmed during the late spring or early summer in order to be officially mapped and recognized. The New Hampshire Fish & Game Department has a documentation form and process that can be accessed at https://nhwildlifesightings.unh.edu/.

Left: probable vernal pool along East Holderness Road; this pool lies in the headwaters of the large beaver pond off of Coxboro Road, and is typical (even though altered by the roadway) for being in a stony, Pillsbury soil near the watershed divide

C. Cover Types & Natural Communities

The above discussion of the wetland NWI types and hydric soils offers a beginning description of the cover types that are present in the White Oak Pond watershed. Most of these can be assigned to a specific natural community type, although many NWI types span several natural communities and a couple of them are not defined at all in the most recent publication on natural communities of New Hampshire, *The Nature of New Hampshire – Natural Communities of the Granite State* (Sperduto and Kimball 2011). The Emergent Marsh, for example, is comprised of six different natural communities:

1) Sweet Gale-Meadowsweet-Tussock Sedge Fen – this comprises most of the low growth portion of Lamb Swamp as it nears the edge of the open water. As it suggests, sweet gale (*Myrica gale*) and Meadowsweet (*Spirea alba var. latifolia*) are the dominant shrubs, and are interspersed with tussock sedge (*Carex stricta*). Sphagnum moss forms the dominant "binder" to the partially floating mat of vegetation, and is persistent throughout the fen. As a sphagnum peat-accumulating wetland, it is called a fen because it has water moving through the system as opposed to a bog that is effectively a rainwater and snowmelt basin. Nonetheless, it does have occasional "bog" species such as bog laurel (*Kalmia polifolia*) and pitcher plant (*Sarracenia purpurea*).

Pitcher plant nestled in among Sphagnum moss

2) Sedge Meadow Marsh – this seasonally flooded/saturated zone extends upgradient of many of the aquatic beds at the edge of the pond and is typically dominated by various sedge family members such as threeway sedge (*Dulichium arundinaceum*), spikesedge (*Eleocharis spp.*), sedge (*Carex spp.*), and woolsedge (*Scirpus spp.*). It also supports plants such as swamp candles (*Lysimachia terrestris*), marsh St. Johnswort (*Triadenum virginicum*), and dwarf St. Johnswort (*Hypericum mutilum*). These sites are critical habitat for different species of nesting birds (e.g. American bittern), pickerel frog, dragonflies and

damselflies, and other aerial aquatic insects such as marsh beetles, craneflies, and mosquitoes. A good example of this type can be seen on Frank's Island.

3) Wire Sedge – Sweet Gale Fen – portions of the low growing edge to the 'bog mat' near White Oak Pond has a predominance of wire sedge (*Carex lacustris*) and sweet gale mixed in with cat-tails (*Typha latifolia*), bottle-shaped sedge (*Carex utriculata*), and swamp candles. These fens are also sphagnum-dominated in terms of their 'mat,' yet also contain open mud patches where ice action and seasonal flooding can eliminate all but the hardiest forbs. Runways of the southern bog lemming are not uncommon in this type of fen.
4) Water Willow-Sphagnum Fen – along the middle and upper edges of the perennial stream that feeds into White Oak Pond are dense stands of the low growing water willow (*Decodon verticillatus*). Slightly more basic conditions support Sphagnum species that favor these habitats such as *S. fuscum, S. papillosum,* and *S. palustre*. Other water edge shrubs and forbs are typically mixed in, such as meadowsweet, sweet gale, leatherleaf (*Chamaedaphne calyculata*), cat-tail, tussock sedge, and marsh St. Johnswort. The dense cover provides excellent habitat for water snakes, northern ribbon snakes, and painted turtles (see below).

Left: painted turtle hidden among the water willow along Lamb Swamp Brook, the main inflow to White Oak Pond

5) Tall Graminoid Meadow Marsh – this natural community is less frequently inundated than the sedge meadow, yet still contains year-round saturation that promotes the development of deep organic soils. Bottle-shaped sedge and bluejoint reedgrass (*Calamagrostis canadensis*) tend to be dominant species, along with low-growing woody shrubs such as meadowsweet and steeplebush (*Spiraea tomentosa*). Occurrences can either be extensive and uniform (as in the beaver pond below Coxboro Road), or patchy and localized (as in the beaver meadow south of East Holderness Road). Common yellowthroat, marsh wren, and red-winged blackbird are associated with these sites, as are ribbon snake, southern bog lemming, meadow vole, moose and deer.
6) Emergent Marsh – this final natural community type that was identified in the White Oak Pond watershed occurs as low growing, shallow water vegetation dominated by persistent and non-persistent emergent plants. Much of the shallow water areas between the islands contain good examples of this community where common arrowhead (*Sagittaria latifolia*), lesser bur-reed (*Sparganium americanum*), and pickerel-weed (*Pontederia cordata*) represent the bulk of the non-persistent herbs and cat-tail, Canada rush (*Juncus canadensis*), and three-way sedge represent the bulk of the persistent emergent herbs. These sites are commonly inundated in winter and spring and dry out by late summer when the biomass is at its maximum. These beds provide excellent habitat for frogs, turtles, nesting ducks, muskrats, and beaver.

Other common wetland cover types in the PSS (scrub-shrub) category include the following natural communities that were also found in the White Oak Pond watershed:

7) Tall Graminoid Scrub-Shrub Marsh – the principal difference between this natural community and the Tall Graminoid Meadow Marsh is the addition of several new species of forbs and shrubs. Forbs that prefer to

dry out even more during the growing season include woolsedge (*Scirpus cyperinus*), flat-topped aster (*Doehlingeria umbellatus*), and spotted joe-pye-weed (*Eutrochium maculatum*). Shrubs that commonly occur in these zones include northern arrowwood (*Viburnum dentatum*), winterberry holly (*Ilex verticillata*), and mountain holly (*Ilex mucronata*). These areas form critical habitat for a number of larger mammals such as deer, coyote, fox, snowshoe hare, raccoon, and bear. They are also important pollinator feeding sites for a variety of moths and butterflies. Good examples of this marsh type can be found in the main drainage below East Holderness Road and in the Johnson-Perkins prime wetland along McCrillis Hill Road.

8) Alder Alluvial Swamp – This shrub-dominated natural community bridges the gap between a marsh, where non-woody plants dominate, and a swamp, where woody plants dominate. These sites can be found both along the principal drainageways and in isolated pockets near the edge of the pond itself. They support speckled alder (*Alnus incana ssp. rugosa*) as the dominant woody plant, but also retain ample diversity of forbs and graminoids such as jewelweed (*Impatiens capensis*), rough avens (*Geum laciniatum*), sensitive fern (*Onoclea sensisbilis*), manna-grass (*Glyceria striata*), hairy willow-herb (*Epilobium ciliatum*), and fringed sedge (*Carex crinita*). Earthworms are common in these sites, as is the one shrub-inhabiting bird that feeds on them, American woodcock.
9) Alder-Dogwood-Arrowwood Alluvial Thicket – This community is found along some of the stream drainageways where flooding is common. A good example lies just below East Holderness Road along the stream channel. Like the Alder Alluvial Swamp, this type is also shrub-dominated. Other shrub species besides the alder, dogwood (*Cornus sppp.*) and arrowwood include meadowsweet, steeplebush, and highbush blueberry (*Vaccinium corymbosum*). Common herbaceous associates include bluejoint reed-grass, manna-grass, northern bugleweed (*Lycopus uniflorus*), tussock sedge, black girdle woolsedge (*Scirpus atrocinctus*), and golden-saxifrage (*Chrysosplenium americanum*).
10) Highbush Blueberry – Mountain Holly Wooded Fen – this shrub type was quite common at the shrub edge of the main emergent marsh in Lamb Swamp. It was quite variable, with scattered red maple and tamarack trees on the slightly higher hummocks. Highbush blueberry (*Vaccinium corymbosum*) and mountain holly were co-dominant in most sites, although winterberry holly and leatherleaf was also quite frequent. A variety of herbaceous species also filled wetter voids and hollows, which were otherwise common in the marsh-swamp system. These included bluejoint reed-grass, wool-sedge, sensitive fern, marsh fern (*Thelypteris palustris*), and hoary sedge (*Carex canescens*).

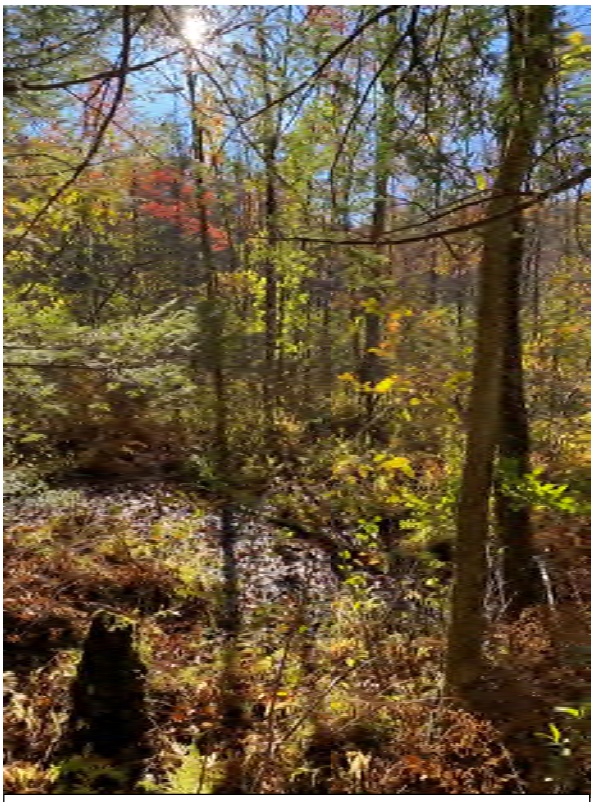
At least four types of forested wetland natural communities were noted on the property. The most widespread was the Seasonally Flooded Red Maple Swamp that was observed along the lower edges of the Lamb Swamp wetland complex. The amount of inflowing floodwaters from the 1500-acre sub-watershed above this swamp provides ample inundation to retain red maple as the canopy dominant and a variety of herbaceous species as understory dominants. The red maple canopy is somewhat open, but not quite enough to support a dense understory shrub layer. Sensitive fern and bluejoint reed-grass are abundant understory dominants, and provide good cover for deer fawns, turtles, masked shrews, and other small mammals.

A second forested swamp known as the Hemlock-Cinnamon Fern Swamp/Forest is not uncommon in this swamp complex as well, and can be easily determined by the presence of hemlock as the canopy dominant and cinnamon fern as the primary understory dominant. Unlike the Seasonally Flooded Red Maple Swamp, these natural communities rarely flood, and in fact, are often at the drier end of the hydrosequence in any given wetland area. Abundant stones and boulders tend to provide ample opportunities for tree root systems to dry out, yet have wet enough pockets between them to prohibit upland species. Eastern hemlock (*Tsuga canadensis*) prefer moist low terraces and that's where these natural communities were observed in the watershed. Good examples were found below Maple Lane

and east of Penny Lane. The soil acidification and deep shade that the hemlock canopy provides reduces the diversity of herbaceous plants in the understory, yet provides good snow interception for wintering deer and moose. Game trails are not uncommon in these forested wetland types.

A slightly different forested wetland that also lies at the drier edge of the wetlands in the White Oak Pond watershed is the Red Maple-Sensitive Fern Swamp. Mostly commonly found on poorly drained hardpan soils (e.g. Pillsbury series), these swamps typically occur on slight to moderate slopes where groundwater is near the surface. Nearly all of the wetlands mapped with the 647C designation (i.e. Pillsbury, very stony on a 8-15% slope), were of this type. Quite commonly there is an ephemeral or intermittent stream channel that flows through or out of these systems as can be seen on the steep east-facing slopes above Coxboro Road. Other common forbs in these natural communities include touch-me-not (*Impatiens capensis*), fringed sedge, manna-grass, and lady fern (*Athyrium filix-femina*).

The least common forested swamp in the watershed occurred in scattered locales near the edge of the basin swamp complexes, such as below East Holderness Road, below McCrillis Hill Road, and in the Eastman-Brown easement. The Red Maple-Black Ash Swamp is generally characterized as a groundwater seepage wetland where inflowing groundwater has increased the pH to a degree where most of the plants are responding to slightly enriched conditions. Black ash (*Fraxinus nigra*) is the indicator species for this natural community, although several herbaceous plants can also provide clues as to the presence of soil-groundwater enrichment: golden-saxifrage, touch-me-not, rough sedge (*Carex scabrata*), water or purple avens (*Geum rivale*), swamp saxifrage (*Micranthes pensylvanica*), and golden ragwort (*Packera aurea*). These forest types not only provide good temporary, flood storage sites but also mediate groundwater inflows to swamp systems that could otherwise dry out and convert to uplands over time.



Red Maple-Black Ash swamp on the Bennet property

Upland natural communities were much less complex and site specific than the wetland natural communities in the White Oak Pond watershed. The attached map A-6 shows a broad swath of Hemlock-Mixed Hardwood that is the dominant upland forest system in the region. Within this general group, at least four forested natural community types were identified as follows:

1) Hemlock-Beech-Oak-Pine Forest – this mixed forest is the most widespread and common type in the watershed as it is in the state. In fact, it characterizes most of the outer coastal plain and low foothills forests from southern to northern New England. In the Lakes Region, it generally occurs below 1200 feet in elevation. It was the dominant type that the early settlers cleared for pasture

and then watched grow back after the agrarian economy met its demise in the mid-19th century. Two of the dominant tree canopy species, white pine and red oak, tend to occupy the drier sites in the soil moisture spectrum, whereas hemlock and beech favor the more mesic sites. On one extreme, the dry thin soils of the low ridges will transition to the next most common natural community, the Appalachian Oak-Pine Forest. On the other extreme, the Hemlock-Beech-Oak Pine Forest will trend towards the Hemlock-Cinnamon Fern Swamp/Forest on somewhat poorly drained soils. The Hemlock-Beech-Oak-Pine Forest generally makes for good wildlife habitat since it contains ample nut and seed crop trees that provide excellent mast in the late summer and fall each year.

2) (Appalachian) Dry Red Oak-Pine Forest – this forest type replaces the Hemlock-Beech-Oak-Pine Forest on lower, warmer, and drier slopes. Presently mapped on about one quarter of the watershed lands, this type is largely indicated by the presence of white oak. This species is at the northern limit of its range in the Lakes Region, and the namesake of White Oak Pond is aptly labeled owing to its frequency on the landscape. Other cohorts include eastern white pine, red pine, pitch pine, red oak, hemlock, red maple, and a little further south, shagbark hickory, black oak, chestnut oak, and scarlet oak. The sandy tills in the White Oak Pond watershed lowlands has favored this natural community below about 740 feet in elevation. It can occur slightly higher than that on south-facing slopes nearby (e.g. Fogg Hill and McCrillis Hill in Center Harbor), but in general it requires the warmest slopes in the watershed in order to occur at all.

Above: Hemlock Forest on one of the 'islands' in Lamb Swamp

3) Hemlock Forest – this conifer type is present in small but noticeable numbers because of the expansiveness of Lamb Swamp. Moist cool air tends to settle into the valleys at night during the summer and winter, and this provides perfect climatic conditions for eastern hemlock. For this reason, all of the 'islands' in the swamp support hemlock terraces, and many of the low benches

both east and west of the swamp contain patches of this natural community. Not unlike the slightly wetter Hemlock-Cinnamon Fern Swamp/Forest, this woodland has a sparse understory on account of the extreme acidity and deep shade. An aggrading Hemlock Forest is a perfect locale for wintering deer and moose, especially when it is near ample amount of wetland and open, south-facing hardwood slopes. Several wintering yards were observed in the watershed, notably along the edges of Lamb Swamp.

4) Northern Hardwood Forest – the Sugar Maple-Beech-Yellow Birch Forest is the iconic natural community type of the White Mountain National Forest. It occupies deep to fairly shallow, moist tills on glaciated uplands between elevations of between 1050 and 2250 feet in the Lakes Region. Lower elevation sites occur on the cooler north-facing slopes of higher hills, which are mostly present on the north side of the Squam Range in the region. Since the White Oak Pond watershed reaches its highest elevation of about 1210 feet in its very western edge, this natural community type is poorly represented in the watershed. Patches of it were observed in the latter locale, and on the uppermost slopes of McCrillis Hill. The ledge and talus area off of Porcupine Road also contains these three hardwood species, but this occurrence is likely due to the elevated nutrient levels in the talus area and may represent a different natural community.[2]

Additional upland natural communities that could be present in the White Oak Pond watershed based on elevation, soils, and aerial photo information include the Beech Forest (which may be present on the east-facing slopes above Coxboro Road), Hemlock-Oak-Northern Hardwood Forest (which likely occurs near or below the northern hardwoods on McCrillis Hill), and Hemlock-White Pine Forest (which may occur as small patches near the shore of White Oak Pond).

Left: classic mature Hemlock-Beech-Oak-Pine Forest 600 feet elevation on the Bennet property in Holderness

D. Wildlife Habitat and Species

Natural communities offer a slightly more detailed summary of environmental conditions and habitats that support certain types of wildlife. The list of 20 habitat types that are mapped for the state in the

[2] It is probable that the northern hardwoods in this vicinity were mixed with red oak in a Semi-Rich Sugar Maple-Oak Forest natural community.

Wildlife Action Plan (WAP) pale in comparison with the 192 natural community types described in *The Nature of New Hampshire* (Sperduto and Kimball 20110. That being said, many of our wildlife species are not that habitat specific, and can be found in a variety of natural communities that span many of the WAP habitats. Good examples are deer, bobcat, and coyote, which have adapted to near all of the available habitats in the state.

Map A-6 contains a key to the 20 natural habitats in the state, yet only eight are shown on the White Oak Pond watershed: Hemlock-hardwood-pine, Appalachian oak-pine, Wet meadow/shrub wetland, Grassland, Peatland, Temperate swamp, Open water, and Cliff and talus. Several areas of developed or Barren Land are also shown. This compares with the 14 wetland and four upland natural communities described above, not including the half a dozen or so that also likely occur as small patches. Each habitat type or natural community holds the potential to harbor a large number of wildlife species among all of the vertebrate and invertebrate groups, which this report can only cursorily summarize. Because there has already been a great deal of documentation of species in the Squam Lakes Region, and because nearly all of these species have been documented for or have the potential of occurring in the White Oak Pond sub-region, the data associated with previous reports is presented here.

A summary of the total species observed in the Squam Lakes Region is as follows:

MAMMALS	44
BIRDS	192
AMPHIBIANS	15
REPTILES	12
FISH	18
AQUATIC INVERTEBRATES	46
OTHER INVERTEBRATES	2500
FUNGI	1750
SUM	**4533**

The following includes a brief overview of the observed and expected species for the watershed. It represents a snapshot of what could be derived from a longer and more in-depth sampling effort. Other NRI efforts in the Squam Lakes region have included sampling efforts such as mammal track transects, small mammal trapping, breeding bird surveys, migratory bird point counts, winter eagle surveys, loon surveys, Christmas bird counts, visual encounter surveys (VES) for amphibians and reptiles, minnow and fyke net trapping for fish, aquatic macro-invertebrate dredges, kick-netting, and sweeps, net sweeps for dragonflies and damselflies, butterflies and moths, and bait and blacklight surveys for moths. All of these efforts have been used in one or more locales in the Squam Lakes region as a part of past, current, or ongoing efforts to catalogue the biodiversity of the area. Two Bio-Blitzes were also completed in 2008 and 2010, and these data have been added into the summary above and some of the narrative description below.

Mammals

White Oak Pond supports all of the wetland and riparian species that the region contains, including moose, beaver, muskrat, otter, mink, raccoon, water shrew, star-nosed mole, southern bog lemming,

and meadow jumping mouse. All of these species were recorded in the watershed during the survey time period by direct observation of track, scat, tunnels, scent mounds, dens, browse, claw marks, and/or sightings. With the exception of water shrew, meadow jumping mouse, and southern bog lemming, all are common and can be expected to be found with a minimum of field effort. Moose are becoming increasingly rare, however, owing to winter tick and brain worm, and sparingly few areas of concentration were noted during the field outings.

Aerial insectivores that also optimize the pond and its surrounding wetlands include little brown myotis, silver-haired bat, big brown bat, and red bat in the data records. Historical and potentially extant species also include northern long-eared bat, eastern small footed bat, and hoary bat. None have been published as occurring in the region in recent years and bat surveys would be beneficial to better understand the current status of those species that have been dramatically reduced by white-nose disease.

Associated uplands contained evidence of moose, deer, opossum, short-tailed shrew, hairy-tailed mole, snowshoe hare, eastern woodchuck, eastern chipmunk, gray squirrel, red squirrel, southern flying squirrel, deer mouse, red-backed vole, meadow vole, woodland jumping mouse, porcupine, eastern coyote, red fox, gray fox, black bear, fisher, ermine, long-tailed weasel, striped skunk, and bobcat. All of these species have been directly observed in the vicinity of White Oak Pond during the past 10 years. Of uncertain status is the presence of smoky shrew, northern flying squirrel, pine vole, and American marten, although the latter has been recorded nearby in the Squam Range. A more protracted effort in searching for these species would be required in order to add them to the list for White Oak Pond even though they have all been recorded in the Squam Lakes Region in the past.

The attached list of mammals that likely occur in the White Oak Pond watershed is copied from the Squam lakes Natural Science Center's 2010 BioBlitz, which spent 24 hours in June to record as many species as possible in the Squam Lakes area. Although the day's tally was slight (13), the list itself has all of the species of mammals that has been observed by the author in the Squam Lakes area since 2001, and includes the verification description in the "Possible Observational Sign" column.

Birds

The 2019 official New Hampshire state list of birds has increased to 420 species, yet most of these have never been seen or recorded in the Squam Lake area.[3] The state's zoological record shows 286 species as museum specimens, yet the practice of obtaining a specimen in order to verify species occurrences is no longer viable or well regarded (Keith and Fox 2013). The estimated number of 192 birds in the Squam Lakes area that is pertinent to the White Oak Pond watershed is derived from the 1988 *A Guide to the Birds of the Squam Lakes Region* by Bev Ridgely. Some of the species that were recorded regularly in Ridgely's time have been taken off the list (e.g. pied-billed grebe, northern harrier, cliff swallow, purple martin, vesper sparrow, and rusty blackbird), yet many have been added as currently regular residents and visitors (e.g. bald eagle, turkey vulture, wild turkey, whip-poor-will, red-bellied woodpecker, fish crow, blue-gray gnatcatcher, Carolina wren, and northern mockingbird.

Ebird lists have provided a recent synopsis of the species reported for the Squam Lakes area, which is attached in Appendix B. There are 177 species on this list, and so a few of the less common species that

[3] https://nhbirdrecords.org/all-articles/NH%20statelist%2002-28-2019%20final.pdf

could occur in the White Oak Pond watershed and which have been observed by this author may not be on this list. On such species, sora (rail), was observed on April 25, 2020, when an adult bird was flushed from the edge of the fen mat of Lamb Swamp. Other uncommon to rare species that have been seen by the author in the Squam Lakes area include black scoter, peregrine falcon, Wilson's snipe, saw-whet owl, northern shrike, brown thrasher, American pipit, and blue-winged warbler.

A total of 57 species was recorded during the four field site visits, which represents (other than the sora) a good approximation of the total number of regularly occurring breeders and winter residents around the pond. Aside from the three common loons that appeared to be posturing during the pre-breeding season (and which have been known to breed on White Oak Pond), there were nesting common mergansers and a family of bald eagles that appeared to making White Oak Pond their home.

Above: three loons posturing on White Oak Pond; Below: a male common merganser in a nesting territory on the pond; Right: immature and mature bald eagles, which were part of a family of two young-of-the-year juveniles and two adults in late April 2020 on the pond

Amphibians

A total of 15 species of amphibians are noted as possibly occurring in the White Oak Pond watershed. The attached list in Appendix B lists most of these, although it also includes northern leopard frog, which has largely been extirpated from the landscape likely due to a chytrid fungus of unknown origin.

Whereas this species was initially listed as a special concern species by NH Fish & Game in the 1990s, it has only been recorded a handful of times since that time. Meanwhile, another special concern species, the blue-spotted salamander, has been observed widely in the Lakes Region and may occur within the watershed. It tends to be more southern and eastern in its distribution in the state, with the strictly blue-spotted form more common in the coastal plain and the Jefferson's (gray) form more common in the southwest part of the state. Part of its strategy of success has been to both reproduce clonally and to interbreed with other species (in this case, as an *Ambystoma laterale-A, jeffersonianum* cross).[4]

Red-spotted newt, redback salamander, two-lined salamander, American toad, spring peeper, gray treefrog, bullfrog, green frog, wood frog, and pickerel frog have all been recorded by the author in the watershed during the survey time period. Further field sampling efforts in spring in and around vernal pools and in the upper perennial stream segments would likely reveal the remaining species. Finding spring salamanders may provide to be a bit of a challenge, since they tend to prefer cold mountain streams, which are not really present in the watershed.

Four-toed salamanders are uncommon forested swamp inhabitants that prefer to hide under sphagnum hummocks

Reptiles

Twelve species of reptiles are listed as occurring in the White Oak Pond watershed, although several of these are rare or uncommon in the region. Whereas painted turtle, snapping turtle, and garter snake are frequent throughout the state (and were observed by the author in the watershed), the remaining species require more effort to discover. Besides the water snake, which has been observed on Frank's Island in the past, the remaining six species of snakes prefer open land particularly in and around managed fields. The smooth green snake is listed as a special concern species in the state, although it has been observed at least twice right near Squam Lake.

The remaining species of turtles are no less secretive, and only one should be expected as a regular resident in White Oak Pond: musk turtle. All three of the other turtles – wood, spotted, and Blanding's, are rare in the state and only have scattered records in the Lakes Region. Based on the available aquatic habitats in White Oak Pond, Blanding's turtles are the most likely, yet this species had only been seen a handful of times in towns much farther to the south and east. Spotted turtles are also a more southern and coastal plain species and wood turtles generally require larger streams and rivers such as the Pemigewasset, which is the nearest known location.

Fish

A total of 18 species of fish are listed as "possible" for the White Oak Pond watershed. The attached list in Appendix B includes a few species for the Squam Lakes area that are restricted to larger lakes, such as Atlantic salmon, lake trout, burbot, and lake whitefish. Rainbow smelt are also likely absent from White

[4] See Colburn (2004).

Oak Pond on account of the dam that prevents passage of migratory fish up and downstream. Rainbow trout are also absent from the pond since this is a stocked species that prefers shallow sandy shorelines. Mill Brook, which flows below the White Oak Pond dam, has a well-known run of white sucker in the spring, where several hundred individuals can be seen in mid to late April. Again, the dam blocks passage of this species upstream, but it is likely that several have remained in the pond and utilize the perennial streams feeding into it to complete their spring run to breeding areas.

Eastern brook trout are known to occur in the two perennial stream systems in the watershed, and trout fry were observed by the author in the vicinity of East Holderness Road. Although the perennial streams are not listed as trout streams by the NH Fish & Game Department of Eastern Brook Trout Joint Venture,[5] an instream population clearly exists and does indicate good water quality of the flowing waters.

Anglers regularly try their luck in White Oak Pond, but most commonly encounter warmwater fish species as a result of their efforts. Brown bullhead (catfish), smallmouth bass, largemouth bass, yellow perch, chain pickerel, red-breasted sunfish, and pumpkinseed sunfish are all common. All of these species except largemouth bass were trapped in 2001 during the Squam Lakes study at Plot A-4 on Frank's Island. Largemouth bass have expanded their range and abundance since that time and have likely replaced most of the smallmouth bass in the pond.

Invertebrates

This group of organisms tends to increase the biodiversity of a given area by one or two orders of magnitude. The count of 46 aquatic invertebrates and estimate of 2500 'Other Invertebrates' should only be considered preliminary. The 46 species of aquatic invertebrates were collected at Plot A-4 during the 2001-2002 Squam Lakes study, and good data supports the fact that many more species are likely present. Prior to the study, a total of 74 species had been documented for the Squam Lakes region by virtue of a single aquatic macro-invertebrate (MI) study in the mid-1970s. The identification of 229 genera of aquatic macro-invertebrates during the Squam Lakes area in 2001-2 suggests that this tally is a mere fraction of what is there. As an example, a more protracted effort on behalf of a recent research project in lakes of the Adirondacks yielded 127 taxa of mayflies alone (!).[6]

The very approximate estimated number of 'Other' invertebrates was derived in part from good studies that have taken place in the region and estimates of taxa diversity provided by specialists, notably Dr. Don Chandler at UNH. For example, a porch and blacklight survey of moths in Sandwich and Thornton have yielded roughly 950 positive identifications of different taxa over the last 10 years. The statewide dragonfly survey in 2007-2011 yielded a maximum of 80 species in the Squam Lakes region. The North American Butterfly Count along the nearby Baker River has resulted in 62 different species. The Squam BioBlitz efforts in 2008 and 2010 added another 249 species. The remaining 1200 or so species are estimates of beetle, fly, and non-insect diversity from Dr. Chandler.

[5] See https://easternbrooktrout.org/
[6] Myers et al (2011)

Some of the biggest concerns around invertebrates focus on pathogenic species. Emerald ash borer, for example, has now been detected in all counties of the state except Coos.[7] Hemlock wooly adelgid was recorded in Holderness in 2017 for the first time and Holderness is still at the north limit of the species.[8] Cherry scallop moth, winter moth, and balsam wooly adelgid have all had outbreaks in the past 10 years in the area, and continue to stress otherwise healthy trees. This type of pressure on our native wildlife and forests will only continue to proliferate as global climate shifts put greater pressure on natural weather cycles.

Right: black ash, like white and green ash, will soon be subjected to rapid die-off in our region as emerald ash borer continues to spread northward

Fungi

The attached list of higher fungi (i.e. versus molds and mildews, etc.) is based on direct observations by the author over the past 20 years. Whereas only a handful of these species have been specifically observed in the White Oak Pond watershed, over 90% of them are widespread in their occurrence and should be expected in suitable habitats. The lists include many of the commonly recognized species such king bolete (*Boletus edulis*), oyster (*Pleurotus ostreatus*), hen-of-the-woods (*Grifola frondosa*), chicken-of-the-woods or sulphur shelf (*Laetiporus sulphureus*), turkey-tail (*Trametes versicolor*), and lion's mane (*Hericium americanum*). It also includes many of the highly sought after mushrooms for food or medicine, such as chaga (*Inonotus obliquus*), reishi or Ling Zhi (*Ganoderma curtisii* or *G. tsugae*), matsutake (*Tricholoma magnivelare*), and Caesar's mushroom (*Amanita jacksonii*).

In terms of the frequency of occurrence (labeled "Occur." in the list), and edibility (labeled "Edibility), the following guidance should assist the mushroom hunting public in terms of the approximate effort required to find these species:

A = Abundant	E - Edible
C = Common	E/C – Edible with caution
F = Fairly Common	H - Hallucinogenic
U = Uncommon	M - Medicinal
R = Rare	P – Poisonous

The "+" and "-" signs are intended to accentuate the edibility or toxicity, and the "?" sign indicates some uncertainty about either the frequency of occurrence or its edibility. As has been said a great many times before, 'When in doubt, throw it out!'

[7] See https://nhbugs.org/emerald-ash-borer
[8] See https://nhbugs.org/hemlock-woolly-adelgid

E. Significant Ecological Areas

Significant Ecological Areas (SEAs) are those areas that by virtue of their composition, rarity, and/or sensitivity to human disturbance, have been identified as important areas for conservation. SEAs that were identified during the 2001-02 Squam Lakes study included the islands of White Oak Pond and Lamb Swamp. As a result of this study, the entire pond and its primary feeder streams and smaller tributaries have been added to the core areas from 20 years ago. A total of nine areas (873 acres or 29.3% of the watershed) were identified as discrete units, although many of them are immediately upstream or downstream of each other. The following table summarizes each one:

Significant Ecological Areas of the White Oak Pond watershed					
Id	**Name**	**Attrib_1**	**Attrib_2**	**Attrib_3**	**ACRES**
1	Johnson-Perkins Prime Wetland	Wildlife habitat	Flood storage		40.22
2	Town Line Beaver Marsh	Wildlife habitat	Bird diversity	Flood storage	6.76
3	East Holderness Rd Marsh	Wildlife habitat	Nesting waterfowl	Flood storage	13.43
4	SNE Basin Swamp	Wildlife habitat	Exemplary natural comm	Water quality	255.39
5	Vernal Pool Cluster	Wildlife habitat	Vernal pools	High water tables	22.14
6	White Oak Pond & Islands	Wildlife habitat	Freshwater fishery	Exemplary Pondshore	376.87
7	White Oak Pond Beaver Marsh SW	Wildlife habitat	Exemplary basin marsh	Vernal pools	93.29
8	Porcupine Rd Beaver Ponds	Wildlife habitat	Nesting waterfowl		11.32
9	West Side Drainage	Riparian habitat	Steep slopes	Beaver marsh	53.78

As noted above, the largest SEA is White Oak Pond itself along with its islands and a 50 – 100 foot buffer around the pond. The latter was included in the SEA on account of the importance of well vegetated buffers adjacent to surface waters. The water quality enhancement functions of these buffers have been well documented in the scientific literature. For example, between 67 and 88 feet is required for removing 90% or more of Total Phosphorus (TP) from entering surface waters in glacial till soils on slopes similar to what is present around White Oak Pond.[9] Other pollutants, including silt, nitrogen, and chlorides, can be effectively removed with adequately vegetated buffers where plants and micro-organisms can uptake, attenuate, and/or otherwise bind up pollutants before they enter the water column.

Critical to the proper functioning of White Oak Pond and its immediate environs is the way in which the waters that feed it are flowing through the system. As described above, there are nine SEAs at or above the pond, and it is no surprise that all but one of them is directly, hydrologically connected to White Oak Pond. The Johnson-Perkins prime wetland is the uppermost SEA along Lamb Swamp Brook, and was designated in 2009 through a formal nomination and approval process through the Center Harbor

[9] See for example, NHANRS (2017).

Conservation Commission and the state of New Hampshire. It has one of the highest wetland wildlife scores among the 12 prime wetlands in Center Harbor, and is richly diverse in its habitat types.

Immediately downstream is the next high quality wetland along the primary tributary, which has been labeled as the "Town Line Beaver Marsh" owing to its position right along the Holderness/Center Harbor town line. Although it is a relatively small open marsh (and the smallest SEA of the nine), it plays an incredibly important role in providing shoreline stabilization along the stream and transforming nutrients and salts from any upstream roadside or off-road pollutant releases.

After a short stretch of closed canopy stream, the next SEA, East Holderness Road Marsh, provides another exceptional habitat for waterfowl and other wildlife in an open marsh habitat. This marsh includes over 2,000 feet of the streambed that winds its way through dense stands of alders, winterberry holly, cat-tails and other perennially saturated organic soils. Beavers have played a variably active role in this marsh, where build-up and drawdown cycles have been fairly regular for the past 100 years.

Above: view of the mixed structure Lamb Swamp just below East Holderness Road

Just north of East Holderness Road the 255-acre Lamb Swamp SEA begins to follow its roughly one mile path towards White Oak Pond. This SEA averages between 1200 and 1300 feet in width and is a total of 7,250 feet long. It receives the most direct and potentially contaminating influences from roadways and residences, not to mention the former Holderness landfill. Yet it also contains one of the few exemplary natural communities in the region and is the site of the largest prime wetland in Holderness.

"Lamb Swamp," as named by the state in its annual water quality monitoring program, is more of a fen than a swamp. Fens are peat-accumulating wetlands with a predominance of sphagnum moss at the surface and a slow, but steady percolation of ground and surface water in a single, general direction. The advantage of this type of hydrologic system is its ability to quickly store floodwater, and then gradually release it downstream. It also supports a complex set of vegetation types that transform potentially harmful nutrients, maintain chemical decomposition rates, and provides invaluable habitat for a wide diversity of species. In sum, this SEA is perhaps the most important ecological reserve site of the entire watershed.

To the southwest and upstream of White Oak Pond are the three remaining SEAs that feed into White Oak Pond. The primary site it is the large beaver marsh less than 800 feet from the southwest corner of the pond. This complex includes the open marsh system and the large forested swamp to its southeast. This swamp includes several vernal pools, three of which have been identified on the wetlands map. Immediately across Coxboro Road is another beaver marsh that gathers all of the small tributaries in the western part of the watershed. This wetland plays a significant role in storing floodwaters and desynchronizing its power prior to its discharge across the road towards White Oak Pond. The third SEA in this part of the watershed lies along a bend in Porcupine Road where a relatively small wetland system has been dammed up to enhance open water habitat. Although this wetland complex is small and lies along a private road, it plays an important role in preventing downstream flooding during and after storm events.

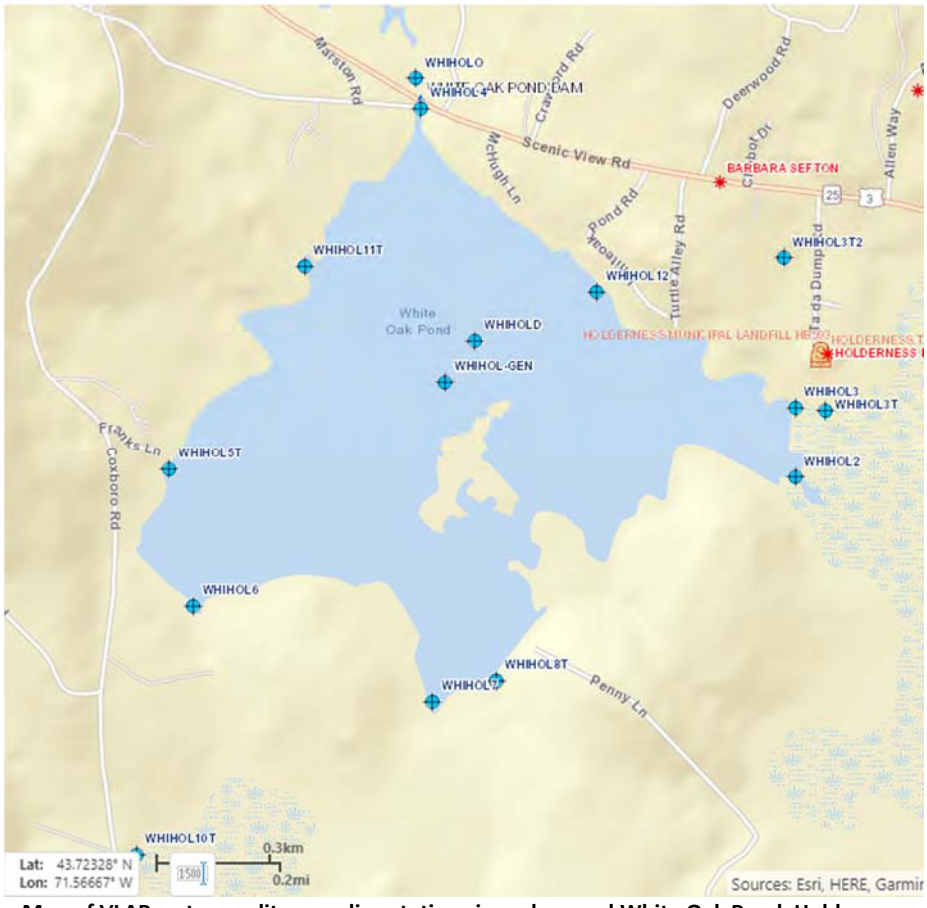
The final SEA lies somewhat outside of the immediate vicinity of White Oak Pond and includes at least seven vernal pools on a broad bench of stony till just west of Wildwood Road and Hayden Drive. Based on the Lidar imagery, there are a large number of shallow basins in this area, and the likelihood of other vernal pools being present is great. Besides the direct wildlife value of these pools, the additional flood storage value above Lamb Swamp is also significant.

Left: traditional boat house camp on White Oak Pond

F. Natural Resource Concerns

The Squam Lakes region has benefitted by conservation minded approaches to land use management for well over 100 years. The generally sensitive approach to developing land for the benefit of those people who come to Squam has carried with it a consciousness of the greater aquatic environment. This mindset has translated into site-appropriate housing with traditional 'camp' architecture, a balance of developed land and conservation land, and the spawning of conservation organizations with a focus on preserving the natural assets of Squam. Relative to White Oak Pond, the latter initiative has yielded the White Oak Pond Watershed Association, which provides a voice for the White Oak Pond neighborhood, underwrites and solicits support for regular water quality monitoring, and has oversight in the land use redevelopment process, as is being expressed at the former White Oak Pond Motel.

Since 1979, the Lay Lakes Monitoring Program at UNH in cooperation with the Voluntary Lake Assessment Program at NHDES has completed regular water quality monitoring throughout the state.[10] At least 12 sites in and around White Oak Pond have been tested for most of the common chemical and (some) biological indicators of water quality. These indicators include temperature, pH, dissolved oxygen (DO), conductivity, turbidity, chlorophyll a, color, ecoli, total phosphorus (TP), acid neutralizing capacity (ANC), alkalinity, Kjeldahl and nitrite nitrogen (N), and secchi disc transparency. The following map illustrates the locations of the primary sampling stations:



Map of VLAP water quality sampling stations in and around White Oak Pond, Holderness

[10] The latest VLAP report can be found at the WOPWA website: http://www.wopwa.org/

Results over the years from the 12 sampling stations have been generally positive and are consistent with levels for mesotrophic ponds in the state. Temperatures have ranged from around 10 to 23°C during the sampling summer months, pH has ranged from 5.9 to 7.8 with a median value of 6.6, and secchi disc transparency has ranged from 2.7 to 4.5 meters with a median value of 3.3 m. Dissolved oxygen has been one of the problematic indicators of concern relative to the benthic readings in WOP Deep. Since 1995, readings have regularly returned levels under 1 mg/l, which indicates a hypoxic condition in the benthos. Whereas this is not as problematic for White Oak Pond as it is for Squam Lake since it lacks a coldwater fishery, it nonetheless indicates a 'dead zone' for larger aquatic life in the summer. Fortunately, in shallow mesotrophic ponds like White Oak Pond, organisms have adapted by either elevating themselves in the water column (e.g. plankton) or moving about in oxygen depleted waters to areas with greater dissolved oxygen levels (e.g. fish).

Another concerning indicator has been total phosphorus (TP). Levels above 12 ppb (and as an upper limit above 40 ppb) have been shown to accentuate benthic hypoxia owing to a release of higher nutrients (TP) that cause excessive algal growth in the spring and early summer. Readings for all of the sites at White Oak Pond regularly rise above 40 ppb and have been as high as 62 ppb. Whereas the trends have not been significant in either an increasing or decreasing direction, the consistently high levels have likely contributed to the loss of sufficient DO levels in many of the pond's shallower benthic areas.

The regularly high readings of TP have also likely contributed to the periodic spikes in chlorophyll a readings, which have ranged between 1 – 11 mg/l with a median value of 4.39 mg/l. This has subsequently affected water clarity (secchi disc transparency), color, and benthic hypoxia. Cyanobacteria can also be enhanced by high nutrient levels and in both of the last two years, the VLAP summary has reported an outbreak (bloom) of toxic cyanobacteria in the pond. Whereas this has not resulted in any reported fish die-offs, these types of events can be seriously detrimental to wildlife as well as humans and pets.

Other water quality indicators have been within acceptable levels at all seven of the instream flow sampling stations. Turbidity has been at or below 1.0 NTU, and chlorides levels have remained consistently under 10 mg/l except at the Holderness 'dump inlet,' WOPHOL3T, where it regularly ranges between 50 – 70 mg/l. Specific conductance has indicated some post-storm 'flashes' of sodium chloride release in the smaller tributaries that are nearer roadways (e.g. WOPHOL4 AND WEPHOL5), with some spikes above 120 µOhm/cm, although levels have generally been in the normal range of between 40 – 50 120 µOhm/cm for inflowing streams. Although within state and EPA limits, the chloride spikes at the dump sampling sites where additional road salt is being applied to the roadways nearby, has elevated the concern for the WOPWA.

Other than chemical concerns for the health of the watershed, there are a few additional biological concerns worth noting. Hemlock wooly adelgid has reached Holderness (2017) and could spread consistently through the region is warmer winters continue to occur. Emerald ash borer (EAB) has begun to invade the Squam Lakes region and will likely eliminate most of the ash trees within 3 – 5 years. Several other pest outbreaks have been reported with varying degrees of defoliation, such as winter moth, balsam wooly adelgid, red pine scale, and gypsy moth. Although many of these are host-specific, they can nonetheless present a concern to the health of the mixed forests of the watershed.

Summary & Recommendations

The 2982-acre White Oak Pond watershed is replete with a diversity of natural resources that is typical for the Squam Lakes region. With slightly lower elevations than the Squam watershed, the ecosystem tend to reflect temperate environments more common to the south rather than the montane conditions to the north. The 298-acre pond itself is the keystone feature of the watershed, and the two perennial tributaries leading into it make up the bulk of the unique and significant ecologies of the area. Since the outlet of the pond is dammed, the pond is self-contained relative to fish and other aquatic life, which underscores the need for careful management of the instream and in-pond natural resources.

Nearly one quarter of the watershed is comprised of surface waters, with an above-average amount of wetlands. These wetlands make up some of the most valuable aggregations of natural communities in the watershed, a fact that is underscored by the recognition of two exemplary natural communities within these systems. The 255-acre Lamb Swamp contains one of these, a premiere example of a Southern New England Basin Swamp, and the shallow water zone around Frank's island contains the other, a Northeast Acidic Pondshore/Lakeshore. These wetland complexes support much of the unique biodiversity of the White Oak Pond basin and help mediate good water quality for the pond through the actions of flood storage and nutrient attenuation and uptake.

The 2019 VLAP report on the status pf the water quality of the pond underscores some of the concerns to area residents relative to their enjoyment and continued use of the pond for recreation and aesthetic enjoyment. Increasing chloride levels indicate a continuing issue with road salt, since chlorides at high levels can interrupt the basic metabolic processes of aquatic life. Higher than average total phosphorus levels have likely been responsible for outbreaks of cyanobacteria and the slightly elevated levels of chlorophyll a in the water column. This has continued to create hypoxic conditions in the benthos of this shallow (10.7 m deep) pond, and such stress on the planktonic life in the pond could lead to a chain reaction that results in more toxic algal blooms and possible fish die-offs.

The following recommendations are offered in addition to those promulgated by the White Oak Pond Watershed Association relative to these concerns and in the general interest of improving the enjoyment of the natural resources of the watershed for future generations. This list is neither overly detailed nor entirely comprehensive, yet includes some of the salient suggestions that have been made by this author and others during past studies of the Squam Lakes region:

1) WOPWA should continue to act as a clearinghouse for general information on the watershed and underscore the importance of conscientious land use actions that protect the health of the waters that flow into White Oak Pond
2) A more comprehensive inventory of culverts and bridges needs to be performed to ensure adequate passage of aquatic organisms into and out of the pond and sufficiency for flood flows; these data should be entered into the statewide database for ease of identification and use
3) A careful review needs to be completed of run-off concerns in and around the watershed, e.g. the roadside ditch next to Route 3 that leads directly into White Oak Pond near the outlet
4) Passage of fish and other aquatic organisms at the current outflow dam should be reconsidered since this dam currently blocks passage for white suckers, chub, possibly smelt and other fish up and downstream

5) Expanded land conservation efforts should target the nine Significant Ecological Areas identified in this report, since these areas contain the highest quality fabric of ecological integrity in the watershed
6) New development along the pondshore should be discouraged and if possible, prohibited since even the Shoreland Water Quality Protection Act does not prevent soil destabilization or the removal of sufficient vegetative filter strips from the shoreline
7) Targeted inventories of selected species should be initiated in order to protect certain habitats; examples include potential nesting trees for bald eagles, loon nesting raft sites, restricted use areas that potentially contain rare species (e.g. sora nesting in Lamb Swamp), vernal pool inventories and registry with NH Fish & Game, searches for historic rare plant species such as small whorled pogonia and stiff gentian, and continued long-term monitoring of Plot A-4 to provide further biomonitoring samples to corroborate with the VLAP data

Lamb Swamp – typical view

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Appendices

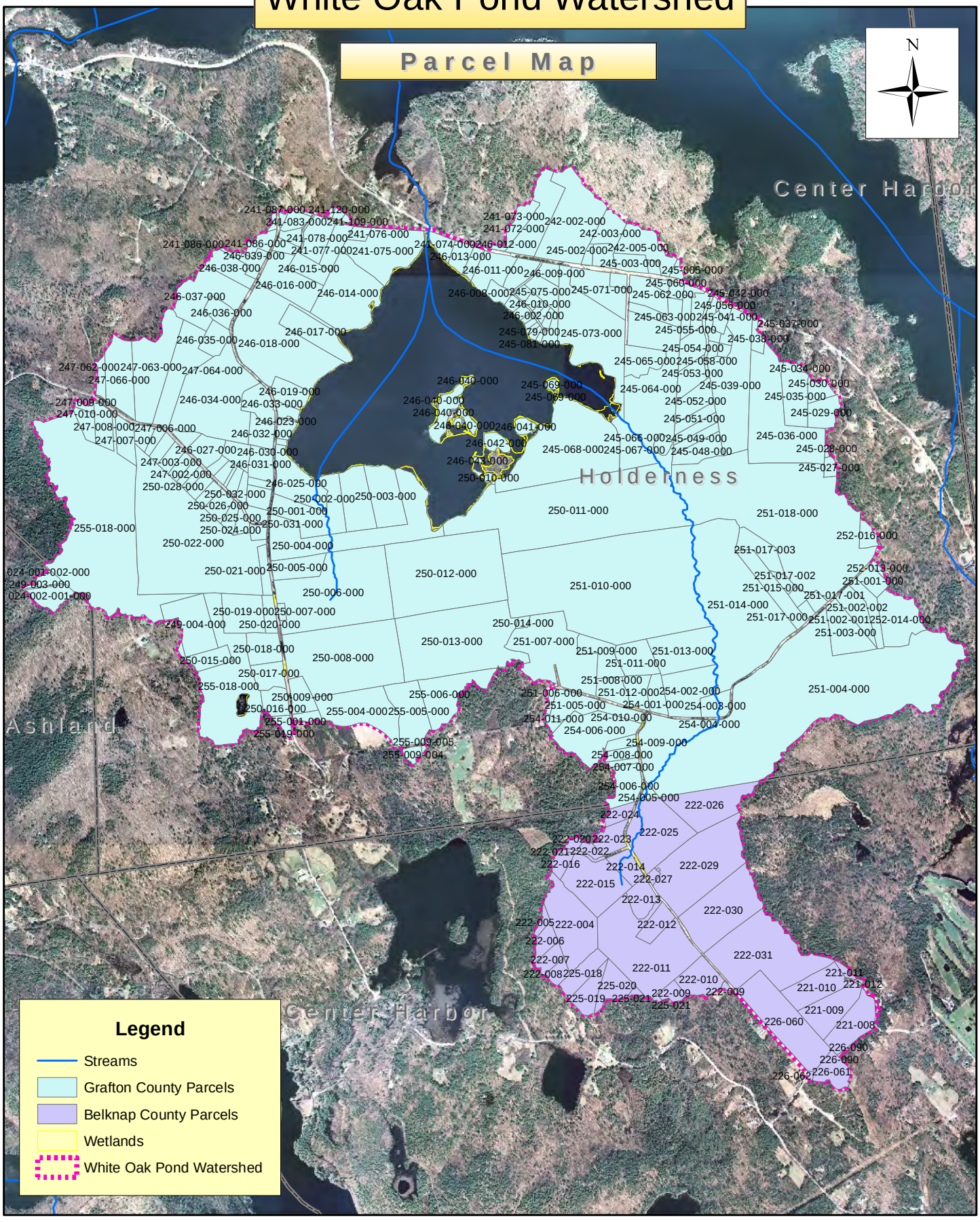
A) Maps

B) Species Lists

1:27,500

White Oak Pond Watershed

Parcel Map



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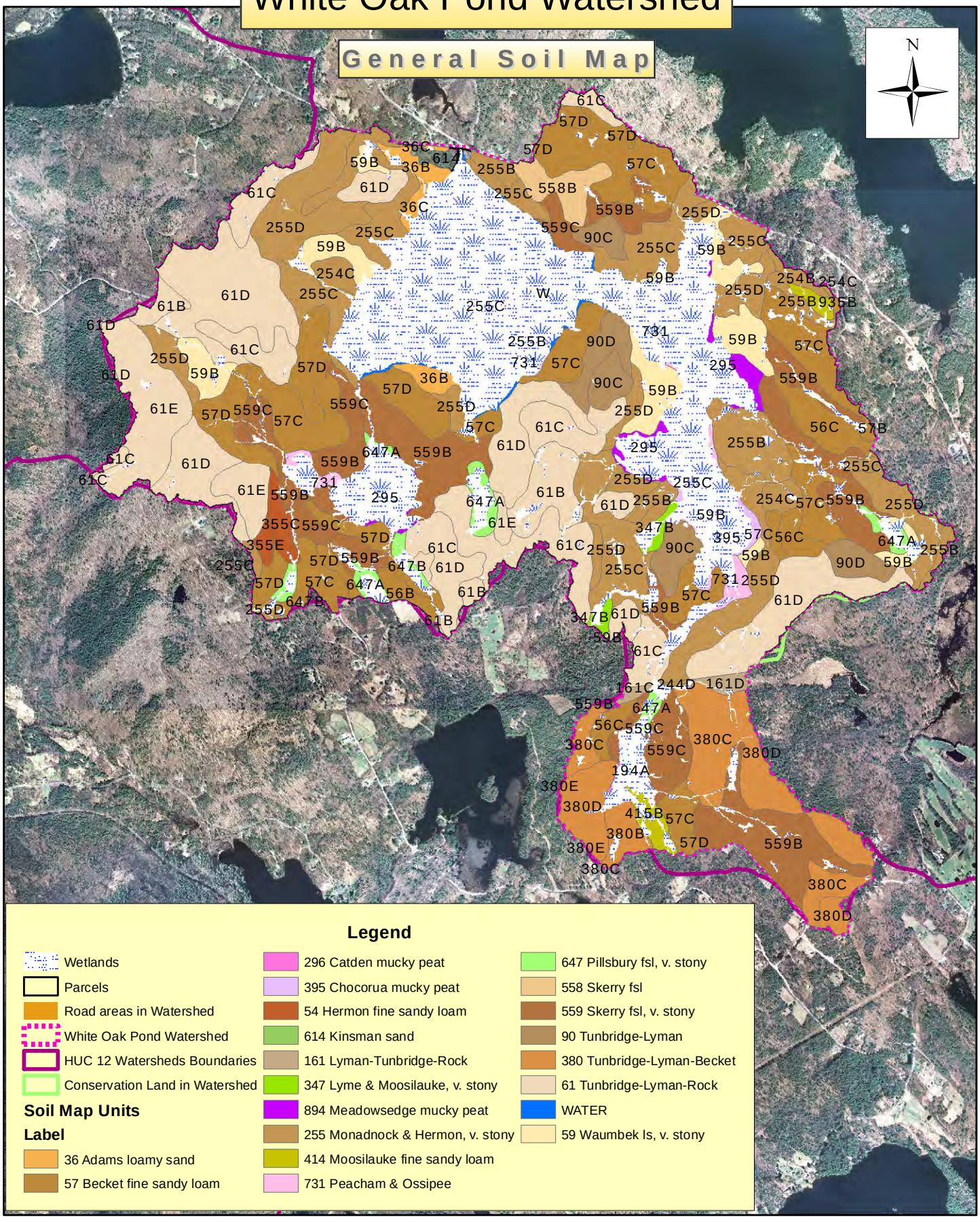
VdP/EMC 2020

1:30,000

White Oak Pond Watershed

General Soil Map



Legend

- Wetlands
- Parcels
- Road areas in Watershed
- White Oak Pond Watershed
- HUC 12 Watersheds Boundaries
- Conservation Land in Watershed

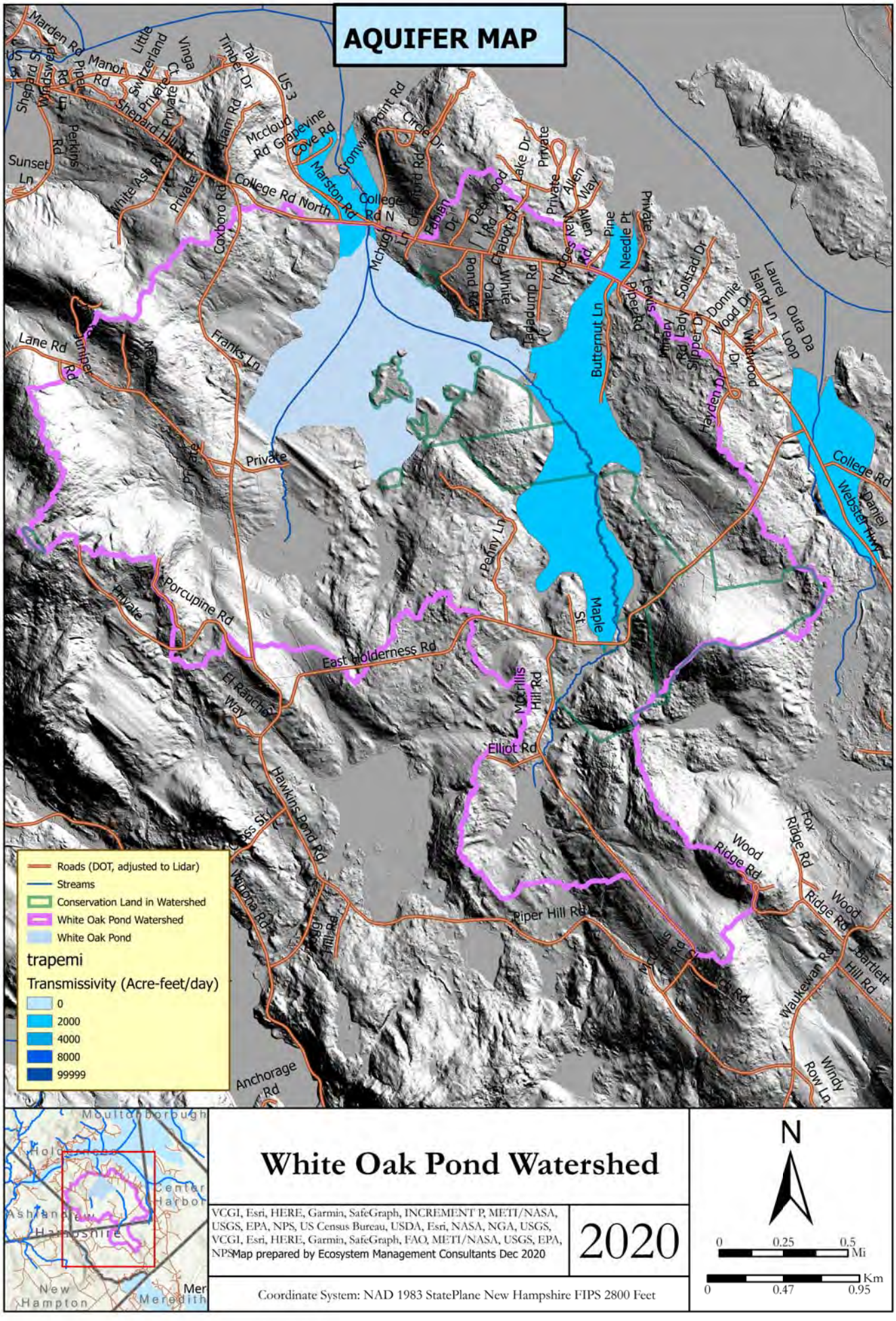
Soil Map Units

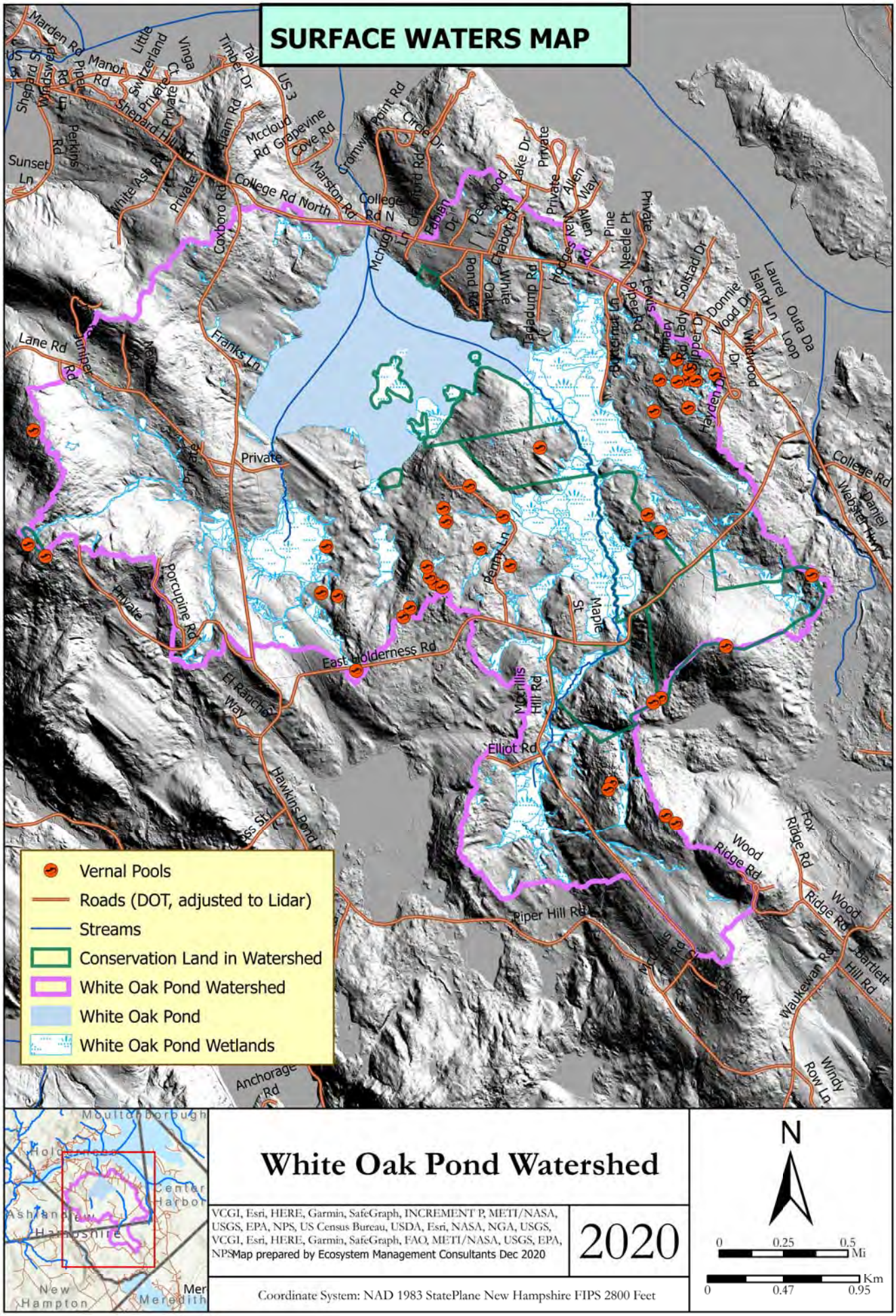
Label

- 36 Adams loamy sand
- 57 Becket fine sandy loam
- 296 Catden mucky peat
- 395 Chocorua mucky peat
- 54 Hermon fine sandy loam
- 614 Kinsman sand
- 161 Lyman-Tunbridge-Rock
- 347 Lyme & Moosilauke, v. stony
- 894 Meadowsedge mucky peat
- 255 Monadnock & Hermon, v. stony
- 414 Moosilauke fine sandy loam
- 731 Peacham & Ossipee
- 647 Pillsbury fsl, v. stony
- 558 Skerry fsl
- 559 Skerry fsl, v. stony
- 90 Tunbridge-Lyman
- 380 Tunbridge-Lyman-Becket
- 61 Tunbridge-Lyman-Rock
- WATER
- 59 Waumbek ls, v. stony

2,500 1,250 0 2,500 Meters

VdP/EMC 2020

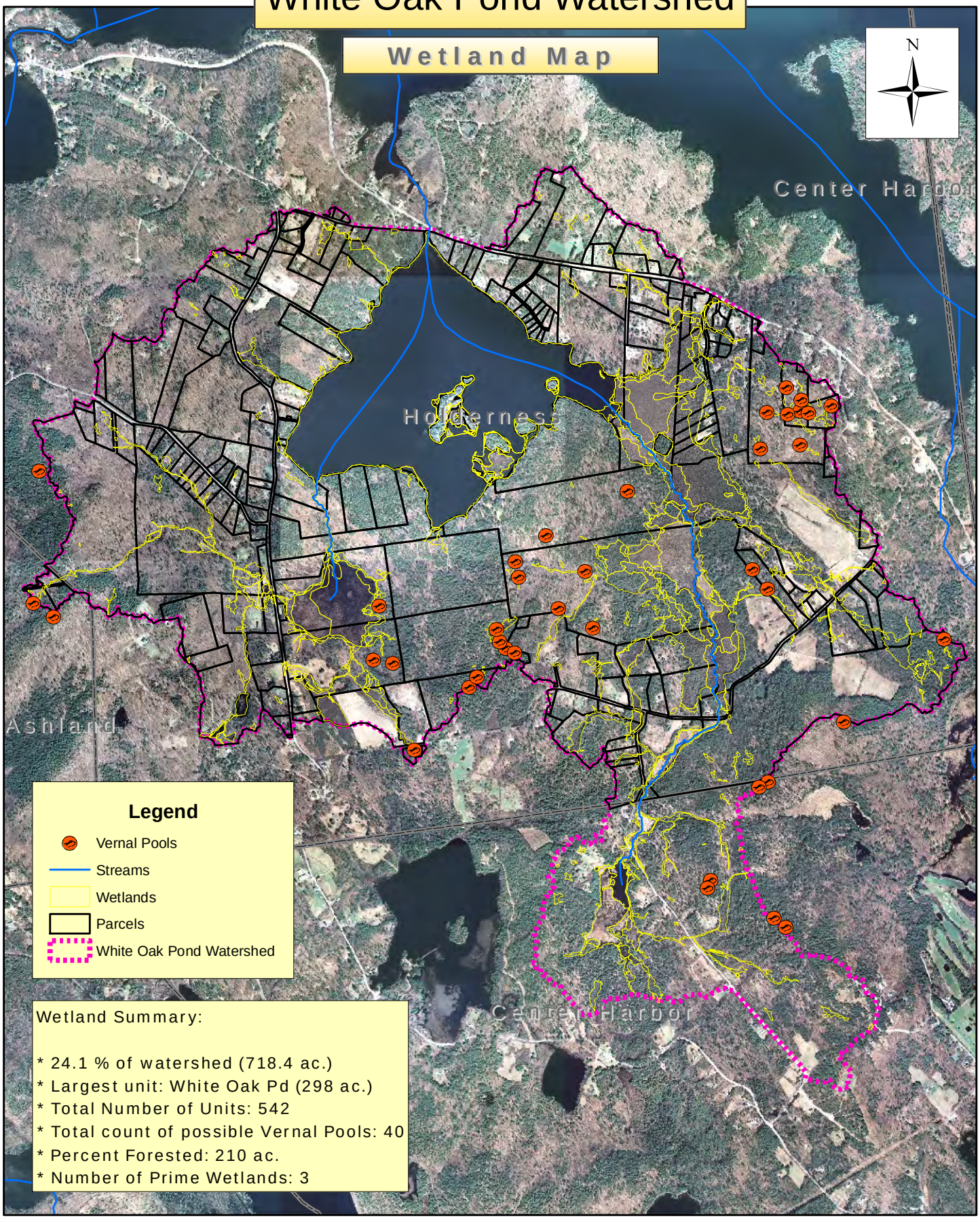

AQUIFER MAP
Roads (DOT, adjusted to Lidar)
Streams
Conservation Land in Watershed
White Oak Pond Watershed
White Oak Pond
trapemi
Transmissivity (Acre-feet/day)
0
2000
4000
8000
99999
Moultonborough
Holderness
Center Harbor
Ashland
Hampshire
New Hampton
Meredith
White Oak Pond Watershed
VCGI, Esri, HERE, Garmin, SafeGraph, INCREMENT P, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, Esri, NASA, NGA, USGS, VCGI, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS
Map prepared by Ecosystem Management Consultants Dec 2020
2020
Coordinate System: NAD 1983 StatePlane New Hampshire FIPS 2800 Feet
N
0 0.25 0.5 Mi
0 0.47 0.95 Km


SURFACE WATERS MAP
Vernal Pools
Roads (DOT, adjusted to Lidar)
Streams
Conservation Land in Watershed
White Oak Pond Watershed
White Oak Pond
White Oak Pond Wetlands
White Oak Pond Watershed
2020
VCGI, Esri, HERE, Garmin, SafeGraph, INCREMENT P, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, Esri, NASA, NGA, USGS, VCGI, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS
Map prepared by Ecosystem Management Consultants Dec 2020
Coordinate System: NAD 1983 StatePlane New Hampshire FIPS 2800 Feet
N
0 0.25 0.5 Mi
0 0.47 0.95 Km
Moultonborough
Center Harbor
Ashland
Hampshire
New Hampton
Meredith
Marden Rd
Manor Rd
Little Switzerland Dr
Vinga Ln
Timber Dr
Tall Timber Dr
US 3
Shepard Ln
Shepard Hill Rd
Private
Perkins Rd
Sunset Ln
White Ash Rd
Mccloud Rd
Grapevine Cove Rd
Cromwell Point Rd
Circle Dr
Lake Dr
Private
Allen Way
College Rd North
Marston Rd
College Rd N
Crawford Rd
Fabian Dr
Deerwood Dr
Chabot Dr
Pine Needle Pt
Conroy Rd
Mchugh Ln
Pond Rd
Oak
White
Tadadump Rd
Hodges Way Rd
Private
Lewis
Piper Rd
Solstad Dr
Donnie Wood Dr
Laurel Island Ln
Outa Da Loop
Wildwood Dr
Lane Rd
Juniper Rd
Franks Ln
Private
Private
College Rd
Daniel Webster Hwy
Penny Ln
Maple St
Porcupine Rd
Private
East Holderness Rd
El Rancho Way
McNills Hill Rd
Elliot Rd
Hawkins Pond
Fox Ridge Rd
Wood Ridge Rd
Piper Hill Rd
Waukewan Rd
Bartlett Hill Rd
Windy Row Ln
Anchorage Rd

1:27,500

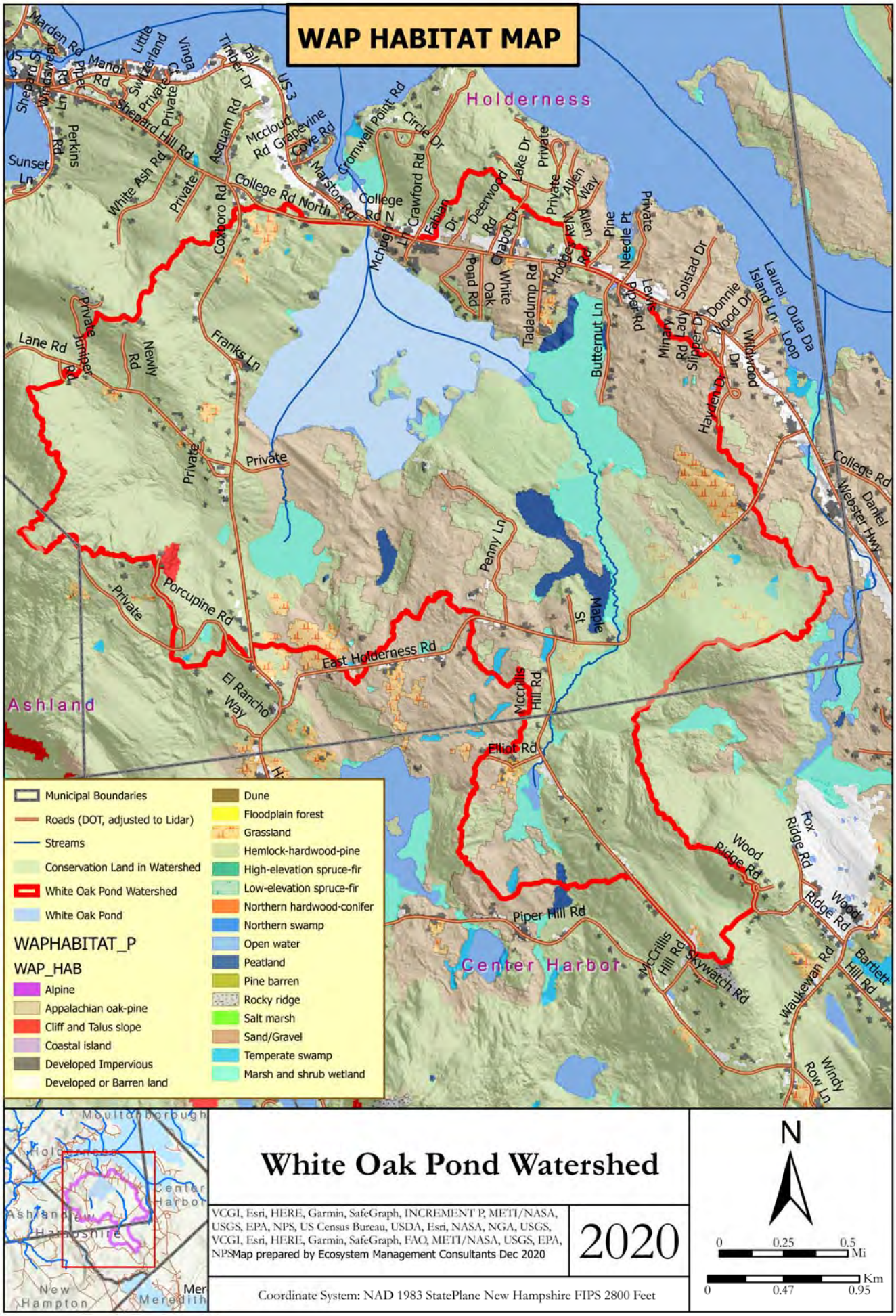
White Oak Pond Watershed

Wetland Map



2,300 1,150 0 2,300 Meters

VdP/EMC 2020


WAP HABITAT MAP
Holderness
Ashland
Center Harbor
Municipal Boundaries
Roads (DOT, adjusted to Lidar)
Streams
Conservation Land in Watershed
White Oak Pond Watershed
White Oak Pond
WAPHABITAT_P
WAP_HAB
Alpine
Appalachian oak-pine
Cliff and Talus slope
Coastal island
Developed Impervious
Developed or Barren land
Dune
Floodplain forest
Grassland
Hemlock-hardwood-pine
High-elevation spruce-fir
Low-elevation spruce-fir
Northern hardwood-conifer
Northern swamp
Open water
Peatland
Pine barren
Rocky ridge
Salt marsh
Sand/Gravel
Temperate swamp
Marsh and shrub wetland
Moultonborough
Center Harbor
Ashland
Hampshire
New Hampton
Meredith
White Oak Pond Watershed
VCGI, Esri, HERE, Garmin, SafeGraph, INCREMENT P, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, Esri, NASA, NGA, USGS, VCGI, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS
Map prepared by Ecosystem Management Consultants Dec 2020
2020
Coordinate System: NAD 1983 StatePlane New Hampshire FIPS 2800 Feet
N
0 0.25 0.5 Mi
0 0.47 0.95 Km

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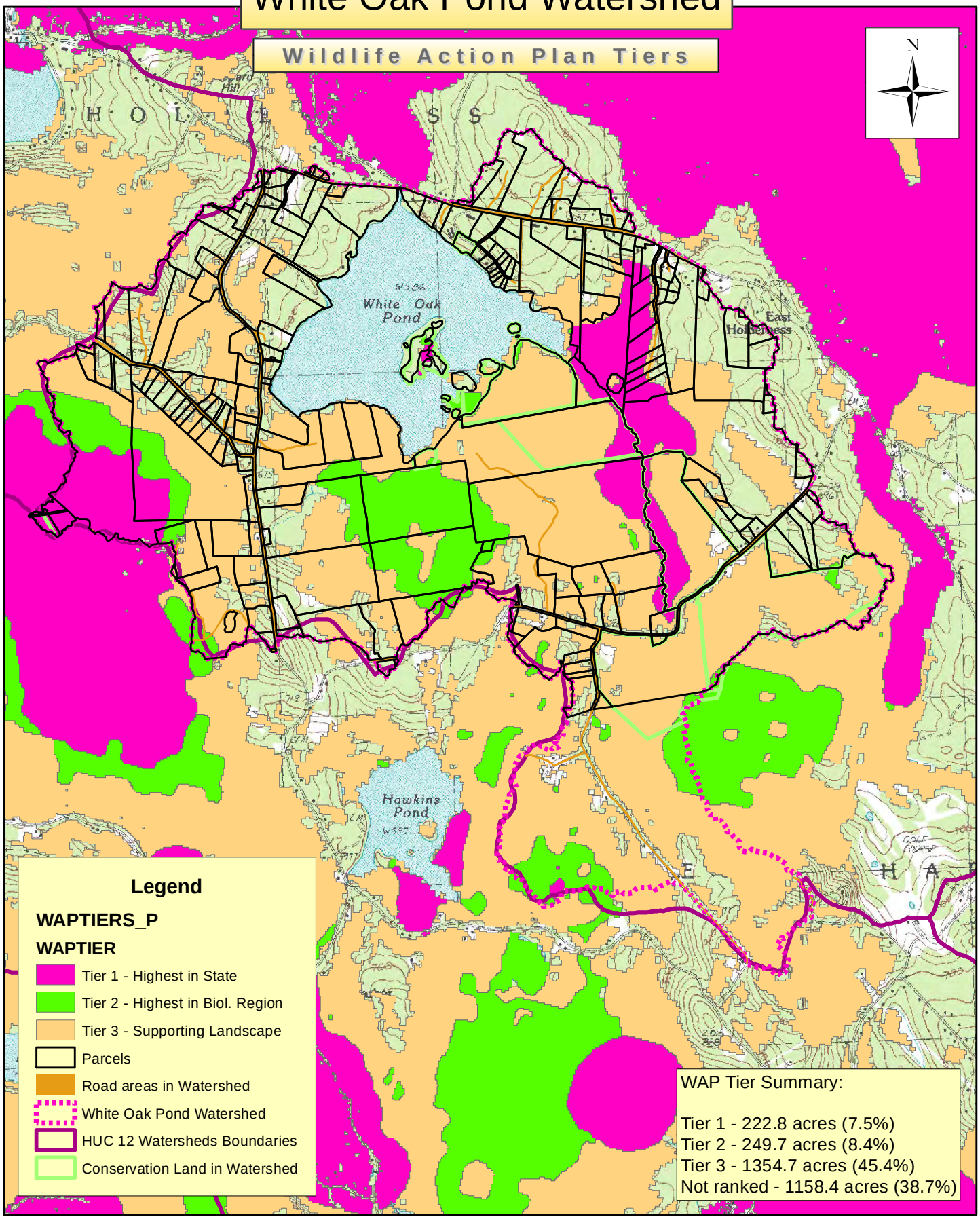
White Oak Pond Watershed

Wildlife Action Plan Tiers



2,500 1,250 0 2,500 Meters

VdP/EMC 2020

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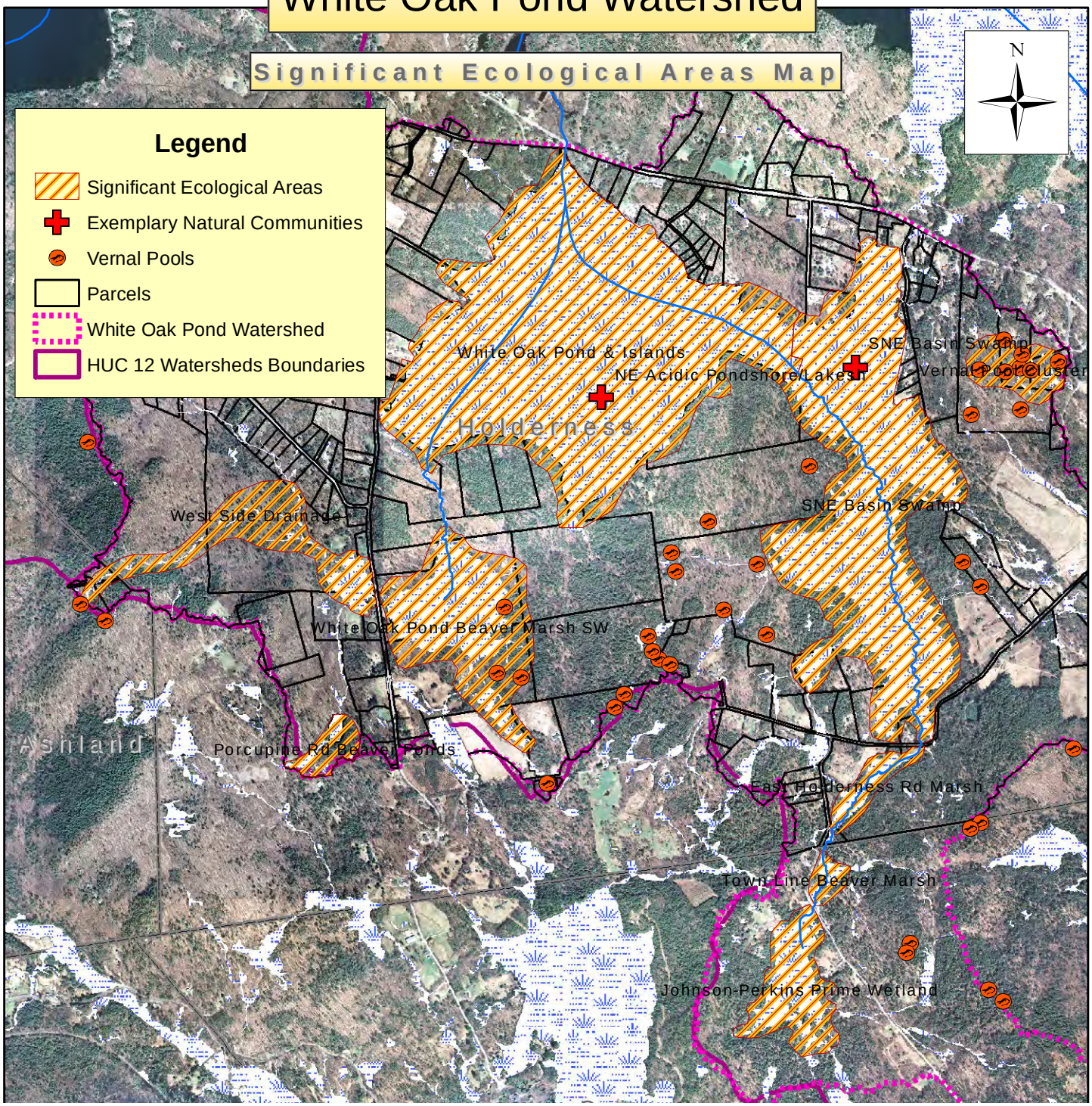
White Oak Pond Watershed

Significant Ecological Areas Map



Id	Name	Attrib_1	Attrib_2	Attrib_3	ACRES	AREA	PERIMETE
1	Johnson-Perkins Prime Wetlan	Wildlife habita	ccccccc		40.222208	1752079.3	6967.574
2	Town Line Beaver Marsh	Wildlife habita	Bird diversity	Flood storage	6.758774	294412.21	2183.793
3	East Holderness Rd Marsh	Wildlife habita	Nesting waterfowl	Flood storage	13.425164	584800.15	4076.621
4	SNE Basin Swamp	Wildlife habita	Exemplary natural co	Water quality	255.39149	11124853.	22801.88
5	Vernal Pool Cluster	Wildlife habita	Vernal pools	High water tables	22.13531	964214.10	4011.305
6	White Oak Pond & Islands	Wildlife habita	Freshwater fishery	Exemplary Pondsh	376.86729	16416339.	21123.75
7	White Oak Pond Beaver Marsh	Wildlife habita	Exemplary basin mar	Vernal pools	93.292266	4063811.1	9592.756
8	Porcupine Rd Beaver Ponds	Wildlife habita	Nesting waterfowl		11.321279	493154.90	3299.869
9	West Side Drainage	Riparian habit	Steep slopes	Beaver marsh	53.779072	2342616.3	11588.53

2,100 1,050 0 2,100 Meters

VdP/EMC 2020

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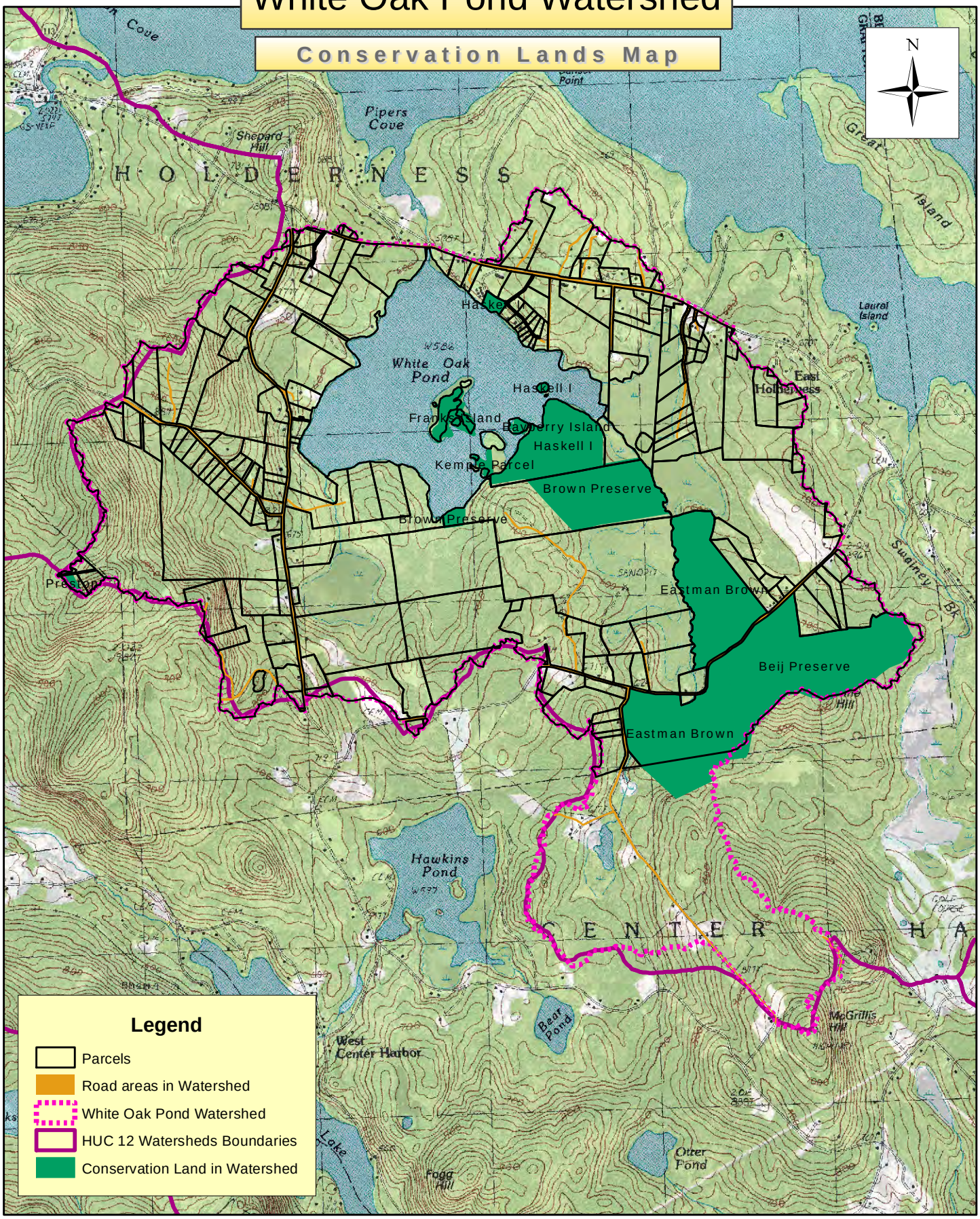
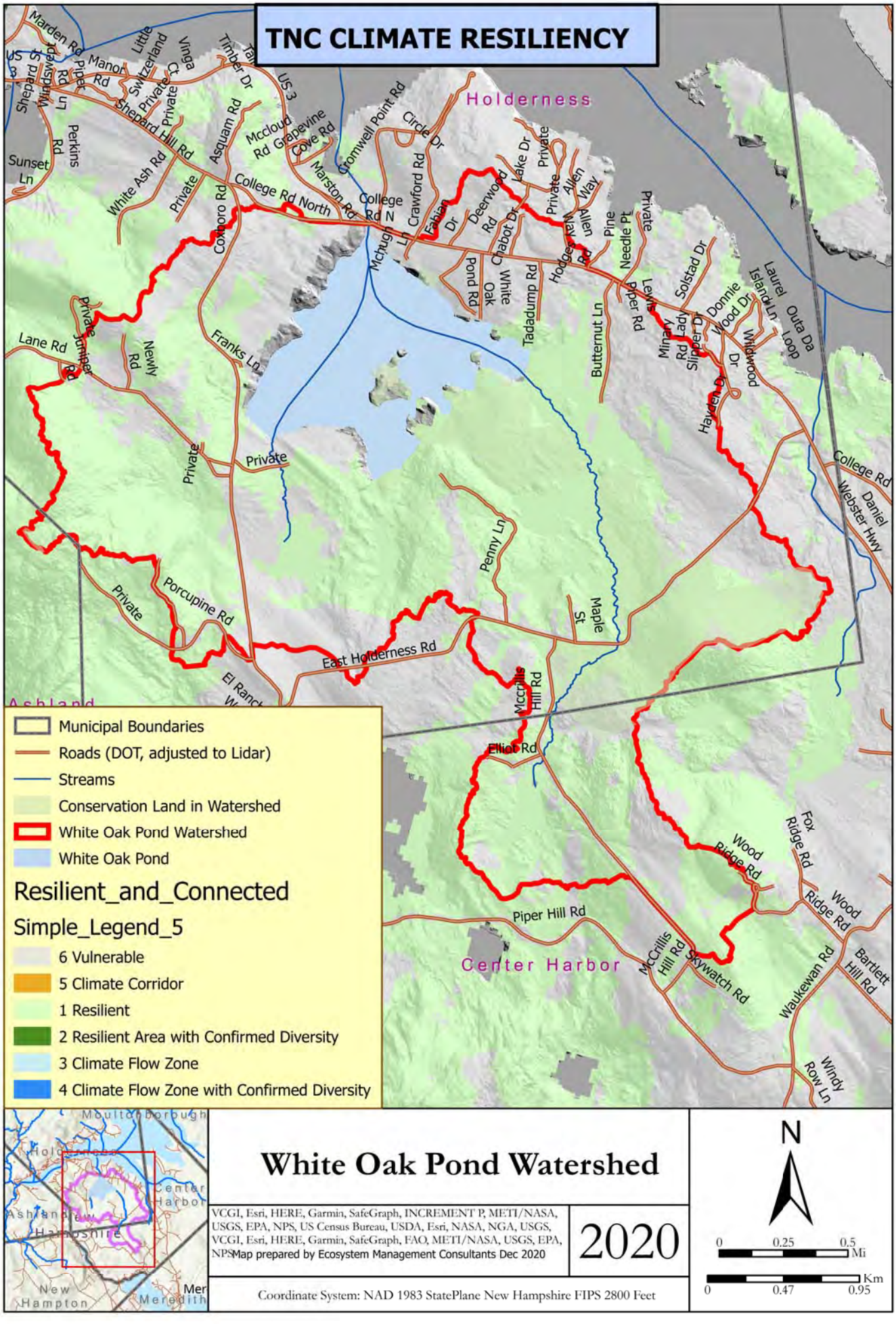
White Oak Pond Watershed

Conservation Lands Map



2,500 1,250 0 2,500 Meters

VdP/EMC 2020


TNC CLIMATE RESILIENCY
Holderness
Center Harbor
Ashland
Municipal Boundaries
Roads (DOT, adjusted to Lidar)
Streams
Conservation Land in Watershed
White Oak Pond Watershed
White Oak Pond
Resilient_and_Connected
Simple_Legend_5
6 Vulnerable
5 Climate Corridor
1 Resilient
2 Resilient Area with Confirmed Diversity
3 Climate Flow Zone
4 Climate Flow Zone with Confirmed Diversity
White Oak Pond Watershed
2020
VCGI, Esri, HERE, Garmin, SafeGraph, INCREMENT P, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, Esri, NASA, NGA, USGS, VCGI, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS
Map prepared by Ecosystem Management Consultants Dec 2020
Coordinate System: NAD 1983 StatePlane New Hampshire FIPS 2800 Feet
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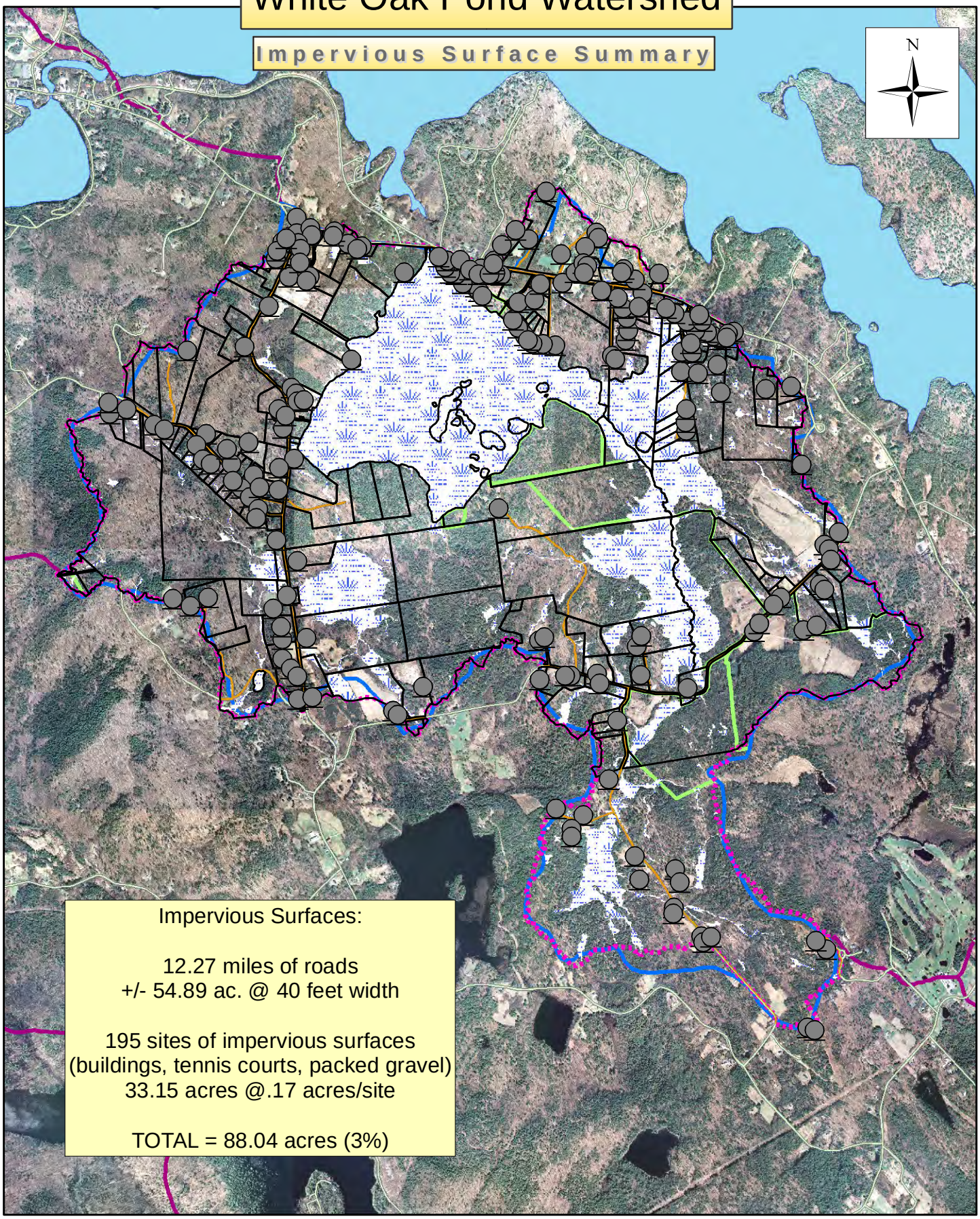
White Oak Pond Watershed

Impervious Surface Summary



2,500 1,250 0 2,500 Meters

VdP/EMC 2020

SQUAM RANGE BIOBLITZ MAMMAL LIST

Highlighted species are rare - please provide GPS data!

X	Scientific Name	Common Name	Possible Observational Sign	Identifier Name	Confirmer Initials
	Didelphimorphia – Didelphidae				
	Didelphis virginiana	Virginia opossum	sighting (with young)		
	Insectivora - Soricidae				
	Sorex cinereus	Masked shrew	sighting, track, tunnels, scat		
	Sorex palustris	Northern water shrew	sighting, track		
	Sorex fumeus	Smoky shrew	NOT RECORDED YET		
	Sorex dispar	Long-tailed shrew	White Mtns - NOT RECORDED YET		
	Sorex hoyi thompsoni	Pygmy shrew	White Mtns - NOT RECORDED YET		
	Blarina brevicauda	Short-tailed shrew	sighting, track, scat, odor		
	Insectivora - Talpidae				
1	Parascalops breweri	Hairy-tailed mole	sighting, tunnels & mounds		
	Chondylura cristata	Star-nosed mole	sighting, tunnels		
	Chiroptera - Vespertilionidae				
	Myotis lucifugus	Little brown myotis	sighting, roost, scat		
	Myotis septentrionalis	Northern myotis (long-eared)	NOT RECORDED YET		
	Myotis leibii	Eastern small-footed bat	NOT RECORDED YET		
	Lasionycteris noctivagans	Silver-haired bat	sighting		
	Pipistrellus subflavus	Eastern pipistrelle	NOT RECORDED YET		
	Eptesicus fuscus	Big brown bat	sighting, roost, scat		
	Lasiurus borealis	Red bat	NOT RECORDED YET		
	Lasiurus cinereus	Hoary bat	NOT RECORDED YET		
	Lagomorpha - Leporidae				
	Lepus americanus	Snowshoe hare	sighting, forms, track, browse, scat		
	Rodentia - Sciuridae				
1	Marmota monax	eastern woodchuck	sighting, track, scat, den		
1	Tamias striatus	Eastern chipmunk	sighting, track, chew marks, tunnels		
1	Sciurus carolinensis	Gray Squirrel	sighting, track, chew marks, cache, drey		
1	Tamiasciurus hudsonicus	Red squirrel	sighting, track, chew marks, tunnels		
1	Glaucomys volans	Southern flying squirrel	sighting, track, voice, chew marks		
	Glaucomys sabrinus	Northern flying squirrel	reported sighting, track, nest, chew marks		
	Rodentia – Castoridae				
1	Castor canadensis	beaver	sighting, track, lodge, browse, musk pile		
	Rodentia - Muridae				
1	Peromyscus maniculatus	Deer mouse	sighting, track, tunnels, chew marks		
	Peromyscus leucopus	White-footed mouse	sighting, track, tunnels, chew marks		
	Clethrionomys gapperi	Red-backed vole	sighting, track, tunnels, scat		
	Microtus pennsylvanicus	Meadow vole	sighting, tunnels, browse, scat		
	Microtus chrotorrhinus	Rock (yellow-nosed) vole	White Mtns - NOT RECORDED YET		
	Pitymus pinetorum	Woodland or pine vole	reported sighting, tunnels, chew marks		
1	Ondatra zibethicus	Muskrat	sighting, track, scat, lodge		
	Synaptomys cooperi	Southern bog lemming	scat (in bogs & fens)		
	Rattus norvegicus	Norway rat	sighting, scat		
	Mus musculus	House mouse	reported sighting		
	Rodentia - Zapodidae				
	Zapus hudsonius	Meadow jumping mouse	sighting, track		

	Napeozapus insignis	Woodland Jumping Mouse	sighting		
	Rodentia - Erethizontidae				
	Erethizon dorsatum	Porcupine	sighting, track, voice, browse, scat, den		
	Carnivora - Canidae				
	Canis lupus	Eastern timber wolf	NOT RECORDED YET		
	Canis latrans var.	Eastern coyote	sighting, track, voice, scat		
	Canis lupus familiaris	Domestic dog	sighting, track, scat		
	Vulpes vulpes	Red fox	sighting, track, scat, den		
	Urocyon cinereoargenteus	Gray fox	sighting, track, scat		
	Carnivora - Ursidae				
1	Ursus americanus	Black bear	sighting, den, track, claw marks, scat		
	Carnivora - Procyonidae				
1	Procyon lotor	Raccoon	sighting, den, track, scat		
	Carnivora - Mustelidae				
	Martes americana	Pine marten	reported sighting, track, scat		
	Martes pennanti	Fisher	sighting, track, urine, scat, pups		
	Mustela erminea	Ermine or short-tailed weasel	sighting (kill), track, voice, scat, den		
	Mustela frenata	Long-tailed weasel	track, urine, scat		
	Mustela vison	Mink	sighting, track, urine, scat		
	Mephitis mephitis	Striped skunk	sighting, track, excavation, burrow, odor		
	Lutra canadensis	River Otter	sighting, track, scat, den, slide		
	Carnivora - Felidae				
	Felis concolor	Mountain lion or cougar	2 scats DNA tested, sev. anecdotal reports		
	Lynx canadensis	Lynx	historical data, 1 recent report		
	Lynx rufus	Bobcat	sighting, track, scratching/chew, scat		
	Artiodactyla - Cervidae				
1	Odocoileus virginianus	White-tailed deer	sighting, track, browse, antlers, scat		
1	Alces alces	Moose	sighting, track, wallow, barking, scat		

13	**TOTAL**

Bird Observations

Date Range: Change Date

Jan-Dec, 1900-2020

Change Location [Squam Lakes Natural Science Center, Holderness] [Squam Lake southeast--Belknap County] [Squam Lake (overall)] [Hoag Island] [Squam Lake northeast--Carroll County] [Squam Lake west--Grafton County] [Five Finger Point Natural Area, Sandwich]

Updated ~10 hr(s) ago.

177 species (+10 other taxa)

Snow Goose (*Anser caerulescens*)

Brant (*Branta bernicla*)

Canada Goose (*Branta canadensis*)

Wood Duck (*Aix sponsa*)

Mallard (*Anas platyrhynchos*)

American Black Duck (*Anas rubripes*)

Mallard x American Black Duck (hybrid) (*Anas platyrhynchos x rubripes*)

Mallard/American Black Duck (*Anas platyrhynchos/rubripes*)

Northern Pintail (*Anas acuta*)

Green-winged Teal (*Anas crecca*)

Ring-necked Duck (*Aythya collaris*)

Greater/Lesser Scaup (*Aythya marila/affinis*)

Common Eider (*Somateria mollissima*)

Surf Scoter (*Melanitta perspicillata*)

White-winged Scoter (*Melanitta deglandi*)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Black Scoter (Melanitta americana)
Long-tailed Duck (Clangula hyemalis)
Bufflehead (Bucephala albeola)
Common Goldeneye (Bucephala clangula)
Hooded Merganser (Lophodytes cucullatus)
Common Merganser (Mergus merganser)
Ruffed Grouse (Bonasa umbellus)
Wild Turkey (Meleagris gallopavo)
Pied-billed Grebe (Podilymbus podiceps)
Horned Grebe (Podiceps auritus)
Red-necked Grebe (Podiceps grisegena)
Western Grebe (Aechmophorus occidentalis)
Rock Pigeon (Columba livia)
Mourning Dove (Zenaida macroura)
Yellow-billed Cuckoo (Coccyzus americanus)


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Black-billed Cuckoo (Coccyzus erythropthalmus)
Common Nighthawk (Chordeiles minor)
Eastern Whip-poor-will (Antrostomus vociferus)
Chimney Swift (Chaetura pelagica)
Ruby-throated Hummingbird (Archilochus colubris)
Virginia Rail (Rallus limicola)
American Coot (Fulica americana)
Purple Sandpiper (Calidris maritima)
Short-billed Dowitcher (Limnodromus griseus)
American Woodcock (Scolopax minor)
Red-necked Phalarope (Phalaropus lobatus)
phalarope sp. (Phalaropus sp.)
Spotted Sandpiper (Actitis macularius)
Solitary Sandpiper (Tringa solitaria)
Greater Yellowlegs (Tringa melanoleuca)


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Bonaparte's Gull (Chroicocephalus philadelphia)
Ring-billed Gull (Larus delawarensis)
Herring Gull (Larus argentatus)
Great Black-backed Gull (Larus marinus)
gull sp. (Larinae sp.)
Caspian Tern (Hydroprogne caspia)
Common Tern (Sterna hirundo)
Forster's Tern (Sterna forsteri)
tern sp. (Sterninae sp.)
Red-throated Loon (Gavia stellata)
Common Loon (Gavia immer)
Great Cormorant (Phalacrocorax carbo)
Double-crested Cormorant (Phalacrocorax auritus)
Great Blue Heron (Ardea herodias)
Great Egret (Ardea alba)


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Black-crowned Night-Heron (Nycticorax nycticorax)
Turkey Vulture (Cathartes aura)
Osprey (Pandion haliaetus)
Sharp-shinned Hawk (Accipiter striatus)
Cooper's Hawk (Accipiter cooperii)
Northern Goshawk (Accipiter gentilis)
Bald Eagle (Haliaeetus leucocephalus)
Red-shouldered Hawk (Buteo lineatus)
Broad-winged Hawk (Buteo platypterus)
Red-tailed Hawk (Buteo jamaicensis)
Eastern Screech-Owl (Megascops asio)
Great Horned Owl (Bubo virginianus)
Barred Owl (Strix varia)
Belted Kingfisher (Megaceryle alcyon)
Yellow-bellied Sapsucker (Sphyrapicus varius)


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Red-bellied Woodpecker (Melanerpes carolinus)
Downy Woodpecker (Dryobates pubescens)
Hairy Woodpecker (Dryobates villosus)
Pileated Woodpecker (Dryocopus pileatus)
Northern Flicker (Colaptes auratus)
American Kestrel (Falco sparverius)
Merlin (Falco columbarius)
Olive-sided Flycatcher (Contopus cooperi)
Eastern Wood-Pewee (Contopus virens)
Yellow-bellied Flycatcher (Empidonax flaviventris)
Alder Flycatcher (Empidonax alnorum)
Willow Flycatcher (Empidonax traillii)
Least Flycatcher (Empidonax minimus)
Empidonax sp. (Empidonax sp.)
Eastern Phoebe (Sayornis phoebe)


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Great Crested Flycatcher (Myiarchus crinitus)
Eastern Kingbird (Tyrannus tyrannus)
Yellow-throated Vireo (Vireo flavifrons)
Blue-headed Vireo (Vireo solitarius)
Philadelphia Vireo (Vireo philadelphicus)
Warbling Vireo (Vireo gilvus)
Red-eyed Vireo (Vireo olivaceus)
Blue Jay (Cyanocitta cristata)
American Crow (Corvus brachyrhynchos)
Fish Crow (Corvus ossifragus)
Common Raven (Corvus corax)
Black-capped Chickadee (Poecile atricapillus)
Tufted Titmouse (Baeolophus bicolor)
Northern Rough-winged Swallow (Stelgidopteryx serripennis)
Tree Swallow (Tachycineta bicolor)


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Bank Swallow (Riparia riparia)
Barn Swallow (Hirundo rustica)
Cliff Swallow (Petrochelidon pyrrhonota)
swallow sp. (Hirundinidae sp.)
Golden-crowned Kinglet (Regulus satrapa)
Ruby-crowned Kinglet (Regulus calendula)
Red-breasted Nuthatch (Sitta canadensis)
White-breasted Nuthatch (Sitta carolinensis)
Brown Creeper (Certhia americana)
Blue-gray Gnatcatcher (Polioptila caerulea)
House Wren (Troglodytes aedon)
Winter Wren (Troglodytes hiemalis)
Marsh Wren (Cistothorus palustris)
Carolina Wren (Thryothorus ludovicianus)
European Starling (Sturnus vulgaris)


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Gray Catbird (Dumetella carolinensis)
Northern Mockingbird (Mimus polyglottos)
Eastern Bluebird (Sialia sialis)
Veery (Catharus fuscescens)
Gray-cheeked/Bicknell's Thrush (Catharus minimus/bicknelli)
Swainson's Thrush (Catharus ustulatus)
Hermit Thrush (Catharus guttatus)
Wood Thrush (Hylocichla mustelina)
American Robin (Turdus migratorius)
Bohemian Waxwing (Bombycilla garrulus)
Cedar Waxwing (Bombycilla cedrorum)
House Sparrow (Passer domesticus)
Evening Grosbeak (Coccothraustes vespertinus)
Pine Grosbeak (Pinicola enucleator)
House Finch (Haemorhous mexicanus)


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Dec
Purple Finch (Haemorhous purpureus)
Common Redpoll (Acanthis flammea)
Red Crossbill (Loxia curvirostra)
Pine Siskin (Spinus pinus)
American Goldfinch (Spinus tristis)
Snow Bunting (Plectrophenax nivalis)
Chipping Sparrow (Spizella passerina)
Field Sparrow (Spizella pusilla)
American Tree Sparrow (Spizelloides arborea)
Fox Sparrow (Passerella iliaca)
Dark-eyed Junco (Junco hyemalis)
White-crowned Sparrow (Zonotrichia leucophrys)
White-throated Sparrow (Zonotrichia albicollis)
Song Sparrow (Melospiza melodia)
Swamp Sparrow (Melospiza georgiana)


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Jul
Aug
Sep
Oct
Nov
Dec
Eastern Towhee (Pipilo erythrophthalmus)
Bobolink (Dolichonyx oryzivorus)
Orchard Oriole (Icterus spurius)
Baltimore Oriole (Icterus galbula)
Red-winged Blackbird (Agelaius phoeniceus)
Brown-headed Cowbird (Molothrus ater)
Rusty Blackbird (Euphagus carolinus)
Common Grackle (Quiscalus quiscula)
Ovenbird (Seiurus aurocapilla)
Louisiana Waterthrush (Parkesia motacilla)
Northern Waterthrush (Parkesia noveboracensis)
Black-and-white Warbler (Mniotilta varia)
Tennessee Warbler (Leiothlypis peregrina)
Nashville Warbler (Leiothlypis ruficapilla)
Common Yellowthroat (Geothlypis trichas)


Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Hooded Warbler (Setophaga citrina)
American Redstart (Setophaga ruticilla)
Northern Parula (Setophaga americana)
Magnolia Warbler (Setophaga magnolia)
Bay-breasted Warbler (Setophaga castanea)
Blackburnian Warbler (Setophaga fusca)
Yellow Warbler (Setophaga petechia)
Chestnut-sided Warbler (Setophaga pensylvanica)
Blackpoll Warbler (Setophaga striata)
Black-throated Blue Warbler (Setophaga caerulescens)
Palm Warbler (Setophaga palmarum)
Pine Warbler (Setophaga pinus)
Yellow-rumped Warbler (Setophaga coronata)
Prairie Warbler (Setophaga discolor)
Black-throated Green Warbler (Setophaga virens)

KEY: = insufficient data | = rare to widespread

Download Histogram Data

SQUAM RANGE BIOBLITZ AMPHIBIANS, REPTILES & FISH LIST

Highlighted species are rare - please include GPS data!

X	Family	Scientific Name	Common Name	Native?	Identifier Name	Confirmer Initials
		AMPHIBIANS				
	Ambystomidae	Ambystoma maculatum	spotted salamander	Y		
	Salamandridae	Notophthalmus viridescens	red-spotted newt	Y		
	Plethodontidae	Desmognathus fuscus	northern dusky salamander	Y		
1		Plethodon cinereus	redback salamander	Y		
		Hemidactylium scutatum	four-toed salamander	Y		
		Gyrinophilus porphyriticus	northern spring salamander	Y		
		Eurycea bislineata	northern two-lined salamander	Y		
1	Bufonidae	Bufo americanus	eastern American toad	Y		
1	Pseudacridae	Pseudacris crucifer	northern spring peeper	Y		
1	Hylidae	Hyla versicolor	gray treefrog	Y		
1	Ranidae	Rana catesbeiana	bullfrog	Y		
1		Rana clamitans	green frog	Y		
1		Rana sylvatica	wood frog	Y		
		Rana pipiens	no. leopard frog	Y		
1		Rana palustris	pickerel frog	Y		
		REPTILES				
1	Chelydridae	Chelydra s. serpentina	snapping turtle	Y		
	Kinosternidae	Sternothorus odoratus	stinkpot or musk turtle	Y		
	Emydidae	Chrysemmys picta picta	eastern painted turtle	Y		
		Chrysemmys picta marginata	midland painted turtle	Y		
		Clemmys guttata	spotted turtle	Y		
		Clemmys insculpta	wood turtle	Y		
		Emydoidea blandingii	Blanding's turtle	Y		
	Colubrudae	Nerodia sipedon sipedon	northern water snake	Y		
		Storeria dekayi dekayi	northern brown snake	Y		
		Storeria occipito-maculata	northern redbelly snake	Y		
		Thamnophis sirtalis sirtalis	eastern garter snake	Y		
		Thamnophis sauritus septentriona	northern ribbon snake	Y		
		Diadophis punctatus edwardsi	northern ringneck snake	Y		
		Opheodrys vernalis vernalis	eastern smooth green snake	Y		
		Lampropeltis t. triangulum	eastern milk snake	Y		
		FISHES				
	Osmeridae	Osmerus mordax	American or Rainbow smelt	Y		
	Coreogonidae	Coreogonus clupeaformis	Lake whitefish (shad)	N		
		neo-hantoniensis				
	Salmonidae	Salmo salar Sebago	Atlantic salmon (land-locked)	Y		
1		Salvelinus fontinalis	E. brook trout	Y		
		Salvelinus namaycush	Lake trout	y		
		namaycush				
		Salmo gairdneri	Rainbow trout	N		

	Catostomidae	Catostomus commersoni	White sucker	Y		
	Cyprinidae	Semotilus corporalis	Fallfish (roach)	Y		
		Notropis bifrenatus	Bridle shiner	Y		
		Notropis cornutus	Common shiner (redfin)	Y		
1		Notemigonus chrysoleucas	Golden shiner	Y		
		Couesius plumbeus	Lake chub	Y		
		Rhinichthys atratulus	Blacknose dace	Y		
		Phoxinus eos	Redbelly dace	Y		
		Fundulus diaphanus	Banded Killifish	Y		
	Ameiuridae	Ameiurus(Ictalurus) nebulosus	Brown bullhead (horned pout)	Y		
1	Esocidae	Esox niger	Chain pickerel	Y		
1	Serranidae	Morone americana	White perch	N		
1	Centrarchidae	Micropterus dolomieu	Smallmouth black bass	N		
1		Micropterus salmoides	Largemouth bass	N		
1		Lepomis gibbosus	Pumpkinseed sunfish	Y		
		Lepomis auritus	Yellowbelly (redbreast) sunfish	Y		
	Percidae	Perca flavescens	Yellow perch	Y		
	Cottidae	Cottus cognatus	Freshwater or slimy sculpin	Y		
	Gadidae	Lota lota maculosa	Burbot (cusk)	Y?		
	OTHER SPECIES					

16	**TOTAL**

Site #:		Sample #'s: ALL																				
ALL																						
Site Names:		# of samples																				
ALL		53																				
Replicate Number					A-1	A-2	A-3	A-4	A-5	A-6	A-7	A-8	A-9	A-10	A-18	A-19	A-20	SUM O	SUM F	SUM G	SUM S	SUM ALL	
Order/(group)	Family/(sub-family)/*(tribe)*	Genus/(species)	Reg.	T	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM						FTG
Aphanoneura																						1	
Aeolosomatida																						1	
	Aeolosomatidae		NR		0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Aeolosoma	NR		0	0	0	0	0	0	0	0	0	0	0	0	1			1.00			
Turbellaria																						4	
Alloecoela																						4	
	Plagiostomidae		AVG	5	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Hydrolimax (grisea)	AH	5	0	2	0	0	1	0	0	1	0	0	0	0	0			4.00	4.00		GC
Oligochaeta																						200	
Haplotaxida																						1	
	Haplotaxidae		AVG	8.5	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Haplotaxis	AH	8.5	0	0	0	0	0	0	0	0	0	0	0	0	1			1.00			GC
Lunbricina																						7	
	Lumbricidae		AVG	7	0	0	0	0	0	0	0	0	0	0	0	0	0		7.00				
		sp.	AH	7	0	0	0	0	1	6	0	0	0	0	0	0	0						GC
Lumbriculida																						167	
	Lumbriculidae		AVG	8	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Eclipidrilus	MA	8	0	10	0	0	2	0	0	0	0	0	0	0	0			12.00			GC
		Lumbriculus (variegatus)	NW	8	0	1	1	0	0	2	0	0	0	0	18	0	0			22.00	22.00		GC
		Stylodrilus (herringianus)	NW	8	5	1	7	0	4	10	0	0	13	0	91	2	0			133.00	133.00		GC
Tubificida																						25	
	Naididae		AVG	9.25	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Bratislavia	AH	9	0	2	6	0	4	6	0	0	0	0	0	0	0			18.00			GC
		Homochaeta (naidina)	AH	9	0	0	0	0	1	0	0	0	0	0	0	0	0			1.00	1.00		GC
		Nais	SE	9.1	0	2	0	0	0	1	0	0	0	0	0	0	0			3.00			GC
		Pristina	SE	9.9	0	0	0	0	1	0	0	0	0	0	0	0	0			1.00			GC
	Tubificidae		AVG	9.8	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Limnodrilus	SE	9.6	0	0	0	1	0	0	0	0	0	0	0	0	0			1.00			GC
		Varichaetadrilus	AH	10	0	0	0	0	0	1	0	0	0	0	0	0	0			1.00			GC
Euhirudinea																						161	
Hirudinea																						161	
	Erpobdellidae		AVG	7.87	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Erpobdella (punctata)	NW	8	0	0	0	1	3	0	0	0	0	0	0	0	0			4.00	4.00		PR
		Mooreobdella (melanostoma)	SE	7.8	0	0	0	1	1	2	0	0	0	0	0	0	0			4.00	4.00		PR
		Mooreobdella (microstoma)	SE	7.8	0	0	1	0	4	0	0	0	1	0	0	0	0			6.00	6.00		PR
	Glossiphoniidae		AVG	7.1	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Helobdella (fusca)	NW	6	0	1	2	0	0	0	0	0	0	0	0	0	0			3.00	3.00		PR
		Helobdella (stagnalis)	SE	6.7	0	0	18	0	0	0	0	0	11	0	0	0	0			29.00	29.00		PR
		Marvinmeyeria (lucida)	NW	8	0	0	6	0	1	0	1	0	0	0	0	0	0			8.00	8.00		PR
		Placobdella (papillifera)	SE	9	0	0	1	0	0	1	0	0	0	0	0	0	0			2.00	2.00		PR
		Placobdella (picta)	NW	6	0	0	0	0	0	0	0	0	0	0	1	0	2			3.00	3.00		PR
	Hirudinidae		AVG	7	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		sp.	NW	7	0	1	0	0	0	0	0	0	0	0	0	0	0		1				PR
	Piscicolidae		AVG	7	0	0	0	0	0	0	0	0	0	0	0	0	0						
		Myzobdella (lugubris)	AH	7	0	1	10	1	3	0	2	0	4	0	0	0	0			21.00	21.00		PR
Gastropoda																						319	
Pulmonata																						160	
	Ancylidae		AVG	7	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Ferrissia (fragilis)	MA	7	0	0	0	1	0	16	0	0	0	0	0	0	0			17.00	17.00		SC
	Lymnaeidae		AVG	7.2	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Pseudosuccinea (columella)	SE	7.2	0	0	0	1	0	0	0	0	0	0	0	0	0			1.00	1.00		SC
	Physidae		AVG	8	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Physella sp.	MA	8	0	0	0	0	2	2	0	0	0	0	0	0	0			4.00			SC
		Physella (gyrina)	MA	8	0	0	0	0	7	1	0	0	0	0	0	0	0			8.00	8.00		SC
		Physella (heterostropha)	MA	8	0	0	0	0	0	0	0	0	0	0	6	0	0			6.00	6.00		SC
	Planorbidae		AVG	6.82	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Gyraulus (circumstriatus)	MA	7	0	0	0	0	0	76	0	0	0	0	0	0	0			76.00	76.00		SC
		Helisoma (anceps)	MA	7	0	1	0	0	16	17	0	0	1	0	0	0	0			35.00	35.00		SC
		Menetus (dilatatus)	MW	8.1	0	0	0	0	0	6	0	0	0	0	0	0	0			6.00	6.00		SC
		Planorbella	NW	6	0	0	0	0	0	2	0	0	0	0	0	0	0			2.00			SC
		Planorbella (campanulata)	NW	6	0	0	0	0	0	1	3	0	1	0	0	0	0			5.00	5.00		SC
Prosobranchia																						159	
	Limacidae		AVG	7	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Amnicola sp.	MW	5	0	0	0	0	4	6	0	0	0	0	0	0	0			10.00			SC
		Amnicola (grana)	MA	8	0	1	0	0	5	0	11	0	1	0	0	0	0			18.00	18.00		SC
		Amnicola (limosa)	MA	8	11	9	5	0	29	51	1	0	0	0	0	0	0			106.00	106.00		SC
	Hydrobiidae		AVG	7	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		sp.	MW	7	0	0	0	0	3	0	0	0	0	0	0	0	0		3				SC
		Probythinella (lacustris)	MW	7	0	2	0	0	1	1	0	0	0	0	0	0	0			4.00	4.00		SC
	Viviparidae		AVG	6	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Cipangopaludina (chinensis)	NW	6	0	6	2	0	7	3	0	0	0	0	0	0	0			18.00	18.00		SC
Bivalvia																						142	
Pelecypoda																						142	
	Sphaeriidae		AVG	6.67	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Musculium (securis)	MA	5	18	13	4	0	1	0	24	0	0	0	0	1	0			61.00	61.00		FC
		Musculium (lacustre)	MA	5	0	0	3	0	0	0	1	0	0	0	0	0	0			4.00	4.00		FC
		Pisidium sp.	MA	8	0	0	0	0	0	4	0	0	0	0	0	0	0			4.00			FC
		Pisidium (casertanum)	NW	8	0	2	0	2	5	18	0	0	0	0	0	0	7			34.00	34.00		FC
		Pisidium (walkeri)	NW	8	0	0	0	0	2	0	0	0	0	0	36	0	0			38.00	38.00		FC
		Sphaerium (occidentale)	NW	6	0	1	0	0	0	0	0	0	0	0	0	0	0			1.00	1.00		FC
Malacostraca																						2243	
Amphipoda																						1989	
	Crangonyctidae		AVG	4	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Crangonyx	MA	4	0	0	1	2	0	0	0	1	0	0	0	0	0			4.00			GC
	Hyalellidae		AVG	8	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Hyalella (azteca)	MA	8	69	246	947	247	16	242	136	23	50	8	0	0	1			1985.00	1985.00		GC
Isopoda																						238	
	Asellidae		AVG	6	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Caecidotea	MA	6	11	82	31	0	1	67	0	0	46	0	0	0	0			238.00			GC
Decopoda																						16	
	Cambaridae		AVG	6	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Orconectes (virilis)	MA	6	0	5	0	0	1	7	0	0	1	1	0	1	0			16.00	16.00		OM
Ostracoda																						2	
Podocopida																						2	
	fam.		AVG	8	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0				
		sp.	NW	8	0	0	1	0	0	1	0	0	0	0	0	0	0						GC
Branchiopoda																						62	
Cladocera																						62	
	Sididae		AVG	8	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Sida	NW	8	1	1	54	0	1	3	1	0	0	0	0	0	0			61.00			FC
		Latona	NW	8	0	0	0	0	0	1	0	0	0	0	0	0	0			1.00			FC
Acari																						42	
Hydrachnidia																						42	
	Hydrachnidae		AVG	8	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Hydrachna (sp1)	AH	8	0	0	1	3	0	1	7	0	0	0	0	1	0			13.00			PR
		Hydrachna (sp2)	AH	8	0	0	0	0	0	0	0	0	0	0	0	0	0			0.00			PR
		Hydrachna (sp3)	AH	8	0	0	0	0	0	0	0	0	0	0	0	1	0			1.00			PR
	Hydrodromidae		AVG	8	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Hydrodroma	AH	8	0	0	0	0	0	0	1	0	0	0	0	0	0			1.00			PR
	Hydryphantidae		AVG	8	0	0	0	0	0	0	0	0	0	0	0	0	0		0				

Replicate Number					A-1	A-2	A-3	A-4	A-5	A-6	A-7	A-8	A-9	A-10	A-18	A-19	A-20	SUM O	SUM F	SUM G	SUM S	SUM ALL	
Order/(group)	Family/(sub-family)/*(tribe)*	Genus/(species)	Reg.	T	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM						FTG
		Hydryphantes	AH	8	0	0	0	0	0	0	1	0	0	0	0	0	0			1.00			PR
	Limnesiidae		AVG	8	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Centrolimnesia	AH	8	0	0	0	0	0	0	4	0	0	0	0	0	0		4				PR
		Limnesia (sp1)	AH	8	0	0	0	0	0	0	0	0	0	0	0	0	0			0.00			PR
		Limnesia (sp2)	AH	8	0	0	0	0	0	0	4	0	0	0	0	0	0			4.00			PR
		Tyrrellia	AH	8	0	0	8	0	0	0	0	0	0	0	0	0	0			8.00			PR
	Unionicolidae		AVG	8	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Neumania (distincta)	AH	8	0	0	8	0	0	0	0	0	0	0	0	0	0			8.00	8.00		PR
		Unionicola	AH	8	0	0	2	0	0	0	0	0	0	0	0	0	0			2.00			PR
Insecta																						2209	
Ephemeroptera																						**668**	
	Ameletidae		AVG	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Ameletus	NW	0	1	0	2	0	0	0	0	0	0	0	0	3	0			6.00			GC
	Caenidae		AVG	7	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Caenis	MA	7	0	1	2	0	0	9	0	0	0	0	0	0	0			12.00			GC
	Ephemerellidae		AVG	2.4	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		sp.	NW	1	0	0	0	0	0	2	0	0	0	0	0	0	0		2				GC
		Ephemerella	NW	1	0	0	0	0	0	0	0	0	0	0	0	16	0			16.00			GC
		Eurylophella (sp1)	MA	4	2	0	0	0	1	0	0	0	0	0	54	8	5			70.00			SC
		Eurylophella (sp2)	MA	4	0	0	0	0	0	1	0	0	0	0	0	0	0			1.00			SC
		Serratella	MA	2	0	0	0	0	0	1	0	0	0	0	0	2	0			3.00			GC
	Ephemeridae		AVG	6	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Hexagenia	MA	6	0	0	0	1	1	2	0	0	1	5	0	0	0			10.00			GC
		Hexagenia (sp2)	MA	6	0	0	0	1	0	0	0	0	0	3	0	0	0			4.00			GC
	Heptageniidae		AVG	2.89	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		sp.	NW	4	1	1	0	0	0	0	0	0	0	0	0	0	0		2				SC
		Epeorus	UMW	0	0	0	0	0	0	0	0	0	0	0	0	6	0			6.00			SC
		Leucrocuta (sp1)	UMW	1	0	0	0	0	0	0	0	0	0	0	5	0	0			5.00			SC
		Leucrocuta (sp2)	UMW	1	0	0	0	0	0	4	0	0	0	0	0	0	0			4.00			SC
		Macdunnoa	NW	4	0	0	0	0	0	0	0	0	0	0	0	1	0			1.00			SC
		Stenacron	MA	4	45	79	1	0	2	7	0	28	11	10	0	0	0			183.00			SC
		Stenonema (sp1)	MA	4	1	21	2	0	0	0	1	2	18	0	0	22	0			67.00			SC
		Stenonema (sp2)	MA	4	0	1	0	0	0	0	0	0	34	0	0	0	0			35.00			SC
		Stenonema (sp3)	MA	4	0	0	0	0	0	0	0	0	4	0	0	0	0			4.00			SC
	Leptophlebiidae		AVG	2.2	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		(sp1)	NW	2	0	0	0	0	0	0	0	0	0	0	0	3	0			3.00			GC
		(sp2)	NW	2	0	0	0	0	0	0	0	0	0	0	0	0	0			0.00			
		Leptophlebia	UMW	4	0	0	0	0	0	0	0	20	0	0	5	0	0			25.00			
		Habrophlebiodes	NW	2	0	0	0	0	0	0	0	0	0	0	0	1	0			1.00			GC
		Paraleptophlebia (sp1)	MA	1	0	0	0	0	0	0	0	2	0	0	94	1	0			97.00			GC
	Neoephemeridae		AVG	2.1	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Neoephemera	SE	2.1	0	0	16	68	1	0	1	4	0	0	0	0	0			90.00			GC
	Polymitarcyidae		AVG	2	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Ephoron	NW	2	0	0	0	0	0	1	0	0	0	0	0	0	0			1.00			GC
	Siphlonuridae		AVG	7	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		sp.	NW	7	0	0	0	0	0	0	0	0	0	0	0	0	0		0				GC
		Siphlonurus	UMW	7	0	0	6	0	1	0	2	0	1	6	2	2	0			20.00			GC
Odonata																						**326**	
(Anisoptera)					0	0	0	0	0	0	0	0	0	0	0	0	0		0				
	Aeschnidae		AVG	4.67	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Aeschna	NW	5	0	0	0	1	0	0	0	1	0	3	8	0	0			13.00			PR
		Basiaeschna (janata)	UMW	6	0	0	0	0	0	1	0	0	0	0	2	0	0			3.00	3.00		PR
		Boyeria	NW	3	0	0	0	0	0	0	0	0	0	2	1	1	0		4				PR
	Cordulegastridae		AVG	3	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Cordulegaster	MA	3	0	0	0	0	0	0	0	0	1	46	5	0	0			52.00			PR
	Corduliidae		AVG	5.23	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Epitheca (Epicordulia)	SE	5.6	0	0	0	1	0	0	0	0	0	0	1	0	0			2.00			PR
		Epitheca (Tetragoneuria)	SE	8.5	0	0	0	2	3	0	0	0	0	0	0	0	0			5.00			PR
		Neurocordulia	SE	5.8	0	0	1	0	0	0	0	0	0	0	0	0	0			1.00			PR
		Somatochlora	MA	1	0	1	1	0	0	0	0	0	1	0	1	0	0			4.00			PR
	Gomphidae		AVG	3	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Gomphus	MA	5	0	0	0	0	0	0	0	1	0	1	0	0	0			2.00			PR
		Hagenius (brevistylus)	UMW	1	0	0	0	0	0	0	0	0	0	1	0	0	0			1.00	1.00		PR
	Libellulidae		AVG	6.43	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Leucorrhinia	MA	9	0	0	0	0	0	0	1	0	0	0	0	0	0			1.00			PR
		Libellula (Libellula) (sp1)	MA	8	0	0	0	13	0	0	2	0	0	0	0	0	0			15.00			PR
		Libellula (Libellula) (sp2)	MA	8	0	0	0	0	0	0	0	0	0	0	0	0	0			0.00			PR
		Libellula (Ladona)	MA	8	0	0	0	24	0	0	0	0	0	0	0	0	0			24.00			PR
		Perithemis (tenera)	MA	4	0	0	0	0	1	0	0	0	0	0	0	0	0			1.00	1.00		PR
		Sympetrum (sp1)	MA	4	0	0	3	2	0	0	0	0	0	0	0	0	0			5.00			PR
		Sympetrum (sp2)	MA	4	0	0	0	0	0	0	0	0	0	0	0	0	0			0.00			PR
(Zygoptera)					0	0	0	0	0	0	0	0	0	0	0	0	0		0				
	Calopterygidae		AVG	6	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Calopteryx	MA	6	0	0	0	0	0	0	0	0	0	1	0	0	0			1.00			PR
	Coenagrionidae		AVG	8.67	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Enallagma	MA	8	0	2	4	29	0	9	39	0	0	0	0	0	0			83.00			PR
		Ischnura	MA	9	0	0	0	0	0	1	0	0	0	0	0	0	0			1.00			PR
		Nehalennia	MA	9	0	0	11	12	0	25	13	0	0	0	0	0	0			61.00			PR
	Lestidae		AVG	9	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Lestes	NW	9	0	0	12	6	0	0	28	1	0	0	0	0	0			47.00			PR
Plecoptera																						**71**	
	Leuctridae		AVG	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Leuctra	MA	0	1	0	0	0	0	0	0	0	0	0	0	19	0			20.00			SH
		Paraleuctra	NW	0	0	0	0	0	0	0	0	0	0	0	0	12	0			12.00			SH
		Zealeuctra	NW	0	0	0	0	0	0	1	0	0	0	0	0	5	0			6.00			SH
	Peltoperlidae		AVG	1.4	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Tallaperla	SE	1.4	0	0	0	0	0	0	0	0	0	0	0	5	0			5.00			SH
	Perlidae		AVG	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Acroneuria	MA	0	0	0	0	0	0	0	0	0	1	0	0	19	0			20.00			PR
		Hansonoperla	MA	1	0	0	0	0	0	0	0	0	1	0	0	2	0			3.00			PR
	Perlodidae		AVG	1.43	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		sp.	MA	2	0	0	0	0	0	1	0	0	0	0	0	0	0		1				PR
		Arcynopteryx	MA	2	0	0	0	0	0	0	0	0	0	0	0	2	0			2.00			PR
		Remenus	SE	0.3	0	0	0	0	0	0	0	0	0	0	0	2	0			2.00			PR
Hemiptera																						**62**	
	Belostomatidae		AVG	9.8	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Belostoma	SE	9.8	0	0	0	0	0	0	0	0	0	2	0	0	0			2.00			PR
	Corixidae		AVG	8	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Cenocorixa	NW	8	0	0	5	0	0	0	0	0	0	1	0	0	0			6.00			PR
	Gerridae		AVG	5	0	0	0	0	0	0	0	0	0	0	1	0	0		1				
		Gerris	NW	5	0	0	0	0	0	0	0	0	0	0	1	1	4			6.00			PR
		Limnogonus	NW	5	0	0	0	0	0	0	0	0	0	0	0	0	0			0.00			PR
	Mesoveliidae		AVG	8	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Mesovelia	AH	8	0	0	4	1	0	0	0	0	0	0	0	0	0			5.00			PR
	Naucoridae		AVG	7	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Pelocoris	MA	7	0	0	8	0	0	0	4	0	0	0	0	0	0			12.00			PR
	Nepidae		AVG	7.5	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Ranatra (fusca)	SE	7.5	0	0	1	0	0	1	0	0	0	0	0	0	0			2.00			PR
	Notonectidae		AVG	8	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Notonecta	AH	8	0	0	0	2	0	0	0	0	0	0	6	0	0			8.00			PR
	Pleidae		AVG	8	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Neoplea	AH	8	0	0	2	0	0	0	1	0	0	0	0	0	0			3.00			PR
	Veliidae		AVG	6	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Microvelia	MA	6	0	0	0	0	0	0	1	0	0	0	0	0	0			1.00			PR
		Rhagovelia	MA	6	0	0	0	0	0	0	0	0	0	2	1	13	0			16.00			PR

Replicate Number					A-1	A-2	A-3	A-4	A-5	A-6	A-7	A-8	A-9	A-10	A-18	A-19	A-20	SUM O	SUM F	SUM G	SUM S	SUM ALL	
Order/(group)	Family/(sub-family)/*(tribe)*	Genus/(species)	Reg.	T	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM						FTG
Coleoptera																						**53**	
	Dytiscidae		AVG	5	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Agabus	MA	5	0	0	0	0	0	0	0	0	0	0	1	0	1			2.00			PR
		Agabinus	MA	5	0	0	0	0	0	0	0	0	0	1	0	0	0			1.00			PR
		Celina	MA	5	0	0	0	0	0	1	0	0	0	0	0	0	0			1.00			PR
		Laccornis	MA	5	0	0	0	0	0	0	0	0	0	0	0	0	2			2.00			PR
	Elmidae		AVG	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Dubiraphia	MA	6	0	2	0	0	0	0	0	0	0	0	0	0	0			2.00			GC
		Macronychus	UMW	4	0	0	0	0	0	0	0	0	0	0	0	0	0			0.00			OM
		Microcylloepus	NW	4	0	1	0	0	0	0	0	0	0	0	0	0	0			1.00			GC
		Promoresia	MA	2	0	0	0	0	0	0	0	0	0	0	0	3	0			3.00			SC
		Stenelmis	MA	5	0	2	0	0	0	0	0	0	2	1	1	5	0			11.00			SC
	Gyrinidae		AVG	4	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Dineutus	MA	4	0	0	1	0	0	0	0	0	0	0	0	0	0			1.00			PR
		Gyrinus	MA	4	0	0	0	0	0	0	0	0	0	0	1	0	0			1.00			PR
	Haliplidae		AVG	7	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Haliplus	NW	7	0	2	0	0	1	8	3	0	0	0	1	0	0			15.00			SH
	Hydraenidae		AVG	5	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Limnebius	MW	5	0	0	0	0	0	0	0	0	1	0	0	0	0			1.00			PR
	Hydrophilidae		AVG	8	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Hydrobius	NW	8	0	0	0	0	0	0	0	0	0	0	0	0	1			1.00			PR
	Limnichidae		AVG	2.9	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Lutrochus	MW	2.9	0	0	0	0	0	0	0	0	0	0	0	2	0			2.00			GC
	Noteridae		AVG	6.9	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Hydrocanthus	SE	6.9	0	0	0	0	0	0	1	0	0	0	0	0	0			1.00			PR
	Psephenidae		AVG	5	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Ectopria	MA	5	0	0	0	0	0	0	0	0	1	0	0	1	0			2.00			SC
	Ptilodactylidae		AVG	4.4	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Anchytarsus	SE	3.8	0	0	0	0	1	0	0	0	0	0	0	0	0			1.00			SH
		Stenocolus	MA	5	0	0	2	0	0	0	0	0	0	0	0	0	0			2.00			SH
	Scirtidae		AVG	7	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Cyphon	MA	7	0	0	1	0	0	0	0	0	0	1	0	0	0			2.00			SC
		Elodes	MA	7	0	1	0	0	0	0	0	0	0	0	0	0	0			1.00			SH
	Tenebrionidae		NR		0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		sp.	NR		0	0	0	0	0	0	0	0	0	0	0	0	0		0				
Megaloptera																						**72**	
	Corydalidae		AVG	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Nigronia	NW	0	0	0	0	0	0	0	0	0	0	0	0	25	0			25.00			PR
	Sialidae		AVG	4	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Sialis	MA	4	0	0	0	0	1	5	0	0	0	0	39	0	2			47.00			PR
Trichoptera																						**264**	
	Calamoceratidae		AVG	3	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Heteroplectron (americanum)	MA	3	0	0	0	0	0	0	0	0	1	0	0	0	0			1.00	1.00		SH
	Glossosomatidae		AVG	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		sp.	NW	0	0	0	0	0	0	0	0	0	0	0	1	0	0		1				SC
		Glossosoma	NW	0	0	0	0	0	0	0	1	0	0	0	0	0	0			1.00			SC
	Goeridae		AVG	1	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Goera	NW	1	0	0	0	0	0	0	0	0	0	1	0	0	0			1.00			SC
	Hydropsychidae		AVG	4.25	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		sp.	MA	4	0	0	0	0	0	0	0	0	0	0	1	1	0		2				FC
		Cheumatopsyche	MA	5	0	0	0	0	0	1	0	0	0	2	0	11	0			14.00			FC
		Hydropsyche	MA	4	0	0	0	0	0	0	0	0	0	7	0	1	0			8.00			FC
		Potomyia	MA	4	0	0	0	0	0	0	0	0	0	2	0	12	0			14.00			FC
	Hydroptilidae		AVG	5.47	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		sp.	NW	4	0	0	0	0	0	0	0	0	0	0	0	0	0		0				PH
		Agraylea	NW	8	1	0	0	0	0	0	0	0	0	0	0	0	0			1.00			PH
		Mayatrichia	NW	6	0	0	0	0	0	0	0	0	0	0	0	2	0			2.00			SC
		Neotrichia	MW	3.6	0	0	0	0	0	0	0	0	0	0	0	3	0			3.00			SC
		Orthotrichia	NW	6	0	2	0	0	0	0	0	0	0	0	0	0	0			2.00			GC
		Oxyethira	MW	5.2	1	0	4	1	0	0	0	0	0	0	0	0	0			6.00			PH
	Lepidostomatidae		AVG	2	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		sp.	NW	3	0	1	0	0	0	0	0	0	0	0	0	0	0		1				SH
		Lepidostoma	MA	1	0	0	0	0	0	0	0	0	0	0	1	0	0			1.00			SH
	Leptoceridae		AVG	4.6	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Mystacides	MA	4	0	0	0	0	0	2	0	0	1	0	0	5	0			8.00			GC
		Nectopsyche	MA	3	0	0	0	0	0	0	0	0	20	0	0	0	0			20.00			SH
		Oecetis	MA	8	0	0	0	0	0	1	2	0	0	0	0	0	0			3.00			PR
		Setodes	UMW	2	0	0	1	0	14	2	0	0	0	0	0	0	0			17.00			OM
		Triaenodes	MA	6	0	0	0	1	0	0	0	0	0	0	0	0	0			1.00			SH
	Limnephilidae		AVG	3.5	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		sp.	MA	4	0	0	0	2	0	0	0	0	0	0	1	0	0		3				SH
		Anabolia	MA	4	0	0	0	0	0	0	0	0	0	0	0	0	0			0.00			SH
		Hydatophylax	NW	1	0	0	0	0	0	0	0	0	0	0	2	0	0			2.00			SH
	(Limnephilinae)	Frenesia	NW	4	0	0	0	0	0	0	0	0	0	0	29	0	0			29.00			SH
		Moselyana	NW	4	0	0	0	0	0	0	0	0	0	1	0	0	0			1.00			GC
		Pycnopsyche	MA	4	0	0	0	0	0	0	0	0	0	0	11	0	0			11.00			SH
	Molannidae		AVG	6	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Molanna	MA	6	0	0	0	0	0	0	0	0	0	1	6	0	0			7.00			SC
	Odontoceridae		AVG	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		sp.	NW	0	0	0	1	0	0	0	0	0	0	0	0	0	0		1				SH
		Marilia	NW	0	0	0	0	0	0	0	0	0	0	0	0	5	0			5.00			SH
	Philopotamidae		AVG	1	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Dolophilodes	NW	1	0	0	0	0	0	0	0	0	0	0	0	8	0			8.00			GC
	Phryganeidae		AVG	5	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Phryganea	NW	4	0	0	0	0	0	0	0	0	0	0	0	1	0		1				OM
		Oligostomis	AH	6	0	0	0	0	0	0	0	0	0	3	0	0	0			3.00			PR
	Polycentropodidae		AVG	6	0	0	0	0	0	0	0	0	0	0	0	0	0			0.00			
		sp.	AH	6	0	0	2	0	0	0	0	0	0	0	0	1	0		3				FC
		Cernotina	AH	6	14	9	11	1	3	4	3	1	5	0	0	0	0			51.00			PR
		Neureclipsis	MA	7	0	0	3	0	1	1	0	0	0	0	9	2	0			16.00			FC
		Phylocentropus	MA	5	0	0	0	0	0	1	1	0	0	0	0	0	0			2.00			PR
	Psychomyiidae		AVG	2	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Lype	UMW	2	0	0	1	0	0	0	0	0	0	8	0	1	0			10.00			SC
	Rhyacophilidae		AVG	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		sp.	NW	0	0	0	0	0	0	0	0	0	0	0	0	2	0		2				PR
		Rhyacophila	NW	0	0	0	0	0	0	0	1	0	0	0	0	1	0			2.00			PR
Lepidoptera																						**14**	
	Pyralidae		AVG	3.67	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Acentria	NW	1	0	0	0	0	0	0	1	0	0	0	0	0	0			1.00			SH
		Paraponyx	MA	5	0	0	0	0	0	0	12	0	0	0	0	0	0			12.00			SH
		Paraponyx (sp2)	MA	5	0	0	0	1	0	0	0	0	0	0	0	0	0			1.00			SH
Diptera																						**679**	
	Ceratopogonidae		AVG	5.93	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		sp.	MW	5.7	0	0	0	0	0	0	0	0	0	0	0	0	0		0				PR
		Bezzia	MA	6	0	0	2	0	0	0	0	0	0	0	0	0	0			2.00			GC
		Probezzia	MA	6	0	0	1	1	0	6	0	0	0	20	0	0	0			28.00			PR
		Sphaeromias	NW	6	0	0	0	0	0	0	1	0	0	0	0	0	0			1.00			PR
	Chaoboridae		AVG	8	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Chaoborus	UMW	8	0	0	0	0	0	0	4	0	0	0	40	0	0			44.00			PR
	Chironomidae		AVG	6.52	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		sp.	AH	6	0	0	0	0	0	0	0	0	0	0	3	10	0		13				GC
	(Chironominae)		NW	6	0	0	0	0	0	0	0	0	0	0	0	0	0		0				GC
	(Chironomini)	Asheum	NW	6	0	0	0	0	0	0	0	1	0	0	0	0	0			1.00			GC
		Chironomus	MA	10	0	4	0	1	1	0	14	6	0	0	31	0	10			67.00			GC
		Cryptochirominus	MA	8	0	0	2	0	0	0	1	0	0	0	0	0	0			3.00			PR

Replicate Number					A-1	A-2	A-3	A-4	A-5	A-6	A-7	A-8	A-9	A-10	A-18	A-19	A-20	SUM O	SUM F	SUM G	SUM S	SUM ALL	
Order/(group)	Family/(sub-family)/*(tribe)*	Genus/(species)	Reg.	T	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM						FTG
		Cyphomella	AH	6	0	0	0	0	0	0	2	0	0	0	0	0	0			2.00			GC
		Dicrotendipes	MA	8	0	0	0	1	0	0	0	0	0	0	0	0	0			1.00			GC
		Einfeldia	NW	8	0	0	0	0	0	0	0	0	0	1	1	0	0			2.00			GC
		Endochironomous	MA	10	0	0	0	0	0	0	0	6	0	0	0	0	0			6.00			GC
		Glyptotendipes	MA	10	0	0	1	0	0	0	0	0	2	0	0	0	0			3.00			FC
		Hyporhygma	NW	6	0	0	0	0	0	0	0	0	0	0	0	0	0			0.00			SH
		Lauterborniella	NW	6	0	0	0	2	0	0	0	0	0	0	0	0	0			2.00			GC
		Microtendipes	NW	6	2	0	0	0	0	2	0	3	0	2	51	0	3			63.00			FC
		Parachironomous	UMW	10	0	0	1	0	0	0	1	1	0	0	0	0	0			3.00			PR
		Paratendipes	MA	8	0	0	0	0	0	0	0	0	0	0	9	0	0			9.00			GC
		Polypedilum	MA	6	0	0	0	0	0	2	1	1	0	0	0	0	0			4.00			SH
		Pseudochironomus	NW	6	1	0	0	29	0	0	0	1	0	0	0	0	0			31.00			GC
		Robackia	NW	7	1	0	0	0	0	0	0	0	0	0	0	0	0			1.00			GC
		Stictochironomus	UMW	9	0	0	2	0	0	0	0	0	0	0	9	0	1			12.00			OM
		Xenochironomus	NW	6	1	0	0	0	0	0	0	0	0	0	0	0	0			1.00			PR
	(Tanytarsini)	Cladotanytarsus	MA	7	0	0	0	2	0	0	0	0	0	0	0	0	0			2.00			GC
		Micropsectra	MA	7	0	0	0	0	0	0	0	0	0	1	20	0	0			21.00			GC
		Paratanytarsus	MA	6	1	0	0	9	0	0	0	0	0	0	2	0	0			12.00			GC
		Sublettea	NW	6	0	0	0	1	0	0	0	0	0	0	0	0	0			1.00			FC
		Tanytarsus	MA	6	0	0	0	0	0	11	2	0	0	1	2	0	0			16.00			FC
	(Diamesinae)	Boreoheptagyia	NW	6	1	0	0	0	0	0	0	0	0	0	0	0	0			1.00			GC
		Potthastia (gaedii group)	NW	6	1	1	0	0	0	0	0	0	0	0	0	0	0			2.00			GC
		Sympotthastia	UMW	2	0	2	0	0	0	0	0	0	0	0	0	0	0			2.00			GC
	(Orthocladiinae)	sp.	NW	5	0	0	0	0	0	0	0	0	0	0	1	30	0			31.00			GC
	(Orthocladiini)	Brillia	MA	5	0	0	0	0	0	0	0	0	0	0	1	0	0			1.00			SH
		Crictopus	MA	7	0	0	2	0	0	0	0	0	0	0	0	0	0			2.00			SH
		Cricotopus (bicinctus)	MA	7	0	0	0	1	0	0	0	0	0	0	0	0	0			1.00	1.00		OM
		Georthocladius	NW	5	0	0	0	0	0	0	0	0	0	1	0	0	0			1.00			GC
		Gymnometriocnemus	MA	7	0	0	0	0	0	0	0	0	0	0	0	3	0			3.00			GC
		Limnophyes	MA	8	0	0	0	0	0	0	0	0	0	0	0	3	0			3.00			GC
		Nanocladius	MA	3	0	0	2	2	0	0	0	0	1	11	0	0	0			16.00			GC
		Orthocladius (Euorthocladius)	NW	6	0	0	2	0	0	0	0	0	0	0	0	0	0			2.00			GC
		Parachaetocladius	MA	2	0	0	1	0	0	0	0	0	0	0	0	0	0			1.00			GC
		Parametriocnemus	MA	5	0	0	0	0	0	0	0	0	0	1	0	0	0			1.00			GC
		Psectrocladius	MA	8	0	0	0	0	0	0	0	0	0	1	0	0	0			1.00			GC
		Xylotopus	UMW	2	0	0	0	0	0	0	0	0	0	7	0	0	0			7.00			GC
	(Podonominae)	Paraboreoclus	NW	6	0	0	0	0	0	0	0	0	0	0	8	0	0			8.00			GC
	(Tanypodinae)	sp.	AH	6	0	0	0	0	0	0	0	0	0	0	2	0	0			2.00			PR
		Ablabesmyia (sp1)	MA	8	0	0	1	4	0	0	0	0	0	0	1	0	0			6.00			GC
		Ablabesmyia (sp2)	MA	8	0	0	21	3	0	0	0	0	0	3	0	0	0			27.00			GC
		Ablabesmyia (sp3)	MA	8	0	0	4	0	0	0	11	0	0	0	0	0	0			15.00			GC
		Apsectrotanypus	NW	7	0	0	0	0	0	0	0	0	0	2	0	0	0			2.00			PR
		Brundiniella	NW	6	0	0	0	0	0	0	0	0	0	1	0	0	1			2.00			PR
		Clinotanypus	MA	8	0	0	0	1	1	15	4	3	0	0	0	0	0			24.00			PR
		Guttipelopia	AH	6	0	0	0	0	0	0	0	0	0	1	0	0	0			1.00			PR
		Hayesomyia (sanata)	MW	4.6	0	0	0	0	0	0	0	0	2	36	0	0	0			38.00	38.00		PR
		Krenopelopia	NW	7	0	0	1	0	0	0	0	1	0	0	0	0	0			2.00			PR
		Labrundinia	MW	3.8	0	0	4	0	0	0	0	0	0	0	0	0	0			4.00			PR
		Larsia	MA	6	0	0	0	0	0	0	0	0	0	1	0	0	1			2.00			PR
		Meropelopia	MA	7	0	0	0	0	0	0	0	0	0	1	0	0	0			1.00			PR
		Natarsia	MA	8	2	3	2	1	4	1	0	2	3	6	10	0	0			34.00			PR
		Paramarina	MA	4	0	0	0	0	0	0	0	0	1	0	0	0	0			1.00			PR
		Procladius	MA	9	0	6	2	3	0	8	2	3	0	6	7	0	0			37.00			PR
		Rheopelopia	NW	7	0	0	0	0	0	0	0	0	0	3	0	0	0			3.00			PR
		Zavrelimyia	MA	8	0	0	0	0	0	0	0	0	0	7	0	0	0			7.00			PR
	Culicidae		AVG	8	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Aedes	MA	8	0	0	0	0	0	0	0	0	0	0	1	0	0			1.00			FC
		Anopheles	MA	6	0	0	1	1	0	0	3	0	0	0	4	1	0			10.00			FC
		Toxorhynchites	NW	8	0	0	0	0	0	0	0	0	1	0	0	0	0			1.00			PR
		Wyeomyia	AH	10	0	0	0	1	0	2	0	0	0	0	0	0	0			3.00			FC
	Mycetophilidae		NR		0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		sp.	NR		0	1	0	0	0	0	0	0	0	0	0	0	0		1				
	Nymphomyiidae		NR		0	0	0	0	0	0	0	0	0	0	0	1	0		1				
		sp.	NR		0	0	0	0	0	0	0	0	0	0	0	0	0		0				SC
	Simuliidae		AVG	6	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		sp.	NW	6	0	0	0	0	0	2	0	0	0	0	0	0	0		2				FC
		Simulium	MA	6	0	0	0	0	0	1	0	0	0	0	0	0	0			1.00			FC
	Tabanidae		AVG	8	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		sp.	NW	8	0	0	0	0	0	1	0	0	0	0	0	0	0		1				PR
	Tipulidae		AVG	3.67	0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Antocha	UMW	3	0	0	0	0	0	0	0	0	0	0	0	1	1			2.00			GC
		Hexatoma	MA	2	0	0	0	0	0	0	0	0	0	6	0	6	0			12.00			PR
		Limonia	UMW	6	0	0	0	0	0	0	0	0	0	0	0	2	0			2.00			SH
Arachnida																						2	
	Pisauridae		NR		0	0	0	0	0	0	0	0	0	0	0	0	0		0				
		Dolomedes	NR		0	1	0	0	0	1	0	0	0	0	0	0	0			2.00			PR
					A-1	A-2	A-3	A-4	A-5	A-6	A-7	A-8	A-9	A-10	A-18	A-19	A-20						
Total Individuals/sample					192	534	1279	492	164	699	361	113	243	239	646	301	44	2	57	5307	5117		
Total Taxa/sample					23	43	67	46	44	66	46	23	33	48	53	56	17	1	22	**251**	**39**		22

Scientific Name	Author Citation	Common Name	Family	Edibility	Occur.
Agaricus arvensis		Horse Mushroom	Agaricaceae	E+	F
Agaricus augustus		The Prince	Agaricaceae	E++	U
Agaricus auricolor	Krieg.	Little Golden Agaric	Agaricaceae	E	R
Agaricus campestris		Meadow Mushroom	Agaricaceae	E++	F
Agaricus micromegethus	Pk.		Agaricaceae	E	R
Agaricus placomyces complex	Peck		Agaricaceae	P	U
Agaricus silvicola	(Vittadini) Pk.	Woodland Agaric	Agaricaceae	E+/C	U
Agrocybe dura		Hard Agrocybe	Strophariaceae	NR	F
Agrocybe erebia	(Fr) Kuhn.		Strophariaceae	NR	U
Agrocybe pediades gr.		Hemispheric Agrocybe	Strophariaceae	NR	C
Agrocybe praecox		Spring Agrocybe	Strophariaceae	E/C	U
Agrocybe sororia	(Pk.) Singer		Strophariaceae	U	U
Akanthomyces aculeatus	Lebert		Cordycipitaceae	U	R
Albatrellus caeruleoporus	(Pk.) Pouz.	Blue-pored Polypore	Albatrellaceae	NR	U
Albatrellus confluens	(Alb.&Scw.:Fr.)Kotl. & Pouz.	Crested Polypore	Albatrellaceae	NR	U
Albatrellus cristatus	(Pers.:Fr.): Kotl. et Pouz.		Albatrellaceae	NR	U
Albatrellus ovinus	(Schaeff.:Fr.) Murr.	Sheep Polypore	Albatrellaceae	E-	U
Albatrellus subrubescens	(Murr.) Pouz.		Albatrellaceae	NR	U
Aleuria aurantia		Orange Peel	Pyronemataceae	E	F
Aleurodiscus oakesii	(Berk. & M.A.Curtis) Pat.	Hophornbeam Disc	Stereaceae	NE	U
Amanita abrupta	Pk	Abrupt-bulb Amanita	Amanitaceae	U	U
Amanita aestivalis	Sing.	White American Star-ftd A.	Amanitaceae	U	F
Amanita albocreata			Amanitaceae	U	R
Amanita amerivirosa	(Fr.) Bertill.	Destroying Angel	Amanitaceae	P!	C
Amanita bisporigera	G.F. Atk.	2-spored Amanita	Amanitaceae	P	C
Amanita brunnescens	G.F. Atkin.	Split-bulb Amanita	Amanitaceae	P	C
Amanita brunnescens var. pallida	Krieg.	Whitish Split Bulb Amanita	Amanitaceae	P	U
Amanita ceciliae (rhacopus) grp.		Strangulated Amanita	Amanitaceae	E/C	C
Amanita cf umbrinolutea	Pomerleau	(nom prov)	Amanitaceae	E?	R
Amanita cinereopannosa			Amanitaceae	P	U
Amanita citrina		Citron Amanita	Amanitaceae	P	A
Amanita crenulata	Pk.	Crenulated Amanita	Amanitaceae	P	R
Amanita crocea	(Quel) Singer	Tawny-orange Amanita	Amanitaceae	E	U
Amanita elongata	Pk.	Peck's Yellow Dust Amanita	Amanitaceae	P	U
Amanita excelsa var. alba	Coker		Amanitaceae	U	R
Amanita flavoconia	G.F. Atkin.	Sunrise Amanita	Amanitaceae	P	A
Amanita flavorubescens	G.F. Atkin.	Yellow Blusher	Amanitaceae	P?	C
Amanita frostiana		Frost's Amanita	Amanitaceae	NR	U
Amanita fulva		Tawny Grisette	Amanitaceae	E/C	A
Amanita gemmata		Gemmed Amanita	Amanitaceae	P	A
Amanita jacksonii (caesaria)	Pomerleau	Ceasar's Amanita	Amanitaceae	E+	U
Amanita lavendula (= citrina v. l.)	(Coker) Tulloss & K.W. Highes	Lavendar Citron Amanita	Amanitaceae	P	U
Amanita morrisii	Pk.	Morris' Amanita	Amanitaceae	U	R
Amanita multisquamosa (= cothurnata)	Pk.	Booted Amanita	Amanitaceae	P	U
Amanita muscaria		Fly Agaric	Amanitaceae	P,H	C
Amanita onusta	(Howe.) Sacc.		Amanitaceae	U	R
Amanita pantherina	(DC.) Krombh.	Panther	Amanitaceae	P	U
Amanita parcivolvata	(Pk.) Gilb.	False Caesars' Mushroom	Amanitaceae	U	U
Amanita peckiana	(Kauff.) Pk.	Peck's Amanita	Amanitaceae	U	R
Amanita phalloides	(Vaill. ex Fr.)Link	Death Cap	Amanitaceae	P!	R
Amanita porphyria		Purple-brown Amanita	Amanitaceae	P?	U
Amanita rubescens var. alba	Cok.	Pale Blusher	Amanitaceae	E/C	F
Amanita rubescens var. rubescens	Pers.	The Blusher	Amanitaceae	E+/C	C
Amanita russuloides	Pk.	Russula-like Amanita	Amanitaceae	U	U
Amanita sinicoflava	Tull.	Pale Yellow Amanita	Amanitaceae	U	R?
Amanita solaniolens	Stewart & Grund	Potato-odor Amanita	Amanitaceae	P	U
Amanita spreta		Hated Amanita	Amanitaceae	P	U
Amanita vaginata		Grisette	Amanitaceae	E	F
Amanita velatipes	Atk.	Veiled-foot Amanita	Amanitaceae	P	U
Amanita violettae	(Pk.) Tulloss	Violet's Amanita	Amanitaceae	U	U
Amanita wellsii		Salmon Amanita	Amanitaceae	U	U
Ampulloclitocybe (Clitocybe) clavipes	(Pers.) Redhead et al.	Fat-footed Clitocybe	Tricholomataceae	E/C	C
Amylocystis lapponica	(Rom.) Sing.		Fomitopsidaceae	NE	U
Annulohypoxylon annulatum	(Schwein.) Ju,Rogers & Hsieh	Oak Cushion Hypoxylon	Hypocreaceae	NE	F
Annulohypoxylon cohaerans	(Pers.) Ju, Rogers & Hsieh	Beech Cushion Hypoxylon	Hypocreaceae	NE	U
Anomoporia albolutescens	(Rom.) Pouz.		Fomitopsidaceae	NE	R
Anthostoma decipiens	(D.C.) Nitzsche		Diatrypaceae	NE	U
Antrodia albida	(Fr.) Donk.		Meripilaceae	NE	U

Antrodia crassa	(Karst.) Ryv.		Meripilaceae	NE	U
Antrodia heteromorpha	(Fr.) Donk.		Meripilaceae	NE	U
Antrodia sinuosa	(Fr.) Karts.		Meripilaceae	NE	U
Antrodiella semisupina	(Berk. & Curt.) Ryv.	'Creamy Rotten Fans'	Steccherinaceae	NE	U
Apiosporina morbosa		Cherry Knot	Amphispaeriaceae	NE	F
Arachnion album	Schwein.		Agaricaceae	E	U
Arachnopeziza aurata	Fuck.		Hyaloscyphaceae	NE	R
Arcyria denudata			Trichiaceae	NE	U
Arcyria incarnata			Trichiaceae	NE	R
Arcyria nutans			Trichiaceae	NE	U
Armillaria mellea	(Vahl) Kumm.	Honey Mushroom	Tricholomataceae	E/C	A
Armillaria solidipes (= ostoyae)	(Romag.) Herink	Honey Mushroom	Tricholomataceae	E/C	C
Arrhenia (= Omphalina) epichysium	(Pers.:Fr.) Redhead et al.	Wood-loving Omphalina	Tricholomataceae	NP	U
Arrhenia (Clitocybe) gerardiana	(Pk.) Elborne	Gerard's Clitocybe	Tricholomataceae	U	R?
Arrhenia sphagnicola	(Berk.) Redhead et al		Tricholomataceae	U	R?
Artomyces (= Clavicorona) pyxidatus	(Pers.) Julich	Crown-tipped Coral	Clavariaceae	E+	F
Artomyces piperatus (= Clavicorona avellanea)	(Kauff.) Julich		Clavariaceae	U	U
Ascobolus stercorarius	(Bull.) J.Schrott.	Dung Fungus	Ascobolaceae	NE	F
Ascocoryne sarcoides		Purple Jelly Drops	Leotiaceae	U	F
Ascotremella faginea			Leotiaceae	U	C
Asterophora lycoperdoides	(Bull.) Ditmar	Powdery Piggyback	Lyophyllaceae	U	F
Asterophora parasitica	(Bull. ex Pers.) Sing.	Silky Piggyback	Lyophyllaceae	U	R?
Aureoboletus (= Boletus) auriporus	(Pk.) Pouz.	Yellow-pored Bolete	Boletaceae	E	F
Auricularia auricula		Judas' Ear	Auriculariaceae	E	F
Austroboletus gracilis		Slender Bolete	Boletaceae	U	U
Baeospora myosura		Conifer-cone Baeospora	Tricholomataceae	NP	F
Baeospora myriadophylla		Lavendar Baeospora	Tricholomataceae	U	R
Bankera fuligineo-alba	(J.C. Schmidt) Coker & Beers		Bankeraceae	U	R
Bankera violascens (carnosa)	(Alb.&Schwein.)Pouzar.		Bankeraceae	U	U
Bisporella (Calycella) citrina		Yellow Fairy Cups	Leotiaceae	NR	A
Bjerkandera adusta	(Willd.:Fr.) Karst.	Smoked Polypore	Hapalopilaceae	NE	C
Bjerkandera fumosa	(Pers.:Fr.) Karst.	Smoky Polypore	Hapalopilaceae	NE	U
Bolbitius (aleuriatus) reticulatus	(Pers.) Ricken		Bolbitiaceae	U	R
Bolbitius titubans (= vitellinus)	(Bull.) Fr.	Yellow Bolbitius	Bolbitiaceae	E	U
Boletellus chrysenteroides			Boletaceae	U	U
Boletellus projectellus	(Murr.) Sing.		Boletaceae	U	U
Boletellus pseudochrysenteroides	Sm. & Thiers		Boletaceae	U	R?
Boletellus russellii	(Frost) Gilbert	Russell's Bolete	Boletaceae	E	U
Boletinellus merulioides		Ash-tree Bolete	Boletaceae	E	C
Boletus (= Xerocomus) illudens	Sing.		Boletaceae	E	R
Boletus (= Xerocomus) rubellus	Kromb.	Reddish Bolete	Boletaceae	U	U
Boletus (= Xerocomus) subtomentosus		Yellow-cracked Bolete	Boletaceae	E,NR	U
Boletus (= Xerocomus) tenax	Smith & Thiers	Tenacious Bolete	Boletaceae	U	U
Boletus (= Xerocomus) truncatus	(Sing.,Snell,Dick)Pouz.	Truncate-spored Bolete	Boletaceae	E	U
Boletus bicolor var. bicolor	Pk.	Two-colored Bolete	Boletaceae	E	F
Boletus bicolor var. borealis	Sm. & Thiers	Two-colored Bolete	Boletaceae	E	U
Boletus bicolor var. subreticulatus	Sm. & Thiers	Two-colored Bolete	Boletaceae	E	U
Boletus calopus var. calopus	Fr.	Bitter Bolete	Boletaceae	U	U
Boletus discolor	(Quelet) Bigeard and Guillemin		Boletaceae	U	U
Boletus edulis group		King Bolete	Boletaceae	E++	F
Boletus flammans	Dick & Snell	Flame Red Bolete	Boletaceae	U	R
Boletus fraternus	Pk.		Boletaceae	E/C	U
Boletus inedulis	(Murr.) Murr.	Inedible Bolete	Boletaceae	E-	U
Boletus longicurvipes		Long-stalked Bolete	Boletaceae	E	U
Boletus nobilis	Pk.	Noble Bolete	Boletaceae	E	R
Boletus pallidoroseus	Both	Pale Rosy Bolete	Boletaceae	E	R
Boletus pallidus	Frost	Pallid Bolete	Boletaceae	E	C
Boletus pseudo-olivaceus	Smith & Thiers		Boletaceae	U	R?
Boletus pseudosensibilis	Sm. & Thiers		Boletaceae	U	R
Boletus roseipes	Bess.,Both & Bess.	Rose-footed Bolete	Boletaceae	NE	U
Boletus sensibilis	Pk.	Sensitive Bolete	Boletaceae	U	U
Boletus speciosus	Frost	Showy Bolete	Boletaceae	E	U
Boletus subcaerulescens	Both, Bess. & Bess.		Boletaceae	E++	U
Boletus subgraveolens	Smith & Thiers		Boletaceae	U	R
Boletus subvelutipes	Pk.	Red-mouth Bolete	Boletaceae	P	C
Boletus variipes	Pk	Variable Bolete	Boletaceae	E	U
Boletus vermiculosus	Pk.		Boletaceae	U	U
Bondarzewia berkeleyi	(Fr.) Bond. & Sing.	Berkeley's Polypore	Bondarzewiaceae	E	U
Botryobasidium subcoronatum			Botryobasidiaceae	NE	R?
Botryobasidium vagum	(Berk. & Curt.) Rogers		Botryobasidiaceae	NE	U

Bovista pila		Tumbling Puffball	Lycoperdaceae	E	U
Bulgaria inquinans		Black Jelly Drops	Leotiaceae	NP	U
Butyroboletus (= Boletus) frostii	(J.L.Russell) G.Wu, Kuan Zhao &	Frost's Bolete	Boletaceae	E	U
Byssonectria terrestris	(Alb. & Schwein.)	Orange Coprophilus Cup	Pyrenomataceae	U	U
Callistosporium luteo-olivaceum	(Burk. & Curt.) Sing.		Tricholomotaceae	U	U
Calocera cornea		Sharp Antlers	Dacrymycetaceae	NP	U
Calocera viscosa		Yellow Tuning Fork	Dacrymycetaceae	NP	F
Calocybe carnea		Pink Calocybe	Tricholomataceae	U	R
Caloscypha fulgens	(Pers.:Fr.) Boudier	Blue-staining Cup	Pyronemataceae	U	U
Calvatia cyathiformis		Purple-spored Puffball	Lycoperdaceae	E+	C
Camarophyllopsis peckianus	(Howe) Boertm.	Gray-gilled Waxy Cap	Hygrophoraceae	E	R?
Cantharellula umbonata		Grayling	Tricholomataceae	E+	A
Cantharellus cibarius grp.	(Fr.) Quel.	Chanterelle	Cantharellaceae	E++	C
Cantharellus cinnabarinus		Cinnabar Chanterelle	Cantharellaceae	E	U
Cantharellus flavus	M.J.Foltz & T.J. Volk	Chanterelle (new taxon)	Cantharellaceae	E++	F
Cantharellus minor			Cantharellaceae	E	U
Ceratiomyxia fruticulosa		Coral Slime	Ceratiomyxaceae	U	C
Ceriporia spissa	(Schw.:Fr.) Rajch.	Orange Poria	Phanerochaetaceae	NE	F
Ceriporia tarda	(Berk.) Ginns	Pink Poria	Phanerochaetaceae	NE	U
Cerrena unicolor		Mossy Maze Polypore	Polyporaceae	NE	F
Chalciporus (Boletus) piperatoides	(Sm.&Th.) Baronis & Both	Blueing Peppery Bolete	Boletaceae	U	R?
Chalciporus (Boletus) piperatus	(Bull.:Fr.) Bat.	Peppery Bolete	Boletaceae	P	F
Chalciporus (Boletus) pseudorubinellus	(Pk.)Singer		Boletaceae	U	R?
Chalciporus (Boletus) rubinellus			Boletaceae	U	U
Cheilymenia ciliata	(Bull.) Maas Geest.		Pyrenomataceae	U	R?
Cheilymenia stercorea	(Pers.) Boud.	Hairy Dung Cup	Pyrenomataceae	U	U
Cheimonophyllum candidissimum	(Berk.&Curt.) Singer	White Oysterette	Tricholomataceae	E	U
Chlorociboria aeruginascens		Green Stain	Dermatiaceae	NR	C
Chondrostereum purpureum	(Pers.) Pouzar	Silverleaf Fungus	Cyphellaceae	NE	U
Chromelosporium caerulescens			Hyphomycetales	U	U
Chromosera cyanophylla = Mycena lilacifolia	(Fr.)Redhead,Ammirati, & Norvell		Hygrophoraceae	U	?
Chroogomphus ochraceus (= rutilus)	(Kauff.) O.K. Miller	Brownish Pine Mushroom	Gomphidiaceae	E	U
Chroogomphus vinicolor		Wine-colored Chroogomphus	Gomphidiaceae	E	U
Chrysomphalina (= Gerronema) chrysophylla	(Fr.) Clem.	Golden-gilled Omphalina	Hygrophoraceae	U	U
Chrysomphalina aurantiaca	(Pk.) Redhead		Hygrophoraceae	U	R?
Ciboria peckiana		Common Wood Ciboria	Sclerotiniaceae	U	U
Claudopus byssisedus	(Pers.) Gillet		Entolomataceae	U	U
Clavaria fragilis (= vermicularis)	Holmsk.: Fr.	Worm Coral	Clavariaceae	NP	U
Clavaria purpurea		Purple Worm Coral	Clavariaceae	U	R
Clavaria zollingeri	Lev.	Purple Clubs	Clavariaceae	U	U
Clavariadelphus ligula	(Sch.:Fr.) Donk	Little Tongue Club Coral	Clavariaceae	U	U
Clavariadelphus pistillaris	(Linn.:Fr.) Donk	Common Club Coral	Clavariaceae	E+	U
Clavariadelphus truncatus	Donk	Truncate Club Coral	Clavariaceae	E+	U
Clavulina cinerea		Smoky Coral	Clavariaceae	E,NR	A
Clavulina coralloides (= cristata)	(Fr.) Schrot.	White Crested Coral	Clavariaceae	E	A
Clavulina rugosa			Clavariaceae	E	U
Clavulinopsis aurantio-cinnabarina	(Zoll. & Morr.) Petersen		Clavariaceae	U	U
Clavulinopsis fusiformis		Yellow Spindle Coral	Clavariaceae	E?	C
Clavulinopsis laeticolor	Berk. & Curtis		Clavariaceae	U	U
Clavulinopsis subtilis	(Pers.) Corner		Clavariaceae	U	U
Clavulinopsis umbrinella	(Saccardo) Corner		Clavariaceae	U	F
Climacocystis borealis	(Fr.) Kotl. & Pouz.		Hapalopilaceae	NR	U
Climacodon pulcherrimus	(Berk. & M.A.Curtis) Nikol.	Pretty Northern Tooth	Meruliaceae	U	R?
Climacodon septentrionale	(Fr.) Karst.	Northern Tooth	Meruliaceae	NR	C
Clitocella (= Rhodocybe) mundula	(Lasch) Kluting,Baroni&Bergemann		Entolomataceae	NR	U
Clitocybe americana (group)			Tricholomataceae	U	C
Clitocybe candicans	(Pers.:Fr.) Kumm.	Pure White Clitocybe	Tricholomataceae	E	U
Clitocybe candida	Bres.		Tricholomataceae	E?	U
Clitocybe compressipes	Pk.	Compressed-stalk Clitocybe	Trcholomataceae	U	U
Clitocybe coniferophila	H.E.Bigelow	Conifer Clitocybe	Tricholomataceae	U	U
Clitocybe dealbata	(Sowerby) P.Kumm.	Sweating Clitocybe	Tricholomataceae	P	U
Clitocybe diatreta	(Fr.:Fr.) Kumm.		Tricholomataceae	U	U
Clitocybe fragrans	(With.) P.Kumm.	Fragrant Clitocybe	Tricholomataceae	E	U
Clitocybe hygrophoroides	H.E. Bigelow	Waxy Cap Clitocybe	Tricholomatcaea	U	U?
Clitocybe lacerata	(Scop.) Metrod		Tricholomataceae	U	U
Clitocybe nebularis (incl. C. alba)	(Batsch.) P. Kummer	Clouded Clitocybe	Tricholomataceae	E-	U
Clitocybe odora	(Bull.) P.Kumm.	Anise-scented Clitocybe	Tricholomataceae	E+	U
Clitocybe robusta	Pk.	Robust Clitocybe	Tricholomataceae	E-	U
Clitocybe subclavipes	Murr.	False Fat-footed Clitocybe	Tricholomataceae	U	R?
Clitocybe subditopoda	Pk.	Grey-brown Clitocybe	Tricholomataceae	U	U?

Clitocybe tarda	Pk.		Tricholomataceae	E+	C
Clitocybula abundans	(Pk.) Sing.		Tricholomataceae	E	U
Clitocybula familia		Family Collybia	Tricholomataceae	E/C	U
Clitocybula oculus	(Pk.) Sing.		Tricholomataceae	U	U
Clitopilopsis (=Rhodocybe) hirneola	(Fr.) Kuhn. ex Conrad & Maub.		Entolomataceae	U	R?
Clitopilus prunulus		Sweatbread Mushroom	Entolomataceae	E	F
Collybia cirrhata			Tricholomataceae	E,P?	U
Collybia cookei			Tricholomataceae	U	U
Collybia tuberosa	(Bull.:Fr.) Kumm.	Tuberous Collybia	Tricholomataceae	U	U
Coltricia cinnamomea	(Pers.) Murr.	Shiny Cinnamon Polypore	Hymenochaetaceae	NE	F
Coltricia montagnei var. greenei	(Fr.) Murr.	Green's Polypore	Hymenochaetaceae	NE	U
Coltricia montagnei var. montagnei	Fr.	Montagne's Polypore	Hymenochaetaceae	NE	U
Coltricia perennis	(Fr.) Murr.		Hymenochaetaceae	NE	C
Comatricha pulchella	(Bab.:Burk.) Rost.		Stemonitidaceae	NE	U
Comatricha typhoides	(Bull.) Rostafinski	Cat-tail Comatricha	Stemonitidaceae	NE	U
Coniophora puteana		Wet Rot	Coniophoraceae	NR	F
Conocybe apala (= lactea)	(Fr.) Arnolds	White Dunce Cap	Bolbitiaceae	E	F
Conocybe cyanopus	(Atk.) Kuhn.	Blue-footed Conocybe	Bolbitiaceae	P	R
Conocybe pubescens	Rich. & Watling	Dung-loving Conocybe	Bolbitiaceae	U	U
Conocybe tenera (group)		Brown Dunce-cap	Bolbitiaceae	NR,P?	C
Coprinellus disseminatus	(Pers.) Lange		Psathyrellaceae	U	U
Coprinellus ephemerus	(Bull.) Fr.	Dung-loving Inky Cap	Psathyrellaceae	E/C	U
Coprinellus micaceus	(Bull.) Vilg.,Hop., & John.	Mica Inky Cap	Psathyrellaceae	E/C	A
Coprinellus radians	(Desm.) Vilg., Hop., & John.		Psathyrellaceae	E/C	U
Coprinopsis acuminata (atramentaria)	(Rom.) Redh.,Vilg. & Monc.	Alcohol Inky	Psathyrellaceae	P	F
Coprinopsis lagopus	(Pers.) Redh.,Vilg, & Monc.	Woolly-stalked Coprinus	Psathyrellaceae	E/C	C
Coprinus comatus		Shaggy Mane	Psathyrellaceae	E+/C	C
Coprinus radians	(Desm.) Fr.	Brilliant Inky Cap	Psathyrellaceae	NE	F
Coprinus silvaticus	Pk.	Woodland Inky Cap	Psathyrellaceae	U	U
Coprinus sterquilinus	Pk.		Psathyrellaceae	E/C	U
Coprinus variegatus (= quadrifidus)	Pk.	Scaly Inky Cap	Psathyrellaceae	E/C	U
Cordyceps capitata		Headlike Cordyceps	Cordycipitaceae	M?	F
Cordyceps militaris		Trooping Cordyceps	Cordycipitaceae	M?	U
Cordyceps ophioglossoides		Yellow-thread Cordyceps	Cordycipitaceae	E,M?	F
Cortinarius (= Rozites) caperatus	(Pers.) Fr.	The Gypsy	Cortinariaceae	E+	F
Cortinarius (Dermocybe) croceus (= cinnamomeus)		Cinnamon Cort	Cortinariaceae	NR	F
Cortinarius acutus	(Pers.:Fr.) Fr.		Cortinariaceae	U	F
Cortinarius alboviolaceus	(Fr.) Kumm.	Silvery-violet Cort	Cortinariaceae	E	C
Cortinarius anomalus (incl. C. azureus)	(Fr.) Fr.		Cortinariaceae	U	R?
Cortinarius armillatus	(Fr.:Fr.) Fr.	Bracelet Cort	Cortinariaceae	E/C	C
Cortinarius badius	Pk.		Cortinariaceae	U	U
Cortinarius bolaris	(Pers.) Fr.	Red-banded Cort	Cortinariaceae	NR	U
Cortinarius brunneus var. brunneus	(Pers.:Fr.) Fr.	Brownish Cort	Cortinariaceae	U	U?
Cortinarius brunneus var. glandicolor	(Fr.) Linstr. & Melot	Black-staining Cort	Cortinariaceae	U	U
Cortinarius caesioarmeniacus	Kytov, Niskanen & Liimat.		Cortinariaceae	U	R?
Cortinarius caesiocanescens	Moser		Cortinariaceae	U	U
Cortinarius callisteus	(Fr.) Fr.		Cortinariaceae	U	R
Cortinarius calochrous	Fr.		Cortinariaceae	U	R
Cortinarius camphoratus (= caesiocyaneus)	(Fr.) Fr.	Potato Cort	Cortinariaceae	E-	U
Cortinarius caninus	(Fr.) Fr.	Dog Cort	Cortinariaceae	U	F
Cortinarius cinnabarinus	Fr.	Cinnabar Cort	Cortinariaceae	NR	R
Cortinarius corrugatus	Pk.	Corrugated Cort	Cortinariaceae	U	U
Cortinarius cotoneus	Fr.		Cortinariaceae	NE	R
Cortinarius crassus	Fr.		Cortinariaceae	U	R?
Cortinarius cylindripes	Kauff.	Cylindrical Blue Cort	Cortinariaceae	U	R
Cortinarius decipiens	(Pers.:Fr.) Zaw.		Cortinariaceae	U	R
Cortinarius delibutus var. delibutus	Fr.		Cortinariaceae	U	U
Cortinarius distans	Pk.		Cortinariaceae	U	U
Cortinarius evernius	(Fr.) Fr.	Violet-based Conifer Cort	Cortinariaceae	NR	U
Cortinarius flexipes	(Pers.:Fr.) Fr.	Pelargonium Webcap Cort	Cortinariaceae	U	U
Cortinarius fulvescens	Fr.		Cortinariaceae	U	R
Cortinarius glaucopus	(Fr.) Fr.	Bulbous Cort	Cortinariaceae	E?	U
Cortinarius glaucopus var. olivaceus	(Moser) Quadr.	Bulbous Cort	Cortinariaceae	E?	U
Cortinarius hemitrichus (gr.)	(Pers.:Fr.) Fr.		Cortinariaceae	U	F
Cortinarius huronensis	Ammir. & Smith		Cortinariaceae	U	R?
Cortinarius incognitus	Ammir. & Smith		Cortinariaceae	U	R?
Cortinarius iodes	Berk. & Curtis	Iodine Cort	Cortinariaceae	E	C
Cortinarius iodioides	Kauff.	Iodine-like Cort	Cortinariaceae	U	U
Cortinarius jubarinus	Fr.		Cortinariaceae	U	R?
Cortinarius laniger (gr.)	Fr.		Cortinariaceae	NR	F

Cortinarius leucopus	(Bull.) Fr.	White-footed Cort	Cortinariaceae	U	R?
Cortinarius lilacinus	Pk.	Lilac Cort	Cortinariaceae	U	U
Cortinarius limonius	(Fr. ex Fr.) Fr.		Cortinariaceae	U	U
Cortinarius liquidus	Fr.		Cortinariaceae	U	R
Cortinarius malicorius (incl. croceofolius)	Fr.		Cortinariaceae	U	F
Cortinarius mammosus			Cortinariaceae	U	U
Cortinarius mucosus	(Fr.) Fr.	Mucousy Cort	Cortinariaceae	U	U
Cortinarius multiformis	Fr.	Variable Cort	Cortinariaceae	NR	U
Cortinarius muscigenus (= collinitus)	Pk.	Blue Banded Cort	Cortinariaceae	E	U
Cortinarius obliquus	Pk.	Oblique-based Cort	Cortinariaceae	NR	F
Cortinarius obtusus	Fr.	Little Brown Cortinarius	Cortinariaceae	U	C
Cortinarius olearioides	Hry.		Cortinariaceae	U	R
Cortinarius percomis			Cortinariaceae	U	R?
Cortinarius pholideus		Scaly-capped Cort	Cortinariaceae	U	U
Cortinarius porphyropus	Fr.		Cortinariaceae	NE	R
Cortinarius privignus	Fr.		Cortinariaceae	NE	
Cortinarius pseudosalor		Honey Cort	Cortinariaceae	U	U
Cortinarius pulchellus			Cortinariaceae	U	U
Cortinarius purpurascens		Purple Staining Cortinarius	Cortinariaceae	U	R
Cortinarius pyriodorus (= pulchrifolius)	Kauff.	Pear-odor Cort	Cortinariaceae	U,NR	F
Cortinarius quercophilus	Y. Lamoureux	Oak-loving Cort	Cortinariaceae	U	F
Cortinarius rigidus	(Kuhn. & Rom.) Fr.	(sm.br.;white fibrils)	Cortinariaceae	U	R?
Cortinarius saturatus	Lange		Cortinariaceae	U	R?
Cortinarius scaurus	Fr.		Cortinariaceae	U	U
Cortinarius scaurus var. herpeticus	(Fr.) Quel.		Cortinariaceae	U	U
Cortinarius semi-sanguineus		Red-gilled Cort	Cortinariaceae	NR	F
Cortinarius sodagnitus	Henry		Cortinariaceae	U	R?
Cortinarius sphaerosporus		Round-spored Cort	Cortinariaceae	U	U
Cortinarius squamulosus		Scaly-capped Cort	Cortinariaceae	U	R
Cortinarius subargentatus	P.D. Horton		Cortinariaceae	U	R
Cortinarius tofaceus	Fr.	(Subgenus Callistei)	Cortinariaceae	U	U
Cortinarius tortuosus	(Fr.:Fr.) Fr.		Cortinariaceae	U	U
Cortinarius torvus	(Fr.) Fr.		Cortinariaceae	U	U
Cortinarius traganus	(Wein.:Fr.) Fr.	Pungent Cort	Cortinariaceae	U,NR	U
Cortinarius trivialis	Lge.		Cortinariaceae	NE	R
Cortinarius vanduzerensis	Smith & Trappe	Blue-banded Cort	Cortinariaceae	U	U
Cortinarius vareicolor (incl. var. marginatus Mos.)	Fr.		Cortinariaceae	U	U
Cortinarius vibratilis	(Fr.) Fr.	Bitter-slime Cort	Cortinariaceae	P	U
Cortinarius violaceus	(Fr.) S.F. Gray	Violet Cort	Cortinariaceae	E-	U
Coryne (Leotia) atrovirens	(Pers.) Sacc.	Green Jelly Club	Leotiaceae	U	U
Craterellus (= Cantharellus) ignicolor	(R.H. Petersen) Dahlman, Danell	Flame-colored Chanterelle	Hydnaceae	E	F
Craterellus (= Cantharellus) lutescens	(Pers.) Fr.	Yellow-foot Chanterelle	Hydnaceae	E+	C
Craterellus (= Cantharellus) tubaeformis	(Fr.) Quelet	Trumpet Chanterelle	Hydnaceae	E+	C
Craterellus caeruleofuscus	A.H. Smith		Hydnaceae	E+	R
Craterellus cornucopioides	(L.) Pers.	Horn-of-Plenty	Hydnaceae	E+++	F
Craterellus fallax	A.H. Smith	Horn-of-Plenty	Hydnaceae	E+++	R?
Craterellus forma infundibuliformes		Trumpet Chanterelle	Hydnaceae	E	U?
Craterium minutum	(Leers) Fr.		Physacaceae	NE	U
Creopus gelatinosus	(Tode:Fr.) Link	Yellow Cushion Hypocrea	Hypocreaceae	NE	U
Crepidotus applanatus		Flat Jelly Crep	Inocybaceae	P	C
Crepidotus fusisporus var. anomalus	Hesl. & Sm.		Inocybaceae	P	R?
Crepidotus herbarum		Little White Crep	Inocybaceae	P	F
Crepidotus mollis		Jelly Crep	Inocybaceae	P	F
Crepidotus stipitatus	Kauffman	Stalked Crep	Inocybaceae	P	R
Cribraria intricata	Schrader		Cribrariaceae	NE	C
Crinipellis piceae		Conifer Crinipellis	Tricholomataceae	U	U
Crucibulum laeve		White-egg Bird's Nest	Nidulariaceae	NE	U
Cryphonectria (= Endothia) parasitica		Chestnut Blight	Cryphonectriaceae	NE	C
Cryptoporus volvatus	(Pk.) Shear.	Veiled Polypore	Polyporaceae	NE	U
Cudonia lutea		Yellow Cudonia	Geoglossaceae	U	F
Cuphophyllus (= Camarophyllus) angustifolius	Murr.		Hygrophoraceae	E	U
Cuphophyllus (= Camarophyllus) borealis		Snowy Waxy Cap	Hygrophoraceae	E	F
Cuphophyllus (= Camarophyllus) cinereus	(Fr.) Karst.	Violaceous Gray Waxy Cap	Hygrophoraceae	E	R
Cuphophyllus (= Camarophyllus) pratensis		Salmon Waxy Cap	Hygrophoraceae	E+/C	U
Cuphophyllus (= Hygrophorus) canescens		Canescent Waxy Cap	Hygrophoraceae	U	U
Cyanoboletus (= Boletus) pulverulentus	Opat.		Boletaceae	E	R
Cyptotrama asprata	(Berk.) Redh.&Ginns	Golden Scruffy Collybia	Physalacriaceae	NP	U
Cyptotrama chrysopepla	(Berk.&M.A.Curtis)Singer	Golden Collybia	Physalacriaceae	NP	C
Cystoderma amaianthinum var. rugosoreticulatum		Pungent Cystoderma	Tricholomataceae	E?	C
Cystoderma fallax		Fallen Sock Cystoderma	Tricholomataceae	NP	U

Cystoderma granosum	(Morg.) Sm. & Sing.		Tricholomataceae	U	U
Cystoderma granulosum	(Batsch:Fr.)Fayod	Granulose Cystoderma	Tricholomataceae	U	U
Dacrymyces chrysospermus (= palmatus)	Berk. & M.A. Curtis	Golden Jelly	Dacrymycetaceae	E-	A
Dacryopinax spathularia	(Schwein.) Martin	Jelly Tongues	Dacrymycetaceae	E?	F
Daedalea quercina	Fr.	Thick-maze Oak Polypore	Polyporaceae	NE	U
Daedaleopsis confragosa	(Bolt.:Fr.) Schroet.	Thin Maze Polypore	Polyporaceae	NE	A
Daedaleopsis septentrionalis	(P. Karst.) Niemela	Thin Gilled Polypore	Polyporaceae	NE	F
Daldinia childiae	Rogers & Ju	Cramp Balls	Xylariaceae	NE	F
Daldinia concentrica		Carbon Balls	Xylariaceae	NE	F
Datronia mollis	(Sommerf.:Fr.) Donk.	'Chocolate & Cream Hood'	Polyporaceae	NE	U
Datronia scutellata	(Schw.) Gilbn. & Ryv.	'Small Alder Polypore'	Polyporaceae	NE	U
Dendrothele (= Thelephora) candida	(Schwein.) P.A. Lemke		Corticiaceae	NE	U
Dendrothele nivosa	(Berk. & M.A. Curt.) Lemke	Red Cedar Wash	Corticiaceae	NE	U
Diatrype stigma	(Hoffm.:Fr.) Fr.		Diatrypaceae	NE	C
Diatrypella frostii	Pk.	Maple Pustule Rot	Diatrypaceae	NE	C
Dichomitus squalens	(Karst.) Reid.	'Red Ray Rot'	Polyporaceae	NE	U
Dictyophora duplicata		Netted Stinkhorn	Phallaceae	NP	U
Didymium iridis	(Ditmar) Fr.		Didymiaceae	NE	U
Didymium nigripes			Didymiaceae	NE	F
Ductifera pululahuana (= Exidiopsis alba)	(Pat.) Wells	White Jelly	Exidiaceae	U	R
Eccilia unicolor	Pk.		Entolomataceae	NR	U
Elaphomyces granulatus	Fr.		Elaphomycetaceae	E/M?	F
Endogone pisiformis	Link		Endogonaceae	U	R?
Endogone sp.			Endogonaceae	U	A
Entoloma (=Alboleptonia) sericellum	(Fr.) Kumm.	Pinkish-white Entoloma	Entolomataceae	NE	U
Entoloma abortivum	(Berk. & Curt.) Donk.	Aborted Entoloma	Entolomataceae	E/C	F
Entoloma albidum (= canum)	Murr.	Cinder Entoloma	Entolomataceae	NE	U
Entoloma albogriseum	(Pk.) Redhead		Entolomataceae	P	U
Entoloma bicolor	Murr.	Bicolored Entoloma	Entolomataceae	NE	U
Entoloma bloxamii (= madidum)	(Berk.) Sacc.		Entolomataceae	P	R?
Entoloma cetratum	(Fr.) Moser		Entolomataceae	U	R?
Entoloma lividum (= sinuatum)	(Bull.) Quel.	Lead Poisoner	Entolomataceae	P	F
Entoloma luridum	Hesl.		Entolomataceae	P	R?
Entoloma melleicolor	Murr.	Honey-colored Entoloma	Entolomatcaeae	U	U
Entoloma murinum	(Pk.) Egeland	Gray Smile Entoloma	Entolomataceae	P	U
Entoloma ortonii (=Nolanea sericea?)	Arnolds & Noordel	Silky Entoloma	Entolomataceae	P	U
Entoloma rhodopolium	Fr.		Entolomataceae	P	U
Entoloma sericatum (= rhodopolium)	(Britzelm.) Sacc.	Rosy-gray Entoloma	Entolomataceae	P	F
Entoloma sinuatum	(Bull.) P.Kumm.	Gray Entoloma	Entolomataceae	P	C
Entoloma subsinuatum	Murr.	Pale Yellow-gilled Entoloma	Entolomataceae	P	U
Entoloma turbidum	(Fr.) Quel.		Entolomataceae	P	U
Entoloma undatum	(Gill.) M.M.Moser	Gray Wave Entoloma	Entolomataceae	P?	U
Entoloma variabile	Pk.	Variable Entoloma	Entolomataceae	P	R?
Entoloma violaceum	(Murr.) Hongo & Ozawa	Violet Entoloma	Entolomataceae	P	U
Entoloma watsonii	(Pk.) Noordel.	Fragile Scabrous Entoloma	Entolomataceae	U	R?
Eocronartium muscicola	(Pers.) FitzP.		Eocronartiaceae	NE	R?
Exidia crenata	(Schwein.) Fr.	Crenate Jelly Roll	Exidiaceae	E-	C
Exidia glandulosa	(Bull.) Fr.	Black Jelly Roll	Exidiacae	E-	F
Exidia recisa	(Ditmar) Fr.	Brown Jelly Drops	Exidiaceae	E-	F
Exidiopsis effusa	(Bref. ex Sacc.) A. Moller	Hair Ice (Crosta velata)	Exidiaceae	U	R
Fistulina hepatica	Schaeff.:Fr.	Beefsteak Mushroom	Fistulinaceae	E	U
Flammulaster (= Phaeomarasmius) erinaceellus	(Pk.) Watling	Powder-scale Pholiota	Strophariaceae	U	R?
Flammulina velutipes		Velvet Foot/Winter Mushroom	Tricholomataceae	E	U
Fomes excavatus (= fomentarius)	(Berk.) Cooke	Tinder Polypore	Polyporaceae	NE	A
Fomitopsis officinalis	(Vill.:Fr.) Bond. & Sing.	Larch Polypore	Fomitopsidaceae	NE,M	U
Fomitopsis pinicola (incl. ochraceus)	(Swartz.:Fr.) Karst.	Red-belt Polypore	Fomitopsidaceae	NE	C
Fuligo candida	Pers.	Dog Vomit Slime	Physaraceae	NE	F
Fuligo septica		Caca de Luna ('Goat Vomit')	Physaraceae	NR,E?	C
Galerina autumnalis (= marginata)		Deadly Galerina	Cortinariaceae	P	C
Galerina cerina complex	A.H.Sm. & Singer		Cortinariaceae	U	R?
Galerina hypnorum		Moss Galerina	Cortinariaceae	P	F
Galerina marginata		Ringed Galerina	Cortinariaceae	P	U
Galerina paludosa	(Fr.) Kuhn.	Swamp Galerina	Cortinariaceae	P	C
Galerina stylifera	(Atk.) Sm. & Sing.		Cortinariaceae	U	R?
Galerina tibicystis		Bog Galerina	Cortinariaceae	P	F
Galerina venenata		Deadly Lawn Galerina	Cortinariaceae	P!	U
Ganoderma applanatum		Artist's Conk	Ganodermataceae	M	A
Ganoderma curtisii	(Bjerk.) Murr.		Ganodermataceae	NE	R?
Ganoderma lucidum	(W. Curt.:Fr.) Karst.	Ling Zhi (Reishi)	Ganodermataceae	M	U
Ganoderma tsugae	Murr.	Hemlock Varnish Shelf	Ganodermataceae	M	C

Geastrum sessile (= fimbriatum)	(Fr.:Sowerby) Pouzar	Sessile Earth Star	Geastraceae	NE	U
Geoglossum difforme	Fr.	Common Earth Tongue	Geoglossaceae	NE	U
Gliophorus (= Hygrocybe) irrigatus (= unguinosa)	(Pers.:Fr.) Bon.	Greasy Waxy Cap	Hygrophoraceae	NP	U
Gliophorus (= Hygrocybe) laetus			Hygrophoraceae	U	U
Gliophorus (= Hygrocybe) perplexus	(Sm. & Hesl.) Kovalenko		Hygrophoraceae	U	U
Gliophorus (= Hygrocybe) psittacinus		Parrot Waxy Cap	Hygrophoraceae	E-	U
Gloeophyllum sepiarium	(Fr.) Karst.	Yellow-red Gilled Polypore	Gloeophyllaceae	NE	A
Gloeoporus (Caloporus) dichrous	(Fr.) Bres.	Gelatinous-pored Polypore	Meruliaceae	NE	C
Gloeoporus taxicola	(Pers.:Fr.) Gilbn. & Ryv.		Meruliaceae	NE	U
Gloioxanthomyces (= Hygrocybe) nitidus		Shining Funnel	Hygrophoraceae	E,NR	C
Gomphidius glutinosus		Slimy Gomphidius	Gomphidiaceae	E	U
Gomphus clavatus	(Pers.) Gray	Pig's Ear Gomphus	Cantharellaceae	E+	R
Grifola frondosa	(Dicks.:Fr.) S.F. Gray	Hen-of-the-woods	Meripilaceae	E++	U
Guepiniopsis buccina			Dacrymycetaceae	U	U?
Gymnopilus junonius (=spectabilis)		Big Laughing Gym	Cortinariaceae	P(H)	U
Gymnopilus luteus			Cortinariaceae	U/P	C
Gymnopilus penetrans		Little Gym	Cortinariaceae	U	C
Gymnopilus picreus	(Fr.) Karst.		Cortinariaceae	U	U
Gymnopilus punctifolius	(Pk.) Singer		Cortinariaceae	U	R?
Gymnopilus ventricosus	(Earle) Hesler	Fake Laughing Gym	Cortinariaceae	NP	U
Gymnopus (= Collybia) alkalivirens	(Sing.) Hall.	Little Brown Collybia	Tricholomataceae	NE	U
Gymnopus (= Collybia) dryophilus	(Bull. : Fr.) Murr.	Oak-loving Collybia	Tricholomataceae	E/C	C
Gymnopus (= Collybia) egregius	Halling		Tricholomataceae	U	R?
Gymnopus (= Collybia) spongiosus	(Berk. & M.A.Curtis) Halling	Sponge-footed Collybia	Tricholomataceae	E?	F
Gymnopus (= Collybia) striatipes (= cylindrosporus)	(Pk.) Halling	Striate-stalk Collybia	Tricholomataceae	NE	U
Gymnopus (= Collybia) subnudus	(Ellis ex Pk.) Halling	Hairy-stalked Collybia	Tricholomataceae	E?	F
Gymnopus (= Collybia) subsulphureus	(Pk.) Murr.	Yellow Collybia	Tricholomataceae	E	U
Gymnopus (= Connopus or Collybia) acervatus	(Fr. : Fr.) Murr.	Clustered Collybia	Tricholomataceae	E-/C	F
Gymnosporangium clavipes	Cooke & Peck	Cedar Quince Rust	Pucciniaceae	NE	U
Gyromitra esculenta		False Morel	Helvellaceae	E/C,NR	U
Gyromitra gigas	(Krombh.) Cooke	Giant False Morel	Helvellaceae	E	U
Gyromitra infula		Saddle-shaped False Morel	Helvellaceae	P	F
Gyroporus cyanescens	(Bull.) Quel.	Bluing Bolete	Boletaceae	E	U
Hapalopilus croceus	(Fr.) Donk		Hapalopilaceae	NE	R
Hapalopilus rutilans (= nidulans)	(Pers.) Murrill	Tender Nesting Polypore	Hapalopilaceae	NE	U
Hapalopilus salmonicolor	(Berk. & Curt.) Pouz.	'Yellow Stringy Saprot'	Hapalopilaceae	NE	U
Harrya (= Tylopilus) chromapes	(Frost) Smith & Thiers	Yellow-footed Tylopilus	Boletaceae	E	F
Hebeloma crustiliniforme	(Bull.:Fr.) Quel.	Poison Pie	Cortinariaceae	P	F
Hebeloma hiemale			Cortinariaceae	P	U
Hebeloma mesophaeum		Dark-centered Hebeloma	Cortinariaceae	P	C
Helicogloea (= Leucogloea) compressa	(Ellis & Everh.) V. Malysheva & K	Helicogloea anamorph	Phleogloeaceae	U	F
Helminthosphaera clavariarum			Sordariaceae	NE	U
Helvella albella	(Quel.) Boudier	White Elfin Saddle	Helvellaceae	U	R?
Helvella crispa	(Scop.:Fr.) Fr.	Fluted Elfin Saddle	Helvellaceae	P	F
Helvella elastica	Bull.:Fr.	Elfin Saddle	Helvellaceae	NR	F
Helvella lacunosa	Afz.:Fr.	Lacunose Elfin Saddle	Helvellaceae	P	U
Helvella macropus	(Oers.:Fr.) Karst.	Long-footed Elfin Saddle	Helvellaceae	U	C
Helvella minor	(Vell.) Rausch	Minor Elfin Saddle	Helvellaceae	U	R?
Helvella palustris	Pk.		Helvellaceae	U	R
Helvella sulcata	Fr.		Helvellaceae	U	U
Helvella villosa	(Kunt.) Diss.&Nann	Hairy Elfin Saddle	Helvellaceae	U	R?
Hemileccinum (= Boletus) subglabripes	(Pk.) Halling	Smooth-stemmed Bolete	Boletaceae	E+	U
Hemimycena pseudolactea	(Kuhn.) Singer		Mycenaceae	U	R?
Hemistropharia (= Pholiota) albocrenulata	(Pk.) Jacobs. & Larss.	Scalloped Pholiota	Strophariaceae	NR	U
Hemitichia calyculata			Trichiaceae	U	U
Hemitrichia clavata		Yellow-fuzz Cone Slime	Trichiaceae	U	C
Hemitrichia serpula		Pretzel Slime	Trichiaceae	NE	U
Hericium americanum (coralloides)	Ginns	Coral Tooth	Hericiaceae	E++	F
Hericium ramosum	(Bull.) Letellier	Branching Coral Tooth	Hericiaceae	E	U
Heterobasidion annosum	(Fr.) Bref.	Conifer-base Polypore	Bondarzewiaceae	NE	U
Hohenbuehelia petaloides		Leaf-like Oyster	Pleurotaceae	E	F
Hormomyces coralloides			Hyphomycetales	U	U
Humidicutis (= Hygrocybe) auratocephala		Golden-headed Waxy Cap	Hygrophoraceae	E	R?
Humidicutis (= Hygrocybe) pura	(Pk.) E. Horak		Hygrophoraceae	U	R
Humidicutis (=Hygrocybe) marginata var. concolor	S.	Orange-gilled Waxy Cap	Hygrophoraceae	E	U
Humidicutis (=Hygrocybe) marginata var. marginata	Pk.	Orange-gilled Waxy Cap	Hygrophoraceae	E	F
Humidicutis (=Hygrocybe) marginata var. olivacea	(Sm. & Hesl.)	Olive Orange-gilled Waxy Cap	Hygrophoraceae	E	U
Hydnellum aurantiacum		Orange Rough-cap Tooth	Bankeraceae	NE	U
Hydnellum caeruleum		Blue Tooth	Bankeraceae	NE	U
Hydnellum concrescens (= zonatum)	(Pers.) Bank.	Zoned Tooth	Bankeraceae	NE	U

Hydnellum ferrugineum (= pineticola)	(Fr.) P.Karst.	Pine-loving Tooth	Bankeraceae	NR	F
Hydnellum geogenium	(Fr.) Banker	Yellow Tooth	Bankeraceae	NE	U
Hydnellum mirabile	(Fr.) P.Karst.		Bankeraceae	NE	U
Hydnellum nigrellum		Blackish Tooth	Bankeraceae	NE	U
Hydnellum peckii (= diabolus)	Banker		Bankeraceae	NE	R?
Hydnellum scrobiculatum		Rough Hydnellum	Bankeraceae	NE	F
Hydnellum spongiosipes		Spongy-footed Tooth	Bankeraceae	NE	F
Hydnocristella (= Kavinia) himantia	(Schwein.) Petersen		Corticiaceae	NE	R?
Hydnoporia (= Hymenochaete) corrugata (= aggluti	(Fr.) Lev.		Hymenochaetaceae	NE	U
Hydnum albidum cf	Pk.	Small White Sweet Tooth	Hydnaceae	E+	U
Hydnum albomagnum	Banker	Big White Tooth	Hydnaceae	E+	U
Hydnum neorepandum	(L.) Tuula Niskanen et al	Sweet Tooth	Hydnaceae	E++	F
Hydnum quebecense	Tuula Niskanen et al	Reddish Sweet Tooth	Hydnaceae	E++	F
Hydnum umbilicatum	Pk.		Hydnaceae	E	U
Hydropus marginellus	(Pers.) Sing.		Marasmiaceae	U	U
Hydropus scabripes	(Murr.) Sing.		Marasmiaceae	U	U
Hygrocybe (=Cuphophyllus) lacmus (=subviolaceus)	(Schumach.)P.D.Orton & Wat.	Violet-Gray Waxy Cap	Hygrophoraceae	E	U
Hygrocybe acutoconica		Acutely-conic Waxy Cap	Hygrophoraceae	NP	F
Hygrocybe americana (= H. acutus)	(A.M.Sm. & Hesl.) Bessette, Bess	Pointed White Waxy Cap	Hygrophoraceae	E?	R
Hygrocybe aurantiosplendens		Slimy Acute Waxy Cap	Hygrophoraceae	E	U
Hygrocybe cantharellus		Chanterelle Waxy Cap	Hygrophoraceae	E	C
Hygrocybe ceracea	(Wulfen) Kumm.		Hygrophoraceae	E	U
Hygrocybe coccinea		Scarlet Waxy Cap	Hygrophoraceae	E	U
Hygrocybe coccineocrenata var. sphagnophila	(Pk.) Arnolds	Sphagnum Waxy Cap	Hygrophoraceae	E	U
Hygrocybe conica		Witch's Hat	Hygrophoraceae	P	U
Hygrocybe cuspidata			Hygrophoraceae	E	U
Hygrocybe flavescens		Golden Waxy Cap	Hygrophoraceae	E	C
Hygrocybe glutinipes		Slimy Orange Waxy Cap	Hygrophoraceae	E	R?
Hygrocybe marchii	Bres.		Hygrophoraceae	U	U
Hygrocybe miniata		Fading Scarlet Waxy Cap	Hygrophoraceae	E	F
Hygrocybe nitrata	(Pers.) Wuntsche	Nitrous Waxy Cap	Hygrophoraceae	E-	R
Hygrocybe parvula			Hygrophoraceae	E	F
Hygrocybe perplexa	(Sm.& Hess.) Am.	Perplexing Waxy Cap	Hygrophoraceae	E?	R?
Hygrocybe punicea		Scarlet Waxy Cap	Hygrophoraceae	E	F
Hygrocybe purpureofolia	(Bigelow) Courtec.	Purple-gilled Waxy Cap	Hygrophoraceae	E	U
Hygrocybe reidii		Honey Odor Waxy Cap	Hygrophoraceae	E	R?
Hygrocybe spadicea	(Scop.:Fr.) Karst.	Date-brown Waxy Cap	Hygrophoraceae	E?	R?
Hygrocybe squamulosa	Ellis & Ev.	Squamulose Waxy Cap	Hygrophoraceae	E	U
Hygrocybe turundus var. turundus	(Pk) Sm. & Hes.		Hygrophoraceae	E	U
Hygrophoropsis aurantiaca		False Chanterelle	Paxillaceae	E/C,P	F
Hygrophorus bakerensis		Tawny Almond Waxy Cap	Hygrophoraceae	E	U
Hygrophorus camarophyllus			Hygrophoraceae	E+	U
Hygrophorus chrysodon		Golden-spotted Waxy Cap	Hygrophoraceae	E	U
Hygrophorus flavodiscus		Yellow-disc Waxy Cap	Hygrophoraceae	E+	A
Hygrophorus fuligineus		Sooty Waxy Cap	Hygrophoraceae	E+	C
Hygrophorus hypothejus		Olive-yellow Waxy Cap	Hygrophoraceae	E	R
Hygrophorus olivaceoalbus		Olive Waxy Cap	Hygrophoraceae	E	U
Hygrophorus piceae	Kuhn.	Spruce Waxy Cap	Hygrophoraceae	U	R?
Hygrophorus purpurascens	(Fr.) Fr.	Veiled Purplish Waxy Cap	Hygrophoraceae	E-	R?
Hygrophorus tennesseensis	Smith & Hesler	Tennessee Waxy Cap	Hygrophoraceae	U	R
Hymenochaete rubiginosa	(Dicks.) Lev.		Hymenochaetaceae	NE	F
Hymenochaete tabacina			Hymenochaetaceae	NE	F
Hymenochaetopsis (Hydnochaete) olivacea	(Schwein.) Banker.	Brown-toothed Crust	Hymenochaetaceae	NE	A
Hymenopellis furfuracea (=Xerula radicata)	(Rehlan:Fries) Dorfelt	Rooting Collybia	Physalacriaceae	E	C
Hymenopellis rubrobrunneus	(Redhead, Ginns, & Shoemaker)	Reddish Rooting Collybia	Physalacriaceae	U	R
Hymenoscyphus fructigenus		Acorn Cup	Heliotaceae	NP	F?
Hyphodontia arguta	(Fr.) Erikss.	Toothed Crust	Schizoporaceae	NE	U
Hyphodontia breviseta			Schizoporaceae	NE	U
Hypholoma (Naematoloma) capnoides	(Fries) Karsten	Conifer Tuft	Strophariaceae	E+	A
Hypholoma (Naematoloma) dispersum	(Fr.) Quelet	Dispersed Naematoloma	Strophariaceae	U	U
Hypholoma (Naematoloma) elongatum	(Persoon:Fries) Ricken		Strophariaceae	U	U
Hypholoma (Naematoloma) fasciculare		Sulphur Tuft	Strophariaceae	P	U
Hypholoma (Naematoloma) sublateritium	(Fries) Quelet	Brick Caps	Strophariaceae	E+	C
Hypholoma (Naematoloma) udum	(Persoon:Fries) Kuhner	Bog Naematoloma	Strophariaceae	NP	F
Hypocrea (= Podostroma) alutacea	(Pers.) Ces. & De Not.		Hypocreaceae	U	U
Hypocrea americana	(Canham) Overton		Hypocreaceae	NE	R?
Hypocrea avellanea	Rogerson & Carey		Hypocreaceae	NE	U
Hypocrea chromosperma	Curtis & Peck		Hypocreaceae	NE	U
Hypocrea citrina	(Pers.) Fr.		Hypocreaceae	NE	U
Hypocrea latizonata	Pk.	Birds Nest Hypocrea	Hypocreaceae	NE	U

Hypocrea pulvinata	Fuck.		Hypocreaceae	NE	U
Hypocrea rufa	(Pers.) Fr.		Hypocreaceae	NE	U
Hypocrea sulphurea	(Schwein.) Sacc.		Hypocreaceae	NE	U
Hypomyces aurantius	(Pers.) Fuck.	Golden Polypore Mold	Hypocreaceae	NE	C
Hypomyces cervinigenus	Roger. & Simms		Hypocreaceae	NE	U
Hypomyces chlorinigenus	Roger. & Sam.	Bolete Hypomyces	Hypocreaceae	NE	U
Hypomyces chrysospermus		Golden Hypomyces	Hypocreaceae	NR	C
Hypomyces completus	(Arnold) Rog. & Sam.	Suillus Mold	Hypocreaceae	NR	F
Hypomyces hyalinus		Amanita Mold	Hypocreaceae	NR	C
Hypomyces lactifluorum		Lobster Mushroom	Hypocreaceae	E-	C
Hypomyces lateritius	(Fr.) Tul. & C.Tul.	Milky Mold	Hypocreaceae	U	U
Hypomyces leotiicola	Rogerson & Samuels	Jellybaby Hypomyces	Hypocreaceae	E-	U
Hypomyces luteovirens		Yellow-green Hypomyces	Hypocreaceae	NR	F
Hypomyces microspermus	Rogerson & Samuels		Hypocreaceae	NR	U
Hypomyces mycophilus	Rogerson & Samuels		Hypocreaceae	NR	R?
Hypomyces polyporinus	Pk.	Polypore Hypomyces	Hypocreaceae	NE	U
Hypomyces porphyreus	Rogerson & Maser		Hypocreaceae	NE	R?
Hypoxylon fragiforme		Red Cushion Hypoxylon	Xylariaceae	NE	C
Hypoxylon fuscum	(Pers.) Fr.	Brown Cushion Hypoxylon	Xylariaceae	NE	F
Hypsizygus (= Pleurotus) elongatipes	(Pk.) Bigelow	Long-stalked Oyster	Pleurotaceae	E	U
Hypsizygus tessulatus		Elm Oyster	Pleurotaceae	E-	F
Hypsizygus ulmarius	(Bull.) Redhead	Elm Oyster	Pleurotaceae	E-	U
Imleria (= Boletus) badia	(Fr.) Vizzini	Bay Bolete	Boletaceae	E	C
Infundibulicybe (= Clitocybe) gibba	(Pers.) Harmaja	The Funnel	Tricholomataceae	E	U
Infundibulicybe costata	(Kuhn. & Romag.)Harm.		Tricholomataceae	E	R?
Infundibulicybe squamulosa	(Pers.) Harmaja	Conifer Funnel	Tricholomataceae	U	U
Inocephalus (= Entoloma) fibrillosus (= fibrosum)	(Pk.) Y.Lam.	Fibrous Entoloma	Entolomataceae	U	R?
Inocephalus (= Nolanea) luteus	(Pk.) Lam.	Yellow Entoloma	Entolomataceae	P	U
Inocephalus (= Nolanea) murrayi	(Pk.) Lam.	Yellow Unicorn Entoloma	Entolomataceae	NR	U
Inocephalus (= Nolanea) quadratus (=salmonea)	(Berk.&Curt) Lam.	Salmon Entoloma	Entolomataceae	P?	F
Inocybe (= Inosperma) fastigiella (fastigiellum)	(Atk.) Matheny & Esteve-Rav.		Inocybaceae	P	U
Inocybe albodisca	Pk.	White-disc Fiber Head	Inocybaceae	P	F
Inocybe calamistrata			Inocybaceae	P	F
Inocybe fuscodisca		Black-nipple Fiber Head	Inocybaceae	P	U
Inocybe geophylla		White Fiber Head	Inocybaceae	P	U
Inocybe hystrix	(Fr.) P. Karst	Spiny Fiber Head	Inocybaceae	P	U
Inocybe hystrix var. hystrix			Inocybaceae	P	R
Inocybe lacera		Torn Fiber Head	Inocybaceae	P	F
Inocybe lanatodisca var. phaeoderma		Sperm-Corn Fiber Head	Inocybaceae	P?	U
Inocybe lanuginosa		Wooly Fiber Head	Inocybaceae	P	C
Inocybe lilacina		Lilac Fiber Head	Inocybaceae	NR	U
Inocybe napipes	Lange	Bulbous-footed Inocybe	Inocybaceae	P	R?
Inocybe pallidicremea	sensu Grund & Stuntz		Inocybaceae	P	R?
Inocybe rimosa (= fastigiata) var. microsperma	(Bull.:Fr.) Kumm.	Straw Colored Fiber Head	Inocybaceae	P	F
Inocybe sororia		Green Corn Fiber Head	Inocybaceae	P	U
Inocybe tahquamenonensis	St.	Tahquamenon Fiber Head	Inocybaceae	P	R
Inocybe tubarioides	G.F.Atkins.	Tubaria-like Fiber Head	Inocybaceae	P	U
Inocybe umbratica	Quel.		Inocybaceae	P	U
Inocybe whitei (=pudica)	(Berk. & Broome) Sacc.	Blushing Fiber Head	Inocybaceae	P	U
Inonotus (Onnia) circinatus	(Fr.) Gilbn.		Hymenochaetaceae	NE	U
Inonotus (Onnia) tomentosus	(Fr.) Teng.	Woolly Velvet Polypore	Hymenochaetaceae	NE	F
Inonotus (Pseudoinonotus) dryadeus	(Pers.) Murr.	Oak-loving Polypore	Hymenochaetaceae	NE	U
Inonotus cuticularis	(Bull.:Fr.) Karst.		Hymenochaetaceae	NE	U
Inonotus glomeratus	(Pk.) Murr.	'Beech Fiber Ears'	Hymenochaetaceae	NE	C
Inonotus obliquus	(Pers.:Fr.) Pilat.	Clinker Polypore (Chaga)	Hymenochaetaceae	NE	C
Inonotus radiatus	(Sow.:Fr.) Karst.		Hymenochaetaceae	NE	F
Inonotus rheades	(Pers.) Bond. & Sing.		Hymenochaetaceae	NE	U
Inonotus triqueter	(Alb. & Schwein.)Teixeira		Hymenochaetaceae	NE	R?
Irpex lacteus	(Fr.:Fr.) Fr.	Milky Toothed Crust	Steccherinaceae	NE	C
Isaria farinosa	(Holmsk.) Fr.		Cordycipitaceae	NE	U
Ischnoderma benzoinum	(Wahlenb.) P.Karst.		Ischnodermataceae	NE	U
Ischnoderma resinosum	(Fr.) Karst.	Resinous Polypore	Ischnodermataceae	NR	F
Junghuhnia nitida	(Fr.) Ryv.	Yeollowish micropore crust	Steccherinaceae	NE	U
Keuhneromyces (= Pholitoa) vernalis	(Sacc.) Singer & A.H.Smith	Spring Pholiota	Strophariaceae	E/C	U
Kretzschmeria (= Ustulina) deusta	(Hoffm.) P.M.D. Martin	Carbon Cushion	Xylariaceae	NE	F
Kuehneromyces (= Pholiota) mutabilis	(Scop.:Fr.) Sing.&Sm.	Changeable Pholiota	Strophariaceae	E/C	U
Laccaria amethystina	(Hudson) Cooke	Amethyst Laccaria	Hydnangiaceae	E	U
Laccaria bicolor	(Maire) Orton	Bicolored Laccaria	Hydnangiaceae	E	C
Laccaria laccata grp.	(Scop.:Fr.) Berk. & Broome	Common Laccaria	Hydnangiaceae	E/C	A
Laccaria longipes	Mueller	Long-stalked Laccaria	Hydnangiaceae	U	U

Laccaria nobilis	(Smith) Mueller	Noble Laccaria	Hydnangiaceae	E	U
Laccaria ochropurpurea	(Berk.) Pk.	Purple-gilled Laccaria	Hydnangiaceae	E	C
Laccaria pallidifolia	Bessette & Miller	Pallid-gilled Laccaria	Hydnangiaceae	E	C
Laccaria proxima	(Boud.) Pat.	Deceiver	Hydnangiaceae	E	U?
Laccaria pumila	Fayod		Hydnangiaceae	E	U?
Laccaria striatula	(Pk) Pk.		Hydnangiaceae	E	U?
Lachnellula agassizii	(Berk. & Curt.) Dennis		Hyaloscyphaceae	NE	U
Lachnum (Dasyscyphus) virgineum	(Batsch) P. Karst.	Stalked Hairy Fairy Cup	Hyaloscyphaceae	U	U
Lacrymaria lacrymabunda (= Psathyrella velutina)	(Bull.) Pat.	Velvety Psathyrella	Psathyrellaceae	E/NR	F
Lactarius (Lactifluus) glaucescens	Crossl.		Russulaceae	E-	R?
Lactarius (Lactifluus) hygrophoroides	Berk. & Curtis	Hygrophorus Milky	Russulaceae	E	U
Lactarius (Lactifluus) volemus	Fr.	Voluminous-latex Milky	Russulaceae	E+	U
Lactarius affinis			Russulaceae	NR	U
Lactarius allardii			Russulaceae	P	U
Lactarius aquifluus = helvus?		Burnt Sugar Milky	Russulaceae	E+	F
Lactarius argillaceifolius	Hesler & Smith	Clay-gilled Milky	Russulaceae	E?	U
Lactarius aspideoides	Burlingham		Russulaceae	P	R?
Lactarius atroviridis	Pk.	Sordid Green Milky	Russulaceae	U	U
Lactarius camphoratus		Candy Milky	Russulaceae	E+	A
Lactarius chelidonium	Pk.		Russulaceae	E	U
Lactarius chelidonium var. chelidonioides	(Smith) Hesler & Smith		Russulaceae	E	U
Lactarius chrysorheus	Fr.	Yellow-juice Milky	Russulaceae	P	F
Lactarius cinereus		Gray Milky	Russulaceae	U	F
Lactarius cinereus var. fagetorum		Cinereus Milky	Russulaceae	U	F
Lactarius croceus	Burl.		Russulaceae	NR	U
Lactarius deceptivus	Pk.	Deceptive Milky	Russulaceae	P	A
Lactarius deterrimus (deliciosus)		Orange-latex Milky	Russulaceae	E+	U
Lactarius fumosus		Smoky Milky	Russulaceae	NR	U
Lactarius gerardii	Pk.	Gerard's Milky	Russulaceae	E	F
Lactarius gerardii var. subrubescens	Smith & Hesler		Russulaceae	E-	R?
Lactarius glyciosmus		Coconut-scented Milky	Russulaceae	NR	U
Lactarius griseus		Gray Milky	Russulaceae	P	F
Lactarius hepaticus	Plowr.	Liver Milky	Russulaceae	E	U
Lactarius hibbardae		Coconut-scented Milky	Russulaceae	NR	C
Lactarius hysginus var. hysginus	Fr.		Russulaceae	P	U
Lactarius lignyotus		Velvet Milky	Russulaceae	NP	C
Lactarius lignyotus var. marginatus		Chocolate Milky	Russulaceae	NP	U
Lactarius mucidus		Slimy Milk Cap	Russulaceae	NP	F
Lactarius paradoxus	Beardslee & Burl.	Odd Milky	Russulaceae	E	R?
Lactarius peckii	Burl.	Peck's Milky	Russulaceae	U	F
Lactarius piperatus var. piperatus	Gray	Peppery Milky	Russulaceae	P?	U
Lactarius psammicola	A.H.Smith	Zonate Milky	Russulaceae	P	U
Lactarius pseudoflexuosus			Russulaceae	P	U
Lactarius pubescens	Fr.	Birch Milky	Russulaceae	P	R
Lactarius pyrogallus		Fire-latex Milky	Russulaceae	P	U
Lactarius quietus var incanus	Hesler & Smith	Oakbug Milkcap	Russulaceae	U	U
Lactarius repraesentaneus	Britz.	Yellow-bearded Milkcap	Russulaceae	NP	U
Lactarius resimus	(Fr.:Fr.) Fr.	Turned-up Milky	Russulaceae	P	U
Lactarius rufus var. rufus	(Fr.) Fr.	Red Hot Milky	Russulaceae	P	F
Lactarius sordidus		Sordid Milky	Russulaceae	NP	U
Lactarius subpalustris	Hesler & Smith		Russulaceae	P	R?
Lactarius subpurpureus	Pk.	Variegated Milky	Russulaceae	U	U
Lactarius subserifluus		Scant Milky	Russulaceae	E	F
Lactarius subvellereus	Pk.		Russulaceae	P	U
Lactarius subvellereus var. subdistans	Hesler & Smith		Russulaceae	P	F
Lactarius thejogalus	(Bull.) Gray	Sulfer-milk Lactarius	Russulaceae	E/NR	F
Lactarius thyinos	A.H. Smith	Orange-latex Milky	Russulaceae	E	F
Lactarius tomentoso-marginatus	Hesler & Smith		Russulaceae	P	F
Lactarius torminosus		Woolly Milky	Russulaceae	P	F
Lactarius uvidus		Lilac-stained Milky	Russulaceae	P	U
Lactarius vietus			Russulaceae	U	F
Lactarius vinaceorufescens		Yellow-latex Milky	Russulaceae	P	A
Laetiporus cincinnatus	(Morgan)Burds.,Banik & Volk		Fomitopsidaceae	E++	U
Laetiporus persicinus	(Berk. & Curt.) Gilbn.	White Sulphur Shelf	Fomitopsidaceae	E++	U
Laetiporus sulphureus	(Bull.:Fr.) Murr.	Sulphur Shelf	Fomitopsidaceae	E+	F
Langermannia gigantea	Calvatia gigantea	Giant Puffball	Lycoperdaceae	E+/C	U
Leccinellum albellum	(Pk.) Bres. & Manfr. Binder	White Scaber Stalk	Boletaceae	E	U
Leccinum atrostipitatum			Boletaceae	E/C	F
Leccinum aurantiacum	Bull. ex St. Amans	Orange Scaber Stalk	Boletaceae	E	C
Leccinum griseonigrum	Sm., Th. & Watl.	Grayish-black Scaber Stalk	Boletaceae	E	U

Leccinum griseum (= carpini)			Boletaceae	E	U
Leccinum holopus		Birch Scaber Stalk	Boletaceae	E	C
Leccinum holopus var. americanum	(Rotsk.) Watl.	Snow White Scaber Stalk	Boletaceae	E	F
Leccinum insigne(group)	Sm., Th. & Watl.	Aspen Scaber Stalk	Boletaceae	E/C	F
Leccinum insolens var. brunneo-maculatum	Sm., Th. & Watl.	Brownish Scaber Stalk	Boletaceae	E	R?
Leccinum luteum	Sm., Th. & Watl.	Yellow Scaber Stalk	Boletaceae	E	U
Leccinum oxydabile	(Sing.) Sing.		Boletaceae	E	U
Leccinum piceinum	Pil. & Derm.	Spruce Scaber Stalk	Boletaceae	E	C
Leccinum rugosiceps	(Pk.) Sing.	Wrinkled Bolete	Boletaceae	E-	U
Leccinum scabrum group		Common Scaber Stalk	Boletaceae	E	C
Leccinum snellii		Snell's Scaber Stalk	Boletaceae	E	F
Leccinum subgranulosum	Sm. & Th.		Boletaceae	U	U
Leccinum variicolor			Boletaceae	E?	U?
Lentinellus cochleatus		Cockle-shell	Auriscalpiaceae	E	U
Lentinellus micheneri	(Berk. & M.A.Curt.) Pegler		Auriscalpiaceae	E-	R?
Lentinellus omphalodes	(fr.) Karsten		Auriscalpiaceae	U	R?
Lentinellus ursinus		Bear Lentinus	Auriscalpiaceae	NR	U
Lentinus levis (=Panus strigosus)	(Berk & M.A. Curtis) Murr.		Polyporaceae	NR	U?
Lentinus strigosus (=Panus rudis)	(Schwein.)Fr.	Hairy Panus	Polyporaceae	NR	U
Lentinus suavissimus	Fr.	Anise Odor Lentinus	Polyporaceae	NR	R?
Lenzites (Trametes) betulina	(Fr.) Fr.	Gilled Polypore	Polyporaceae	NE	C
Leocarpus fragilis		Insect Egg Slime	Physacaceae	U	F
Leotia lubrica	(Scop.) Pers.	Common Jelly Clubs	Leotiaceae	E?	C
Leotia viscosa	Fr.	Green-headed Jelly Club	Leotiaceae	E?	F
Lepiota castanea	Quel.	Chestnut Lepiota	Agaricaceae	P!	R
Lepiota clypeolarioides	Rea	White Chocolate Lepiota	Agaricaceae	P	R
Lepiota cristata	(Bolton) P. Kumm.	Malodorous Lepiota	Agaricaceae	P	F
Lepista (= Clitocybe) gilva (= maculosa)	(Pers.:Fr.) Roze	Spotted Clitocybe	Tricholomataceae	NE	U
Lepista (= Clitocybe) glaucocana	(Bres.) Singer	Pale Blewit	Tricholomataceae	E	U
Lepista (= Clitocybe) nuda	(Bull.) Cooke	Blewit	Tricholomataceae	E++	F
Lepista (= Clitocybe) saeva	(Fr.) P.D.Orton	Thin Blewit	Tricholomataceae	E	U
Lepista (= Clitocybe) sordida (= tarda)	(Schumach.) Sing.	Slender Blewit	Tricholomataceae	E	U
Leptonia asprella	(Fr.:Fr.) Kumm.		Entolomataceae	NE	U
Leptonia clintoniana	(Pk) Larg.		Entolomataceae	NR	U
Leptonia corvina	(Kuhn.) Ort.	Carbon-colored Entoloma	Entolomataceae	P	U
Leptonia exilis	(Fr.:Fr.) Ort.	Reddening Entoloma	Entolomataceae	NR	U
Leptonia formosa	(Fr.:Fr.) Gill.	Superb Entoloma	Entolomataceae	NR	U
Leptonia fragrans	(Hesl.) Larg.	Fragrant Entoloma	Entolomataceae	NR	R?
Leptonia incana	(Fr.:Fr.) Gill.	Green-footed Entoloma	Entolomataceae	NR	U
Leptonia lividocyanula	(Kuhn.) Orton	Small Sphagnum Entoloma	Entolomataceae	NR	R
Leptonia placida	(Fr.) P. Kumm.		Entolomataceae	NR	R?
Leptonia serrulata	(Fr.:Fr.) Kumm	Blue Toothed Entoloma	Entolomataceae	P	F
Leptonia sodalis	(Romagn.) Ort.	Mountain Entoloma	Entolomataceae	NR	U
Leptonia subserrulata	Pk.	Marginate-gilled Entoloma	Entolomataceae	NR	U
Leptonia watsonii	(Pk.) Larg.	Watson's Entoloma	Entolomataceae	NR	U
Leptoporus mollis	(Pers.) Quel.	Pinkish Polypore	Hapilopilaceae	NE	U
Leucoagaricus (= Lepiota) americana	(Pk.) Vellinga	Reddening Lepiota	Lepiotaceae	E+	U
Leucoagaricus (= Lepiota) leucothites (= naucina)	(Vittad.) Wasser	Smooth Lepiota	Lepiotaceae	NR	F
Leucocoprinus (= Lepiota) cepaestipes	(Sowerby) Pat.	House Plant Lepiota	Agaricaceae	NR	U
Leucogyrophana mollusca			Coniophoraceae	NE	R?
Leucopaxillus (= Clitocybe) giganteus	(Sibthorp.:Fr.) Sing.	Giant Leucopax	Tricholomataceae	U	U
Leucopholiota decorosa			Tricholomataceae	U	U
Lopharia cinerascens	(Schwein.) G.Kun.		Polyporaceae	NE	F
Lophodermium pinastri	(Schrad.) Chevall	Pine Needle Rust	Rhytismataceae	NE	F
Lycogala epidendrum		Wolf's Milk Slime	Reticulariaceae	NR	A
Lycogala flavofuscum			Reticulariaceae	E?	U
Lycoperdon coloratum	Pk.		Lycoperdaceae	E	R?
Lycoperdon curtisii	Berk.	Curtis' Puffball	Lycoperdaceae	E	U
Lycoperdon echinatum		Spiny Puffball	Lycoperdaceae	E	F
Lycoperdon excipuliforme (=Calvatia elata)	(Scop.)Pers.	Stalked Puffball	Lycoperdaceae	E+/C	U
Lycoperdon marginatum	Kalchbr.		Lycoperdaceae	E	U
Lycoperdon peckii	Morgan	Peck's Puffball	Lycoperdaceae	E	R?
Lycoperdon perlatum		Gem-studded Puffball	Lycoperdaceae	E	C
Lycoperdon pulcherrimum	Berk. & M.A. Curtis	Beautiful Puffball	Lycoperdaceae	E	R?
Lycoperdon pyriforme	Schaaeff:Pers.	Pear-shaped Puffball	Lycoperdaceae	E	A
Lyophyllum connatum			Lyophyllaceae	E	U
Lyophyllum decastes		Fried-chicken Mushroom	Lyophyllaceae	E/C	U
Lyophyllum semitale			Lyophyllaceae	U	U
Macrocystis cucumis	(Pers.) R. Heim.		Marasmiaceae	E-	R?
Macrolepiota procera	(Scop.) Singer	Parasol Mushroom	Lepiotaceae	E++	F

Macrotyphula juncea			Clavariaceae	U	U
Marasmiellus (= Gymnopus) confluens	(Pers. : Fr.) J.S. Oliveira	Tufted Collybia	Tricholomataceae	E/C	C
Marasmiellus (= Gymnopus) dichrous	(Burk & Curt.) J.S. Oliveira	Bicolored Collybia	Tricholomataceae	NR	U
Marasmiellus (= Gymnopus) luxurians	(Pk.) J.S. Oliveira	Luxuriant Collybia	Tricholomataceae	U	R?
Marasmiellus papillatus	(Pk.) Redhead & Halling	Papillate Marasmius	Marasmiaceae	NP	R?
Marasmiellus praeacutus	(Ellis)Halling	Pointed-stalked Marasmiellus	Marasmiaceae	U	U
Marasmius androsaceus	(L.) Fr.	Horse-hair Marasmius	Marasmiaceae	NP	U
Marasmius capillaris		Hair-like Marasmius	Marasmiaceae	U	F
Marasmius cohaerens			Marasmiaceae	NP	U?
Marasmius copelandi var. olidus	(Gilliam) Desjardins	Garlic Marasmius	Marasmiaceae	E	F
Marasmius epifagus	Gilliam	Beech-leaf Marasmius	Marasmiaceae	U	U
Marasmius oreades		Fairy Ring Mushroom	Marasmiaceae	E+	C
Marasmius pallidocephalus		Pallid-headed Marasmius	Marasmiaceae	NP	F
Marasmius plicatulus		Pleated Marasmius	Marasmiaceae	NP	U
Marasmius pulcherripes			Marasmiaceae	NP	C
Marasmius rotula		Pin Wheel Marasmius	Marasmiaceae	NP	F
Marasmius siccus		Orange Pinwheel	Marasmiaceae	NR	F
Marasmius strictipes		Orange-yellow Marasmius	Marasmiaceae	U	U
Marasmius sullivantii	Mont.		Marasmiaceae	U	R?
Marasmius thujinus	Pk.		Marasmiaceae	E-	U
Megacollybia rodmanii (=Tricholomopsis platyphyll	(Pers.:Fr.) Kotl. & Pouz.	Platterful Mushroom	Tricholomataceae	E+	A
Meiorganum curtisii	(Berk.) Redhead & Singer		Paxillaceae	U	U
Melanogaster tuberiformis	Corda		Boletaceae	E-	R?
Melanoleuca alboflavida	(Pk.) Murr.		Tricholomataceae	E	U
Melanoleuca melaleuca		Changeable Melanoleuca	Tricholomataceae	E?	U
Meripilus sumstinei (=giganteus)	(Fr.) Karst.	Black-staining Polypore	Meripilaceae	E	U
Microglossum fumosum		Brown Earth Tongue	Geoglossaceae	U	U
Microglossum rufum		Orange Earth Tongue	Geoglossaceae	U	C
Micromphale foetidum		Fetid Marasmius	Tricholomataceae	NR	U
Micromphale perforans		Perforated Marasmius	Tricholomataceae	U	U
Mitrula elegans (= paludosa?)		Elegant Swamp Beacon	Sclerotiniaceae	U	U
Mitrula paludosa	Fr.	Swamp Beacon	Sclerotiniaceae	U	F
Morchella americana (= esculenta)	Clowez & Matherly	Yellow Morel	Morchellaceae	E+++	U
Morchella angusticeps (= elata)	Peck	Black Morel	Morchellaceae	E+++	U
Morganella subincarnata	(Pk.) Kreisel & Dring		Lycoperdaceae	U	U
Multiclavula mucida			Clavariaceae	U	F
Muscinupta (= Cyphellostereum) laevis	(Fr.) Redhead,Lucking&Lawrey	Moss Mushrom	Rickenellaceae	U	U
Mutinus caninus		Dog Stinkhorn	Phallaceae	U	U
Mycena abramsii	Murr.	Fading Gray Mycena	Mycenaceae	U	F
Mycena acicula	(Fr.) Quel.	Coral Spring Mycena	Mycenaceae	U	U
Mycena alcalina		Alkaline-odor Mycena	Mycenaceae	NR	F
Mycena amabilissima	(Pk.) Saccardo	Pink Mycena	Mycenaceae	U	R?
Mycena atkinsoniana	A.H. Smith	Red-pruinose Atkinson's Mycena	Mycenaceae	U	R?
Mycena capillaripes	Peck		Mycenaceae	U	U
Mycena capillaris			Mycenaceae	U	U
Mycena citrinomarginata	Gill.	Citrine-edged Mycena	Mycenaceae	U	U
Mycena clavicularis	(Fr.) Gill.	Slimy-stemmed Mycena	Mycenaceae	U	U
Mycena corticola		Bark Mycena	Mycenaceae	U	U
Mycena epipterigioides		Cucumber-scented Mycena	Mycenaceae	U	U
Mycena epipterygia (incl. var. lignicola, viscosa)	(Scop.) Gray	Yellow-stemmed Mycena	Mycenaceae	U,NR	C
Mycena galericulata (group)			Mycenaceae	U	F?
Mycena gracilis	(Quel.) Kuhn.	Graceful Mycena	Mycenaceae	NE	C
Mycena griseoviridis	Smith		Mycenaceae	U	F
Mycena haematopus		Bleeding Mycena	Mycenaceae	NP	F
Mycena inclinata			Mycenaceae	U	U
Mycena leaiana		Orange Mycena	Mycenaceae	U	F
Mycena leptocephala	(Pers.:Fr.) Gill.	Chloral Mycena	Mycenaceae	U	C
Mycena lilacifolia	(Pk.) Singer	Lilac Mycena	Mycenaceae	U	R
Mycena maculata		Spotted Mycena	Mycenaceae	U	F
Mycena megaspora	Kauffm.	Large-spored Mycena	Mycenaceae	U	U
Mycena meliigena	(Berk. & Cooke) Sacc.	Bark-loving Mycena	Mycenaceae	U	C
Mycena niveipes	(Murr.) Murr.	Snow-footed Mycena	Mycenaceae	U	F
Mycena osmundicola	Lange	Fern-loving Mycena	Mycenaceae	U	U
Mycena purpureofusca		Purple Gray Mycena	Mycenaceae	U	U
Mycena rosella		Rose Mycena	Mycenaceae	NR	U
Mycena rutilantiformis	(Murr.) Murr.		Mycenaceae	U	U
Mycena sanguinolenta		Bleeding Mycena	Mycenaceae	U	U
Mycena semivestipes	(Pk.) A.H. Sm.		Mycenaceae	U	U
Mycena stylobates	(Pers.) Kumm.		Mycenaceae	U	C
Mycena subcaerulea		Blue Mycena	Mycenaceae	NP	U

Mycetinis (=Marasmius) scorodonius	(Fr.)Fr.	Garlic Marasmius	Marasmiaceae	E+	C
Mycetinis opacus	(Berk. & Curt.) Wilson & Desjardin		Marasmiaceae	NP	R?
Mycocalicium subtile	(Pers.) Satz.	Stubble Fungus	Mycocaliciaceae	NE	U
Myxarium (= Exidia) nucleata	Wallr.	Granular Jelly Roll	Tremellaceae	U	U
Nectria cinnabarina	(Tode) Fr.		Nectriaceae	NE	U
Nectria coccinea var. faginata	(Pers.) Fr.	Beech Blight	Nectriaceae	NE	C
Nectriopsis violacea	(J.C.Smith ex Fr.) Maire	Violet Slime Parasite	Bionectriaceae	NE	R?
Neofavolus alveolaris (= Polyporus mori)	(DC.) Bond. & Sing.	Hexagonal-pored Polypore	Polyporaceae	NE	C
Neolecta irregularis		Irregular Earth Tongue	Neolectaceae	U	F
Neolecta vitellina	(Bres.) Korf & Rogers	Egg Yolk Earth Tongue	Neolectaceae	U	U
Neolentinus suffrutescens (=lepideus)		Train Wrecker	Polyporaceae	NR	U
Neottiella rutilans	(Fr.) Dennis		Pyronemataceae	U	U
Nidula candida		Common Gel Bird's Nest	Nidulariaceae	NE	U
Niveoporofomes (=Fomitopsis) spraguei	(Berk. et Curt.) Gilbn. & Ryv.		Fomitopsidaceae	NE	U
Nolanea (= Entoloma) conica	(Pk.) Sacc.	Conic Unicorn Entoloma	Entolomataceae	P	U
Nolanea (= Entoloma) flavifolia	Pk.	Yellow-gilled Entoloma	Entolomataceae	NE	R?
Nolanea (= Entoloma) sericea	(Quel.) P.D.Orton	Silky Entoloma	Entolomataceae	P	U
Nolanea (= Entoloma) strictior	(Pk.) Pom.	Straight-stalked Entoloma	Entolomataceae	P	C
Nolanea (= Entoloma) strictior var. isabellina	(Hes.) Baroni		Entolomataceae	NR	U
Nolanea (= Entoloma) verna	Lundell	Spring Entoloma	Entolomataceae	P	C
Odonticium romellii	(S. Lundell) Parmasto		Corticiaceae	NE	R?
Oligoporus (Polyporus) balsameus	(Pk.) Gilb. & Ryv.		Polyporaceae	NE	U
Oligoporus (Tyromyces) caesius	(Fr.) Schr.	Blue-staining Polypore	Polyporaceae	U	F
Oligoporus (Tyromyces) guttulatus	(Pk.) Gilb. & Ryv.		Polyporaceae	NR	U
Oligoporus (Tyromyces) tephroleucus	(Fr.) Gilbn. & Ryv.		Polyporaceae	NE	U
Omphalotus illudens	(Schwein.) Bres. & Besl.	Jack-O'Lantern	Omphalotaceae	P	U
Ophiocordyceps stylophora	(Burke & Broome) G.H.Sung		Ophiocordicipitaceae	U	R
Otidia onotica		Donkey Ears	Pyronemataceae	U	U
Oxyporus populinus	(Schum.:Fr.) Donk.	Mossy Maple Polpyore	Schizoporaceae	NR	C
Pachyella clypeata	(Schwein.) Le Gal		Pezizaceae	U	U
Panaeolina (= Psathyrella) foenisecii	(Pers.) Maire	Lawn Mower's Mushroom	Psathyrellaceae	P(H)	C
Panaeolus papilionaceus (= campanulatus/sphinctr	(Bull.) Quel.	Bell-shaped Panaeolus	Coprinaceae	P/±H	U
Panaeolus subalteatus		Girdled Panaeolus	Coprinaceae	P(H)	U
Panellus serotinus		Late Fall Oyster	Tricholomataceae	E-	C
Panellus stipticus		Luminescent Pan	Tricholomataceae	M,P	A
Panus conchatus	(Bull.) Fr.		Polyporaceae	NR	U
Parasola (=Coprinus) leiocephala (= plicatilis)		Japanese Parasol Inky	Psathyrellaceae	U	U
Paxillus involutus		Inrolled Pax	Paxillaceae	P	C
Penicillium claviforme (= vulpinum)	Bainier	Club-shaped Mold	Trichocomaceae	U	R
Peniophora rufa		Red Tree Brain	Corticiaceae	?	C
Perenniporia fraxinea	(Bull.:Fr.) Ryv.		Polyporaceae	NE	U
Perenniporia fraxinophila		Ash-loving Polypore	Polyporaceae	NE,M	U
Perenniporia subacida			Polyporaceae	NE	U
Peziza badia		Large Brown Cup	Pezizaceae	NR	F
Peziza badio-confusa		Brown Cup	Pezizaceae	U	U
Peziza olivacea		Olive-brown Cup	Pezizaceae	U	F
Peziza phyllogena			Pezizaceae	U	U
Peziza repanda	Persoon	Wavy Cup	Pezizaceae	U	U
Peziza succosa	Berkeley	Yellow Sap Cup	Pezizaceae	U	U
Peziza sylvestris		Woodland Cup	Pezizaceae	U	U
Peziza vesiculosus		Bladder Cup	Pezizaceae	U	U
Phaeocalicium polyporaeum	(Nyl.) Tibell		Mycocaliciaceae	NE	U
Phaeocollybia christinae (= rufipes)	(Fr.) Heim.		Cortinariaceae	NR	U
Phaeocollybia jennyae	(Karsten) Heim.		Cortinariaceae	U	R?
Phaeocollybia kauffmanii	(Smith) Singer		Cortinariaceae	U	R?
Phaeohelotium monticola			Leotiaceae	NE	F
Phaeolus schweinitzii		Dye-makers Polypore	Polyporaceae	NE	C
Phaeomarasmius erinaceus	(Fr) Scherf. ex. Romagn.		Agaricaceae	NE	F
Phaeonematoloma myosotis	(Fr.) Bon	Swamp Hypholoma	Strophariaceae	U	U
Phallus ravenelii		Stinkhorn	Phallaceae	NR	C
Phellinus (= Fuscoporia) gilvus	(Schwein.) Pat.	Mustard Yellow Polypore	Hymenochaetaceae	NE	F
Phellinus (Fulvifomes) robiniae (incl. rimosus)	(Murr.) Ames	Locust Polypore	Hymenochaetaceae	NE	U
Phellinus conchatus	(Pers.:Fr.)Quel.		Hymenochaetaceae	NE	U
Phellinus everhartii	(Ellis & Galloway) Pilat		Hymenochaetaceae	NE	F
Phellinus ferruginosus	(Schrad.) Pat.	Rusty Pore Crust	Hymenochaetaceae	NE	F
Phellinus hartigii	(Allesch. & Schnabel) Pat.	Hemlock Conk	Hymenochaetaceae	NE	U
Phellinus igniarius	(L.) Quel.	Willow Bark Fungus	Hymenochaetaceae	NE	C
Phellinus inermis	(Ell. & Ever.) Cunn.		Hymenochaetaceae	NE	U
Phellinus laevigatus	(Fr.) Bourdot & Galzin		Hymenochaetaceae	NE	U?
Phellinus tremulae			Hymenochaetaceae	NE	F

Phellinus viticola	(Schwein.:Fr.) Donk.		Hymenochaetaceae	NE	U
Phellodon niger		Black Tooth	Hydnaceae	NE	U
Phlebia (Merulius) tremellosa	(Shrader:Fries) Nakasone & Burd	Trembling Merulius	Schizoporaceae	U	U
Phlebia rufa	(Pers.) M.P. Christ.		Corticiaceae	NE	R?
Phlebiella (= Xenasmatella or Trechispora) vaga	(Fr.) Liberta		Corticiaceae	NE	R?
Phlebiopsis (=Peniophora) gigantea	(Fr.) Julich	Conifer Parchment	Corticiaceae	NE	U
Phleogena faginea	(Fr.) Link	Oak-loving Phleogena	Phleogenaceae	NE	U
Pholiota (destruens) populnea	(Pers.) Kuyper et al	Destructive Pholiota	Strophariaceae	E-	U
Pholiota adiposa	(Batch) P.Kumm.		Strophariaceae	NR	U
Pholiota alnicola (= flavida?)	(Fr.:Fr.) Sing.	Yellow Pholiota	Strophariaceae	NE	U
Pholiota anomala	Pk.		Strophariaceae	U	R?
Pholiota aurivella		Golden Pholiota	Strophariaceae	U	F
Pholiota bakerensis	Smith & Hesler		Strophariaceae	U	R?
Pholiota flammans		Flaming Yellow Pholiota	Strophariaceae	NR	U
Pholiota flavida	(Schaeff.) Singer		Strophariaceae	U	U
Pholiota granulosa	(Pk.) Sm. & Hesl.	Granulose Pholiota	Strophariaceae	U	R?
Pholiota highlandensis		(carbonaria group)	Strophariaceae	U	U
Pholiota lenta	(Pers.:Fr.) Sing.	Glutinous Pholiota	Strophariaceae	U	F
Pholiota lenta-lubrica gr.			Strophariaceae	U	U
Pholiota limonella	Pk.		Strophariaceae	P?	U
Pholiota lubrica	(Pers.:Fr.) Sing	Lubricous Pholiota	Strophariaceae	U	U
Pholiota parvula	Smith & Hesler		Strophariaceae	NP	R?
Pholiota squarrosa		Sharp-scaly Pholiota	Strophariaceae	P-	F
Pholiota squarrosoides		Sharp-scaly Pholiota	Strophariaceae	E+/C	C
Pholiota terrestris			Strophariaceae	U	F
Pholiota veris	(Singer & Smith) Smith & Hesler	Spring Pholiota	Strophariaceae	U	U
Phragmidium violaceum	(Sch.) Winter	Blackberry Rust	Phragmidiaceae	NE	U
Phylloporus leucomycelinus	(Singer & Ivory) Singer	White-based Phylloporus	Boletaceae	E	U
Phylloporus rhodoxanthus	Sing.	Gilled Bolete	Boletaceae	E+	F
Phyllotopsis nidulans		Orange Mock Oyster	Tricholomataceae	E--	U
Physalacria inflata	(Schwein.) Fr.	Bladder Stalks	Physalacriaceae	NE	U
Physarum bivalve	Pers.		Physacaceae	U	R?
Physarum cinereum		Ashy Physarum	Physacaceae	U	C
Physarum didermoides			Physacaceae	U	C
Physarum polycephalum		Many-headed Slime	Physacaceae	NR	F
Phytoconis (= Omphalina) ericetorum	(Pers.) Redhead & Kuyper	Lichen Agaric	Tricholomataceae	NP	U
Piptoporus (Fomitopsis) betulinus		Birch Polypore	Polyporaceae	E-	A
Pleurocybella porrigens		Angel Wings	Pleurotaceae	E-	U
Pleurotus dryinus	(Pers.) Kumm.	Veiled Oyster	Pleurotaceae	E-	U
Pleurotus levis	(Berk.&Curt.) Sing.	Hairy Pleurotus	Pleurotaceae	NE	R?
Pleurotus ostreatus	(Jacq.) P. Kumm.	Oyster Mushroom	Pleurotaceae	E+	C
Pleurotus populinus	O. Hillbur & O.K. Mill	Poplar Oyster	Pleurotaceae	E	U
Pleurotus pulmonarius	(Fr.) Quel.	Summer Oyster	Pleurotaceae	E+	F
Plicaturopsis crispa		Crimped Gill	Schizophyllaceae	NE	F
Pluteus admirabilis	Peck	Admirable Pluteus	Pluteaceae	E?	U
Pluteus americanus (= salicinus)	(P.Banerjee & Sund.) Justo, E.F.M	Bluing Pluteus	Pluteaceae	E?	U
Pluteus atromarginatus	(Konrad) Kuhner	Black-edged Pluteus	Pluteaceae	E	U
Pluteus cervinus	(Schaeffer:Fries) Kummer	Deer Mushroom	Pluteaceae	E-	C
Pluteus chrysophlebius	(Berk. & Curt.) Sacc.	Golden Pluteus	Pluteaceae	U	R?
Pluteus flavofuligineus (= leoninus?)	Atkinson		Pluteaceae	E?	U
Pluteus granularis	Peck	Granular Pluteus	Pluteaceae	E	U
Pluteus longistriatus	(Pk.) Peck		Pluteaceae	E?	U
Pluteus pallidus	Homola	Pallid Pluteus	Pluteaceae	E-	U
Pluteus pellitus	(Fries) Kummer		Pluteaceae	E-	U
Pluteus petasatus	(Fries) Gillet		Pluteaceae	E	U
Pluteus seticeps	(Atkinson) Singer	Hairy-capped Pluteus	Pluteaceae	E?	U
Pluteus tomentosulus	(White) Pk.	White Hairy Pluteus	Pluteaceae	E	R
Polyozellus multiplex	(Underw.) Murr.	Blue Chanterelle	Thelephoraceae	E+	R
Polyporus (Ceriporus) squamosus	(Huds.) Fr.	Dryad's Saddle	Polyporaceae	E-	C
Polyporus admirabilis	Pk.	Admirable Polypore	Polyporaceae	M	R
Polyporus arcularis	(Batsch) Fr.	Spring Polypore	Polyporaceae	NE	F
Polyporus brumalis	(Pers.) Fr.	Winter Polypore	Polyporaceae	NE	A
Polyporus leptocephalus (= elegans)	(Jacq.) Fr.	Elegant Polypore	Polyporaceae	NE	C
Polyporus melanopus (= picipes)	(Pers.) Fr.	Black-footed Polypore	Polyporaceae	NE	U
Polyporus radicatus	Schwein.	Rooting Polypore	Polyporaceae	NE,M?	U
Polyporus umbellatus	(Pers.) Fr.	Umbrella Polypore	Polyporaceae	E,M	R
Polyporus varius	(Pers.) Fr.	Elegant Polypore	Polyporaceae	NE	C
Porodaedalea (= Phellinus) chrysoloma	(Fr.) Fiasson & Niemela	Golden Spreading Polypore	Hymenochaetaceae	NE	R?
Porodaedalea (= Phellinus) pini	(Brot.) Murr.	Golden Conifer Conk	Hymenochaetaceae	NE	U
Porodisculus pendulus	(Schwein.) Schwein.	Pendant Polypore	Polyporaceae	NE	U

Poronidulus (Trametes) conchifer	(Schwein.) Murr.	Nesting Polypore	Polyporaceae	NE	U
Porpoloma (= Tricholoma) umbrosum	(A.H. Sm. & M.B. Walters) Singer		Tricholomataceae	E-	U
Postia (= Oligoporus or Tyromyces) fragilis	(Fr.) Julich	Red-staining Polypore	Fomitopsidaceae	NR	F
Postia (=Oligoporus or Tyromyces) stipticus	(Pers.:Fr.) Gilbn. & Ryv.		Fomitopsidaceae	NE	U
Postia (=Oligoporus) ptychogaster	(F.Ludw.) Vesterh.	Powderpuff Bracket	Fomitopsidaceae	NE	R?
Pouzarella nodospora	(Atk.) Mazzer		Entolomataceae	U	F
Prunulus (=Mycena) purus		Purple Mycena	Mycenaceae	E/C	F
Psathyrella candolleana	(Fr.) Maire		Psathyrellaceae	U	U
Psathyrella conissans	(Pk.) A.H. Sm.	Red-gilled Psathyrella	Psathyrellaceae	U	U
Psathyrella delineata	(Pk.) A.H. Smith		Psathyrellaceae	U	F
Psathyrella gracilis	(Fr.) Quelet		Psathyrellaceae	U	U
Psathyrella kauffmanii	A.H. Sm.	Kauffman's Psathyrella	Psathyrellaceae	U	U
Psathyrella piluliformis (= hydrophila)	(Bull.) P.D. Orton	Clustered Psathyrella	Psathyrellaceae	NP	C
Psathyrella rugocephala	(G.A. Atk.) A.H. Smith	Rough-capped Psathyrella	Psathyrellaceae	U	U
Psathyrella spadiceogrisea	(Schaeff.) Maire	Spring Psathyrella	Psathyrellaceae	U	R
Pseudoarmillariella (=Omphalina or Clitocybe) ecty	(Pk.) Singer	Wood Clitocybe	Tricholomataceae	U	U
Pseudoclitocybe (= Clitocybe) cyathiformis	(Bull.:Fr.) Sing.	Cyathiform Clitocybe	Tricholomataceae	U	U
Pseudofistulina radicata	(Schwein.) Burds.	Rooting Polypore	Fistulinaceae	U	R
Pseudohydnum gelatinosum		Jelly Tooth	Tremellaceae	E	U
Pseudomerulius aureus	(Fr.) Julich		Coniophoraceae	NE	U
Pseudoplectania nigrella	(Pers.) Fuck.	Hairy Black (Ebony) Cup	Sarcosomataceae	U	F
Psilocybe caerulipes	(Pk.) Sacc.	Blue-foot Psilocybe	Strophariaceae	P(H)	U
Psilocybe fuscofulva (= turficola, atrobrunnea)	J. Favre		Strophariaceae	P(H)	U
Psilocybe polytrichophila (= montana)	Pk.		Strophariaceae	U	U
Pulveroboletus ravenelii	(Berk. & Curt.) Murr.	Powdery Sulphur Bolete	Boletaceae	E?	U
Pycnoporellus fulgens	(Fr.) Donk.		Fomitopsidaceae	NE	U
Pycnoporus (Trametes) cinnabarinus	(Jacq.) P. Karst.	Cinnabar Polypore	Polyporaceae	NE	C
Ramaria aurea	(Schaeff.) Quel.	Golden Coral	Gomphaceae	E	F
Ramaria botrytis	(Fr.)Ricken	Pink Coral	Gomphaceae	E+	U
Ramaria concolor	(Corner) R.H.Peterson	Concolor Coral	Gomphaceae	U	U
Ramaria flaccida	(Fr.) Bourdot	Soft Coral	Gomphaceae	U	U
Ramaria formosa	(Pers.) Quel.	Yellow-tipped Coral	Gomphaceae	P?	C
Ramaria rubescens	Schaeff.		Gomphaceae	U	R?
Ramaria sanguinea	(Pers.) Quel.	Red-staining Coral	Gomphaceae	U	R
Ramaria stricta	(Pers.) Quel.	Straight-branched Coral	Gomphaceae	E	F
Ramaria subbotrytis	(Pers.) Quel.		Gomphaceae	E	R?
Ramariopsis kunzei	(Fr.) Corner	White (Ivory) Coral	Gomphaceae	E	F
Resupinatus applicatus	(Batsch) Gray	Black Jelly Oyster	Tricholomataceae	U	F?
Retiboletus (= Boletus) ornatipes	Pk.	Ornate-stemmed Bolete	Boletaceae	E	F
Retiboletus griseus	(Frost) Binder & Bresinsky	Gray Bolete	Boletaceae	E	U
Reticularia lycoperdon	Bull.		Tubiferaceae	U	U
Reticularia splendens var. splendens	Morgan		Tubiferaceae	U	U
Rhizomarasmius pyrrhocephalus	(Berk.) R.H.Peterson	Red-headed Marasmius	Physalacriaceae	U	U
Rhizopogon evadens	Smith		Rhizopogonaceae	U	R?
Rhizopogon roseola (= rubescens)	(Corda) Th. Fr.	Blushing False Truffle	Rhizopogonaceae	U	U
Rhizopogon truncatus (= cokeri)	Linder	Bright Yellow False Truffle	Rhizopogonaceae	U	R?
Rhodocollybia butyracea	(Bull.) Lenox	Buttery Collybia	Tricholomataceae	E-	C
Rhodocollybia maculata	(Alb. & Schwein.) Singer	Red-spotted Collybia	Tricholomataceae	E-	C
Rhodocollybia maculata var. scorzonerea	(Alb.&Schw. : Fr.) Lenn.		Tricholomataceae	E-	U
Rhodofomes (= Fomitopsis) cajanderi	(Karst.) Kotl. et Pouz.	Rosy Polypore	Fomitopsidaceae	NE	F
Rhodofomes (= Fomitopsis) rosea	(Alb. et Schw.:Fr.) Karst.	Boreal Rosy Polypore	Fomitopsidaceae	NE	U
Rhytisma acerinum	(Pers.) Fr.	Maple Tar Spot	Rhytismataceae	NE	C
Rickenella (Omphalina) fibula	(Bull.) Raithelh.		Tricholomataceae	NP	C
Roridomyces (= Mycena) roridus	(Scop.) Rexer	Mycena, Slippery-stem	Mycenaceae	U	F
Royoporus (= Polyporus) badius	(Pers.) Schwewin.	Black-footed Polypore	Polyporaceae	NE	C
Russula abietina	Peck	Conifer Russula	Russulaceae	E-	F
Russula adusta	(Pers.) Fries		Russulaceae	U	U
Russula aeruginea	Fries	Green Tacky Russula	Russulaceae	NR	F
Russula albidula	Peck	White Viscid Russula	Russulaceae	P	F
Russula amygdaloides	Kauffman		Russulaceae	U	U
Russula anomala	Peck	White Semi-Hot Russula	Russulaceae	P	U
Russula aquosa	Leclair		Russulaceae	P	U
Russula aurantiaca	(Schaeff.) Romag.	Golden Russula	Russulaceae	E	U
Russula aurantialutea	Kauffman		Russulaceae	U	R?
Russula azurea	Bresadola	Azure Russula	Russulaceae	E	R?
Russula bicolor	Burlingham	Two-colored Russula	Russulaceae	P	U
Russula borealis	Kauff.	Boreal Russula	Russulaceae	P	R?
Russula brevipes	Peck	Short-stalked Russula	Russulaceae	E	F
Russula brevipes var. acrior		Short-stemmed Russula	Russulaceae		F
Russula brunneoviolacea	Crawshay	Brownish-violet Russula	Russulaceae	U	F

Russula burlinghamae	Singer	'Dry Yellow Russula'	Russulaceae	E?	U
Russula cicatricata	Romagnesi		Russulaceae	U	U
Russula claroflava	Grove	Yellow Staining Russula	Russulaceae	NR	F
Russula compacta	Frost	Compact Russula	Russulaceae	E	C
Russula corallina	Burlingham		Russulaceae	U	U
Russula corinthiirubra	Burlingham	Scarlet Red Russula	Russulaceae	P	R?
Russula cremoricolor	Earle	Cream-colored Russula	Russulaceae	P	R?
Russula crustosa	Peck	Green Quilt Russula	Russulaceae	E	F
Russula cyanoxantha	(Schaeffer) Fries	Charcoal-burner	Russulaceae	E,E+	F
Russula decolorans	(Fr.) Fries		Russulaceae	E	U
Russula decora	Shaffer	Reddening Russula	Russulaceae	P	U
Russula disparilis	Burlingham		Russulaceae	E	R?
Russula dissimulans	Shaffer	Red and Black Russula	Russulaceae	E?	C
Russula emetica	(Schaeffer) Persoon	Emetic Russula	Russulaceae	P,E/C	F
Russula fellea	Fr.		Russulaceae	P	R?
Russula flaviceps	Pk.		Russulaceae	P	U
Russula flavida	Frost		Russulaceae	U	U
Russula foetentula	Peck	Marzipan Russula	Russulaceae	NE	U
Russula fragilis var. fragilis	Fries	Fragile Russula	Russulaceae	P	F
Russula fragrans (= laurocerasi var. f.)	Romagn.	Bitter Almond Russula	Russulaceae	P	F
Russula gracilis	Burlingham		Russulaceae	P	U
Russula graveolens	Romell		Russulaceae	U	U
Russula grisea	(Secretan) Fries		Russulaceae	E	U
Russula heterophylla	Fries		Russulaceae	E	U
Russula humidicola	Burlingham		Russulaceae	U	U
Russula incarnaticeps	Murrill		Russulaceae	U	U
Russula ionochlora	Romagnesi		Russulaceae	U	R?
Russula lutea var. lutea	(Hudson) Gray	Yellow Russula	Russulaceae	P	U
Russula mariae	Peck	Purple Bloom Russula	Russulaceae	E-	C
Russula melliolens	Quel.	Honey-scented Russula	Russulaceae	E	U
Russula modesta	Peck	Modest Russula	Russulaceae	P	U
Russula mustelina	Fries	Weasel Russula	Russulaceae	E	R?
Russula nigricans grp.	(Bull.) Fr.	Blackening Russula	Russulaceae	NR	F
Russula ochroleucoides	Kauffman	Ochre Russula	Russulaceae	U	F
Russula operta	Burlingham		Russulaceae	P	R?
Russula ornaticeps	Burlingham	Ornate Russula	Russulaceae	E-	U
Russula paludosa	Burlingham	Swamp Russula	Russulaceae	E-	F
Russula parazurea	Shaeff.	Blue-gray Russula	Russulaceae	P	U
Russula parvovirescens	Buyck,Mitchell&Parrent	Blue-green Quilt Russula	Russulaceae	E	U
Russula peckii	Singer	Peck's Russula	Russulaceae	P	U
Russula pectinatoides	Peck		Russulaceae	P	U?
Russula puellaris	Fries		Russulaceae	E-	F
Russula pulchella	Borsz.		Russulaceae	P	R
Russula pulchra	Burlingham		Russulaceae	NP	U
Russula rosea (= lepida)	Pers.		Russulaceae	E	U
Russula roseipes	(Secretan) Bresadola	Rose-footed Russula	Russulaceae	P	U
Russula roseitincta	Murr.		Russulaceae	E	U
Russula rubriceps	(Kauff.) Sing.	Red-capped Russula	Russulaceae	E	U
Russula rugulosa	Pk.	Rugulose Russula	Russulaceae	U	U
Russula sanguinea (=rosacea)	Fries	Rosy Russula	Russulaceae	NR	U
Russula seperina	Dupain		Russulaceae	U	R?
Russula sericeonitens	Kauff.		Russulaceae	E	U
Russula silvicola	Shaffer	Woodland Russula	Russulaceae	U	A
Russula sphagnophila	Kauffman	Sphagnum Russula	Russulaceae	E-	U
Russula subpunctata	Kauffman	Red Punctate Russula	Russulaceae	E	U
Russula subsericeonitens	Murrill		Russulaceae	E-	U
Russula sulcatipes	Murrill		Russulaceae	U	?
Russula variata	Banning & Peck	Forked-gill Russula	Russulaceae	E-/NR	C
Russula vinacea (krombholzii)	Burlingham	Blackish-red Russula	Russulaceae	E?	F
Russula vinosa (obscura)	Lindblad	Browning Russula	Russulaceae	U	U
Russula virescens	(Schaeffer) Fries	Green Crust Russula	Russulaceae	NR	U
Russula xantho (= aurea, aurata)	Pers.	Gilded Russula	Russulaceae	U	U
Sarcodon imbricatum		Scaly Tooth	Bankeraceae	NR,P?	U
Sarcodon scabrosus	(Fr.)Karst.	Bitter Tooth	Bankeraceae	NR	U
Sarcodontia setosa	(Pers.) Donk	Encrusting Tooth	Cyphellaceae	NE	?
Sarcoscypha coccinea		Scarlet Cup	Sarcoscyphaceae	NR	U
Schizophyllum commune	Fr.	Common Split-Gill	Schizophyllaceae	NE	C
Scleroderma areolatum	Ehren.	Stalked Pigskin Puffball	Sclerodermataceae	P	U
Scleroderma bovista	Fr.		Sclerodermataceae	NR	U
Scleroderma cepa	Pers.		Sclerodermataceae	P	U

Scleroderma citrinum	Pers.	Poison Pigskin Puffball	Sclerodermataceae	P	A
Scutellinia erinaceus	(Schwein.) Kuntze	Yellowish Eyelash Cup	Pyronemataceae	U	R?
Scutellinia scutellata	(L.) Lambotte	Eyelash Cup	Pyronemataceae	U	C
Sebacina incrustans	(Pers.) Tul. & C. Tul.		Sebacinaceae	U	R?
Serpula lacrimans	(Wulfen) J. Schrot.	Dry Rot	Coniophoraceae	NR	F
Singerocybe adirondackensis (= Clitocybe phaeopht	(Pk.) Zhu L.Lang & J.Qin	Stinking Clitocybe	Tricholomataceae	U	U
Sistotrema confluens	Pers.	White Poroid Tooth	Hydnaceae	U	R?
Skeletocutis nivea (semipileatus)	(Jungh.) Jean Keller		Polyporaceae	NE	U
Sparassis crispa	(Wulfen) Fr.	Cauliflower Fungus	Sparassidaceae	E++	U
Sparassis spathulata	(Schwein.) Fr.	Cauliflower Mushroom	Sparassidaceae	E++	R
Spathularia flavida	Pers.	Little Spatula	Cudoniaceae	U	U
Spathularia velutipes		Velvety Fairy Fan	Cudoniaceae	NP	F
Sphaerobolus stellatus	Tode	Cannonball Fungus	Geastraceae	U	U
Sphagnurus (= Lyophyllum) paluster	(Pk.) Redh. & Hofst.		Lyophyllaceae	NP	U
Spongipellis pachyodon	(Pers.) Kotl. & Pouz.		Hapalopilaceae	NE	U
Spongipellis unicolor	(Schwein.) Murr.		Polyporaceae	U	R?
Spongiporus (= Postia, Oligoporus) floriformis	(Quel.) Zmitr.		Fomotopsidaceae	U	U
Steccherinum ochraceum	(Pers.) Gray	Ochre Spreading Tooth	Steccherinaceae	NE	C
Stemonitis fusca	Willd.	Chocolate Tube Slime	Stemonitaceae	NE	U
Stemonitis splendens	Rostaf.	Chocolate Tube Slime	Stemonitaceae	NE	F
Stereopsis burtiana	(Pk.) D.A. Reid		Stereaceae	NE	R
Stereum (hirsutum) rameale (=complicatum)	(Schwein.) Burt.	Crowded Parchment	Stereaceae	NE	A
Stereum gausapatum	(Fr.) Fr.		Stereaceae	NE	F
Stereum hirsutum	(Willd.) Pers.	Hairy Parchment	Stereaceae	NE	C
Stereum ostrea	(Blume & T. Nees.) Fr.	False Turkey-tail	Stereaceae	NE	C
Stereum striatum (= sericeum)	(Fr.) Fr.	Silky Parchment	Stereaceae	NE	C
Stereum subtomentosum	Pouzar		Stereaceae	NE	U
Strobilomyces confusus	Sing.	Pine Cone Bolete	Boletaceae	E	U
Strobilomyces floccopus	(Vahl) P. Karst.	Old-Man-of-the-Woods	Boletaceae	E-	F
Stropharia alcis	Kytov	Moose Dung Stropharia	Strophariaceae	U	U
Stropharia hardii	G.F. Atk.	Hard's Stropharia	Strophariaceae	E	F
Stropharia hornemannii	(Fr.) S. Lundell & Nannf.		Strophariaceae	E	U
Stropharia kauffmanii	A.H. Smith	Stropharia, Kauffman's	Strophariaceae	NE	U
Stropharia rugoso-annulata	Farl. ex Murr.	Wine Cap Stropharia	Strophariaceae	E+++	U
Stropharia semiglobata	(Batsch) Quel.	Hemispheric Stropharia	Strophariaceae	E	U
Suillus (= Fuscoboletinus) paluster	(Pk.) Pomerleau & Smith		Boletaceae	E	U
Suillus acidus	(Pk.) Sing.	Acid-Slime Suillus	Boletaceae	E	C
Suillus americanus	(Pk.) Snell	Chicken-fat Suillus	Boletaceae	E,E+	C
Suillus brevipes	(Pk.) Kuntze	Short-stalked Suillus	Boletaceae	E	F
Suillus cavipes	(Opat.) A.H. Smith & Thiers	Suillus, Hollow Stalk	Boletaceae	E	U
Suillus grevillei	(Klotzsch) Sing.	Larch Suillus	Boletaceae	E	U
Suillus hirtellus	(Pk.) Snell		Boletaceae	E-	U
Suillus lutescens	A.H. Sm. & Thiers	Yellowing Suillus	Boletaceae	U	U
Suillus luteus	(L.) Roussel	Slippery Jack	Boletaceae	E+/C	F
Suillus placidus	(Bonord.) Sing.	Ivory Suillus	Boletaceae	E,E+	C
Suillus punctatipes	(Snell & E.A. Dick) Sing.		Boletaceae	U	U
Suillus punctipes	(Pk.) Sing.		Boletaceae	E?	U
Suillus spraguei (= pictus)	(Pk.) A.H. Sm. & Thiers	Painted Suillus	Boletaceae	E	A
Suillus subalutaceus	(Sm. & Th.) Sm. & Th.		Boletaceae	E?	U
Suillus subaureus	(Pk.) Snell	Broadleaf Suillus	Boletaceae	E	U
Suillus subluteus	(Pk.) Snell	Brown-veiled Suillus	Boletaceae	E+	U
Suillus tomentosus	(Kauff.) Singer	Blue-staining Slippery Jack	Boletaceae	E	U
Suillus weaverae (= granulatus)	(L.) Roussel	Dotted-stalked Suillus	Boletaceae	E	C
Sutorius (= Tylopilus) eximius	(Pk.) Singer	Lilac-brown Bolete	Boletaceae	E+	F
Syzygospora effibulata (= Christiansenia inaurata)	(Ginns & Sunhede) Ginns	Collybia Jelly	Carcinomycetaceae	E	C
Syzygospora mycetophila	(Pk.) Ginns	Collybia Jelly	Carcinomycetaceae	NP	U
Tapesia (=Mollisia) fusca	(Pers.) Fuck.		Dermateaceae	NP	U
Taphrina alni	(Berk. & Broome) Gjearum		Taphrinaceae	NE	U
Tapinella (= Paxillus) atrotomentosa	(Batsch)Sutara	Velvet-footed Pax	Tapinellaceae	P	F
Tapinella (= Paxillus) corrugata	(T.F. Atkin.)E-J.Gilb.	Corrugated Pax	Tapinellaceae	U	U
Tapinella (= Paxillus) panuoides	(Batsch) Gilbert		Tapinellaceae	NR	U
Tatraea (Rutstroemia) macrospora	(Pk.) Baral		Helotiaceae	U	F
Tectella patellaris	(Fr.) Murr.	Veiled Tectella	Tricholomataceae	NR	U
Terana (= Pulcherricium) coerulea	(Schrad. ex Lam.) Kuntze	Velvet Blue Spread	Phanerochaetaceae	NE	U
Tetrapyrgos (= Marasmiellus) nigripes	(Fr.) E. Horak	Black-footed Marasmius	Marasmiaceae	NP	F
Thelephora palmata	(Scop.) Fr.	Fetid False Coral	Thelephoraceae	NE	U
Thelephora terrestris	Erhr.	Common Thelephora	Thelephoraceae	NE	U
Trametes cervina	(Schwein.) Bres.	Deer Turkey Tail	Polyporaceae	NE,M	U
Trametes elegans	(Spreng.:Fr.) Fr.	Elegant Turkey Tail	Polyporaceae	NE,M	U
Trametes gibbosa	(Pk.) G.F. Atkin.		Polyporaceae	NE,M	U

Trametes hirsuta	(Wulfen) Pilat	Hairy Turkey Tail	Polyporaceae	NE,M	C
Trametes ochracea	(Pers.) Gilb. & Ryv.		Polyporaceae	NE,M	U
Trametes pubescens	(Schumach.) Pilat	Pubescent Turkey-Tails	Polyporaceae	NE	F
Trametes sauveolens	L:Fr.	Anise-odor Turkey-Tails	Polyporaceae	NE	U
Trametes trogii	Berk.	Maze-pored Turkey-Tails	Polyporaceae	M?	U
Trametes versicolor	(L.) Lloyd	Turkey-Tails	Polyporaceae	M	A
Trechispora mollusca	(P. Karst) Liberta		Hydnodontaceae	NE	R?
Tremella (Phaeotremella) foliacea (frondosa)	(Pers.) Spirin	Jelly Leaf (Stereum Parasite)	Tremellaceae	NP	U
Tremella mesenterica	(Schaeff.) Retz.	Witches' Butter	Tremellaceae	E-	F
Tremella reticulata	(Berk.) Farl.		Tremellaceae	U	U
Tremellodendron pallidum	(Schwein.) Burt.	Jellied False Coral	Sebacinaceae	U	C
Trichaptum abietinus	(Dicks.) Ryvarden		Polyporaceae	NE	F
Trichaptum biforme	(Fr.) Ryvarden	Violet-tooth Polypore	Polyporaceae	NE	A
Trichaptum fuscoviolaceum	(Ehrenb.) Ryv.	Brown Purple-pore Bracket	Polyporaceae	NE	U
Trichaptum laracina	(Karst.) Ryv.	Violet-gilled Polypore	Polyporaceae	NE	U
Trichaptum subchartaceum	(Muur.) Ryv.	Violet-pored Polypore	Polyporaceae	NE	U
Trichia decipiens	(Pers.)T.McBride		Trichiaceae	NE	U
Trichia scabra	Rostaf.		Trichiaceae	NE	R?
Trichia varia	(Pers.) Pers.		Trichiaceae	NE	U
Trichoglossum farlowii	(Cooke) Durand	Farlow's Earth Tongue	Geoglossaceae	U	U
Trichoglossum hirsutum	(Pers.) Boud.	Velvety Earth Tongue	Geoglossaceae	U	C
Trichoglossum velutipes	(Peck) Durand	Velvety Earth Tongue	Geoglossaceae	U	U
Tricholoma acre	Pk	Hot Gray Trich	Tricholomataceae	P?	U
Tricholoma aestuans	(Fr.) Gill.	Bitter Tricholoma	Tricholomataceae	U	U
Tricholoma albobrunneum	(Fr.) Kummer		Tricholomataceae	P	U
Tricholoma argenteum	Ovrebo	Silvery Trich	Tricholomataceae	U	U?
Tricholoma aurantium	(Fr.) Ricken	Flaming Trich	Tricholomataceae	E	F
Tricholoma caligatum	(Viv.) Ricken	Fragrant Armillaria	Tricholomataceae	E-	F
Tricholoma davisiae (= cheilolamnium)	Pk.	Davis' Trich	Tricholomataceae	U	U
Tricholoma equestre (= flavovirens)	(L.) P. Kumm.	Man-on-Horseback	Tricholomataceae	E+	U
Tricholoma focale (= zelleri)	(Fr.) Rick.	Ringed Trich	Tricholomataceae	E-	U
Tricholoma fulvum (= flavobrunneum)	(Bull.) Sacc.	Brown Birch Trich	Tricholomataceae	E-?	U
Tricholoma fumosoluteum	Pk.	Smoky-yellow Trich	Tricholomataceae	U	U
Tricholoma imbricatum	(Fr.) P. Kumm.	Shingled Trich	Tricholomataceae	E,NR	U
Tricholoma inamoenum	(Fr.) Quel.	Bad Odor Trich	Tricholomataceae	NR	U
Tricholoma magnivelare (=Armillaria ponderosa)	(Pk.) Redhead	Matsutake	Tricholomataceae	E+++	U
Tricholoma myomyces (= terreum?)	(Pers.) Lange	Mousy Trich	Tricholomataceae	E	F
Tricholoma odorum	Pk.		Tricholomataceae	U	R
Tricholoma olivaceobrunneum	Ovrebo		Tricholomataceae	U	R?
Tricholoma palustre	A.H. Smith		Tricholomataceae	P?	U
Tricholoma pardinum	(Pers.) Quel.	Dirty Trich	Tricholomataceae	P	F
Tricholoma pessundatum	(Fr.) Quel.		Tricholomataceae	P	U
Tricholoma populinum	Lange	Poplar Trich, The Sandy	Tricholomataceae	E	U
Tricholoma portentosum	(Fr.) Quel.	Sticky Gray Trich	Tricholomataceae	E/C	F
Tricholoma pullum	Ovrebo	Dusky Trich	Tricholomataceae	U	U
Tricholoma robustipes	Y. Lam.		Tricholomataceae	U	F
Tricholoma saponaceum	(Fr.) P. Kumm.	Soapy Trich	Tricholomataceae	P?	C
Tricholoma subluteum	Pk.		Tricholomataceae	U	U
Tricholoma subresplendens	(Murr.) Murr.	White Trich	Tricholomataceae	U	F
Tricholoma subsejunctum (not = sejunctum)	Pk.	Separating Trich	Tricholomataceae	NR	C
Tricholoma sulphurescens	Bres.	Yellowing Trich	Tricholomataceae	P	R?
Tricholoma sulphureum	(Bull.) P. Kumm.	Coal-tar Trich	Tricholomataceae	P?	U
Tricholoma transmutans	Pk.		Tricholomataceae	P	R?
Tricholoma ustale	(Fr.) P. Kumm.		Tricholomataceae	P	R?
Tricholoma vaccinum	(Schaeff.) P. Kumm.	Russet-scaly Trich	Tricholomataceae	NR	U
Tricholoma virgatum	(Fr.) P. Kumm.	Fibril Trich	Tricholomataceae	E(NR)	C
Tricholomopsis decora	(Fr.) Singer	Decorated Mop	Tricholomataceae	NP	F
Tricholomopsis rutilans	(Schaeff.) Singer	Variegated Mop	Tricholomataceae	E	F
Tricholomopsis sulphureoides	(Pk.) Sing.	Yellow Oyster Mop	Tricholomataceae	U	F
Truncispora (= Perenniporia) ohiensis	(Berk.) Pilat		Polyporaceae	NE	R?
Tubaria confragosa	(Fr.) Harmaja		Cortinariaceae	U	U
Tubaria furfuracea	(Pers.) Gillet	Fringed Tubaria	Crepidotaceae	U	U
Tubifera ferruginosa	(Batsch) J.M. Gmel.	Red Raspberry Slime	Reticulariaceae	NR	F
Turbinellus (= Gomphus) floccosus		Scaly Vase Chanterelle	Cantharellaceae	E-/P	U
Turbinellus (= Gomphus) kauffmanii	Smith & Corner		Cantharellaceae	E--	F
Tylopilus badiceps	Smith & Thiers	Bay Cap Bolete	Boletaceae	E	U
Tylopilus felleus	(Bull.) Karst.	Bitter Bolete	Boletaceae	P	C
Tylopilus ferrugineus	(Frost) Singer		Boletaceae	E	U
Tylopilus indecisus	(Pk.) Murr.		Boletaceae	E	U
Tylopilus plumbeoviolaceus	(Snell & Dick) Sing.	Violet-gray Bolete	Boletaceae	U	U

Tylopilus rubrobrunneus	Mazzer & Smith	Reddish-brown Bitter Bolete	Boletaceae	NR	F
Tylopilus sordidus	(Frost) Sm. & Thiers		Boletaceae	U	U
Tylopilus violatinctus	Baroni & Both	Violet-tinged Bolete	Boletaceae	U	U
Tyromyces chioneus	(Fr.) Karst.	White Cheese Polypore	Schizoporaceae	NR	A
Tyromyces kmetii	(Bres.) Bondart. & Sing.	Orange Tyromyces	Schizoporaceae	U	R
Urnula craterium	(Schwein.) Fr.	Devil's Urn	Sarcosomataceae	U	U
Vararia investiens	(Schwein.) P. Karst.		Lachnocladiaceae	NE	U
Vascellum (= Lycoperdon) pratense	(Pers.) Kreisel	Stalked Lawn Puffball	Lycoperdaceae	E	U
Vibrissea truncorum	(Alb. & Schwein.) Fr.	Water Clubs	Stictidaceae	U	F
Volvopluteus (=Volvariella) gloiocephala (=speciosa	(Fr.) Singer	Smooth Volvariella	Pluteaceae	E/C	U
Xanthoconium affine var. affine	(Peck) Singer		Boletaceae	E	U
Xanthoconium affine var.maculosus	Sing.	Spotted Bolete	Boletaceae	E?	C
Xanthoconium separans	(Peck) Halling & Both	Lilac Bolete	Boletaceae	E	U
Xerocomellus (= Boletus) chrysenteron	(Bull.) Sutara	Red-cracked Bolete	Boletaceae	E	F
Xeromphalina campanella	(Batsch) Maire	Fuzzy-foot	Mycenaceae	NR	F
Xeromphalina cauticinalis	(With.) Kuhner & Maire	'Trooping Fuzzy-foot'	Mycenaceae	NR	C
Xeromphalina cornui	(Quel.) Favre		Mycenaceae	NR	U
Xeromphalina kauffmanii	A.H. Smith	Kauffmann's Fuzzy-foot	Mycenaceae	NR	U
Xeromphalina tenuipes	(Schwein.) A.H. Smith		Mycenaceae	U	R?
Xerula megalospora	(Clem.) Redh., Ginns & Shoe.	Whitish Rooting Collybia	Tricholomataceae	E	F
Xylaria hypoxylon	(L.) Grev.	Candlesnuff Fungus	Xylariaceae	NE	U
Xylaria polymorpha	(Pers.) Grev.	Dead Man's Fingers	Xylariaceae	NR	C
Xylobolus frustulatus	(Pers. ex. Fr.) Boid.	Ceramic Parchment	Stereaceae	NE	U
Xylobolus subpileatus	Berk. & M.A.Curt.		Stereaceae	NE	R?
Xylodon (=Schizopora) paradoxus		Split Pore Polypore	Polyporaceae	NE	U