

WEYBRIDGE

WILDLIFE HABITAT INVENTORY

Jim Andrews

1990

This inventory is designed to be ongoing, to be added to and amended from time to time, by whomsoever has something to add.

Certain policies for additions or corrections need to be followed:

Do not make corrections on another person's entry. Instead, insert your own entry, following Jim Andrews's format, with your name and date and the corrected information.

There needs to be a table of contents, and each new entry needs to be added to the table of contents.

Entries, once recorded, should not be removed.

It is expected that new areas will be researched and made a part of this inventory.

Follow Up Suggestions

Much work is being done by a variety of individuals on planning for the benefit of future Weybridge residents and visitors of all species. But the work is not over. There is much still to do. It is with that in mind that I have included the following suggestions for the Planning Commission and/or Conservation Committee. I think they would help bring some of our goals to fruition.

1. Break the information gathered into small easily readable pieces, or just take excerpts, and over the next year present it to the residents of Weybridge in a logical order, using the newsletter that has been started.
2. Present the information at planning commission meetings, in the same way.
3. Inform the landowners of the significance of their property in a personal, friendly and nonthreatening way, before they hear about it indirectly or read about it in the newsletter. Offer to give them a personal tour of their site.
4. Invite residents to see a slideshow of Weybridge Natural History, using the slides Abbott Fenn, I and others have taken and perhaps invite them to add their own slides. Give a special showing at a planning commission and/or selectmans meeting. In addition, a special showing to the landowners might be useful and appreciated.
5. Invite a series of speakers to speak to Weybridge residents about local wildlife, archaeology or how they have been preserved (or destroyed) in other towns.
6. Have knowledgeable individuals take local residents on field trips to some of the significant sites. With the landowner along as official host.
7. Invite residents to come to a gathering where they can put significant sites that they know of, on a town map, and/or see the other sites that have been identified. Perhaps this could be combined with slide shows, speakers, potlucks, contradances, or local church get-togethers.
8. Put out a questionnaire with a map, asking residents to give information on sites of significance. Follow up with visits to check out those sights.
9. Follow up on the government programs to restore wetlands, and create conservation strips along rivers, by approaching landowners who might be interested, individually and

offering to arrange a site visit, or to facilitate the whole process.

10. After the programs have successfully been implemented at some sites, arrange a meeting with an expert on the program, inviting the landowners who have had success to help convince other landowners to enroll.

11. When specific development requests arise arrange site visits to specifically check for significant features that could have been missed in the general surveys.

12. The Conservation Committee or Planning Commission could arrange to set up a booth at Field Days, the Home and Garden Show or other local event to distribute information on the government conservation programs or their own projects.

INTRODUCTION

The following is a collection of reports on areas of biological significance in the town of Weybridge. The goal of the writer has been to locate, map and describe those areas. For the purposes of this report areas of biological significance fall into one or more of three categories. They are as follows;

1. Community types of local, state or global significance,
2. Habitat containing unusual species, or species of special interest,
3. Common habitat types with characteristics which make them significant for local wildlife, such as corridors, contiguous woodlands, old growth, deer yards etc...

I would envision this information to be one part of a larger "open space inventory" that could include among other things; agricultural lands, woodlands, surface and ground water, wetlands, recreational areas, historic sites, and scenic areas. Together these components of the inventory would provide a useful knowledge base that could be used in conjunction with a knowledge of the values of the town residents, and the best interests of future generations of all living things, including man, to design a farsighted town plan.

Brief comments and recommendations on the visited sites have been included in some cases.

Lists of the flora and fauna identified during the site visits have also been included with each report. These should not be considered comprehensive but only what was readily identifiable by this observer during the time of the visit. For example; some species of herbaceous plants that would be more evident at other times of the year would likely be missed, as well as types of animals that are more evident during other times of the day or year. In addition my own areas of expertise limit the comprehensiveness of the reports. There are many species of sedge which are unusual in Vt, but in the reports I have only identified the existence of different types of sedges in an area, without specifically naming the species, which would have taken me more time than I had available. Also there are many invertebrate species which, unless they stood out as particularly unusual or obvious, I made no attempt to include in the lists. For example a Clymene Moth is very noticable and would be included, but red ants, let alone which species of red ant were not listed.

This collection of reports is meant to be ongoing. Undoubtedly some local residents are aware of sites perhaps on their own property which are of biological significance, but which are not included here. It is my hope that these sites will be brought to the attention of the Weybridge Conservation Committee and that they in turn will have someone visit the site, write up a report and include it here.

Slides were taken of some of the sites, and show characteristics of some of the unusual species. These are meant to help educate the residents of Weybridge about some areas of, or species in, their town that they may not be aware of and have been turned over to the Weybridge Conservation Committee.

The basic methods that I used in gathering this information were as follows;

1. Gather existing information from the Vt. Fish and Wildlife agency, Vt. Natural Heritage Program, U.S. Fish and Wildlife Agency, Soil Conservation Service, County Forester, etc.,
2. Study various maps and aerial photos of Weybridge to locate sites of potential significance,
3. Gather information from local landowners, hunters, fisherman, naturalists, foresters etc.,
4. Visit and study sites of potential significance.
5. Prepare maps and reports.

On each site report is a reference to, site code, that was purposefully left blank. I am hoping that each of the individual sites will be added to an overall map covering the whole town of Weybridge with coded references to the reports in this collection and vice versa.

I have included latitude and longitude for each site for its eventual transferral to the Geographical Information System.

It should be remembered that wildlife habitat doesn't end with the political boundaries of townships. Some of these critical wildlife areas extend beyond our borders and would benefit from cooperative regional efforts.

I have included in an appendix, information which I have gathered over the summer that is pertinent to wildlife habitat and planning for it. A great deal of very useful information can be gained from those sources, for example specific language which could be used in a town plan, reasons to maintain buffer zones along rivers, and how large

they should be, are included in the document from Vt. Fish and Wildlife. Also information on government programs that provide money, labor and expertise to create buffer zones and restore wetlands is included. This information should prove to be very valuable in preserving wildlife habitat.

A4

Why should Weybridge protect wildlife habitat?

Destruction of habitat is far more hazardous to wildlife than hunting or the killing of individual animals. If an Upland Sandpiper is hit by a car or shot, in time, others will be born in the area to take its place. If the numbers of the birds are high enough, and are breeding successfully, a certain amount of death is provided for in the number of offspring hatched each year. However if the area becomes a residential development or is paved under, or is just plowed under regularly for planting, than that area will no longer hold any Upland Sandpipers. They have been removed from that area until the habitat returns, and even then only if other Upland Sandpipers are successfully breeding nearby. Destruction of wildlife habitat removes the living things that depended on that habitat, from that area, completely, and in many cases forever.

Most people would not want to see that happen, but others might ask, so what?

In some cases there is lots of other habitat available that provides what the living thing requires to live and reproduce. For example: the Savannah Sparrow requires the open hayfields and pastures that we provide for them in the dairy farms here in the Champlain valley. If one field is turned into a golf course the bird can no longer live there, but it could move to another hayfield nearby. So long as we continue to have plenty of hayfields, we should have plenty of Savannah Sparrows. However, in many cases we do not have more of the right types of habitat for living things to move to. Scarlet Tanagers and Black and White Warblers need large areas of contiguous forest, uninterrupted by pasture or development. Weybridge has few of these areas left. If we lose these areas to development, we will no longer have any of these birds left, since they will not have any other place in Weybridge to go. We have already lost some large mammals such as Black Bear in this way.

Some types of living things can't relocate easily. It may have taken thousands of years for them to spread into this valley after the glaciers receded. Blue Spotted Salamanders and Hackberry trees can't easily move to a new habitat that provides what they need to live and reproduce, because suitable habitat is many miles away.

Why do we need them in Weybridge at all? Let them live somewhere else.

In most cases the habitat that these living things need is disappearing not only in Weybridge but throughout the areas

in which they live. The same fragmentation of woodlands that has occurred in Weybridge has occurred throughout North America. Many of our summer birds spend the winter in Central and South America where the forests they need for food and shelter are being clearcut at a rapid rate. The numbers of many of these birds are already dropping. Certain plants, such as the Sycamore tree, are unusual anywhere in the state. One hybrid cross between two types of salamanders is now known only from Snake Mt. and has not yet been found anywhere else in the world. There are a few types of living things that are doing better as a result of the habitat changes that we have made. The Rock Dove (Common Pidgeon), English Sparrow, Norway Rat, House Mouse, and House Finch are examples. But in most cases, the areas in which wild things can live are slowly disappearing, not only from Weybridge, but in other towns, states, and countries, too.

So what does it matter if these living things exist at all?

There are many different reasons for saving other living things. Here are a few:

Recreational

Many people enjoy activities which require wildlife habitat. Hunting, fishing, birding, identifying wildflowers, hiking, camping, crosscountry skiing, snowmobiling, Mountain biking, and orienteering are just some of the ways we enjoy wild areas.

Economic

Many studies have been done showing the amount of income brought into areas where people can enjoy the above forms of recreation. License fees, lodging, meals, sales of snacks, bait, supplies, and gasoline etc... all greatly add to the economic health of an area.

Some people make part of their living directly from living resources such as trappers and loggers.

Scientific

We are a part of the same ecosystems which unite all living things. We are dependant on the suns energy to fuel life on this planet, only plants can use that energy to make the food we eat and the air we breathe. Bacteria that live in the soil change nitrogen in the air into a form we need to build our bodies, wetlands store water, trees form a surface on which water condenses, greatly increasing our water supply. These are just a few examples of the many ways we are dependant on these ancient systems which include all

living things. Parts of these systems we understand and many we have yet to learn about. It makes sense to preserve as many components of these systems as possible to keep the whole system working. If we don't know what a certain part in an engine does we had better not remove it. The engine will be more likely to run correctly. In the same way if we are not sure what role Great Horned Owls play in the control of skunks, perhaps we had better keep some areas of mature pines for them to nest in, so as not to eliminate them from the system and perhaps be overrun with skunks. Man has already tampered with many parts of these systems in some cases with disastrous results. Most people realize the need for caution when tampering with these systems on which our health depends.

In some cases there is a great deal of scientific information that can be learned from the study of individual species. For example we can learn about the biological and geological history of this area by studying the genetics of Blue Spotted Salamanders. Through their genes you can learn who their ancestors were and what area of the country they came from after the glaciers left.

Most of our drugs, and agricultural and decorative plants originally came from wild stock. Would it not be wise to preserve other living things for their potential future resource value?

Ethical

Man is only one of the thousands of different types of living things that live together on this planet. Many people believe we do not have the right to totally remove other living things from areas they once inhabited as a result of oversight or greed. They believe it is our responsibility as the most intelligent creature on earth to help provide for the preservation of the others. Our track record has not been good in this area. As a result of our actions many creatures have vanished from the earth and others are in varying degrees of danger. We here in Weybridge can help by preserving our own wildlife.

Aesthetic, Quality of life

Most of us greatly enjoy living and working in an area which still contains the natural beauty of wild places and the creatures which inhabit them. The sights and sounds of geese flying over in the spring, turkeys gobbling, foxes hunting in the fields and grouse ushering their young across a road are just a few examples of the ways they enrich our daily lives.

Planning for Future Generations

Many people are greatly saddened to see areas where they once fished or hiked now covered with pavement or buildings and unable to support our native wildlife. I have seen many local areas where I once wandered as a child consumed by development. Where I once chased rabbits is now the student dining units of Middlebury College. Where I once ran cross country through open farmland is now Buttolph acres development. Part of a good friends farm is now a McDonalds Restuarant. The largest buck any of my friends ever shot, a beautiful 12 pointer, was shot in an area that is now a housing development. The list goes on and on. Let us not fool ourselves, the development that has consumed many a small town before us, is happening here, as it has around Burlington, Rutland, and Boston. Weybridge is an ideal distance from Middlebury and all its work opportunities, it is also an easy commute to the Burlington area and some of our residents already drive there daily to work. We also are within easy reach of millions of people from Boston, New York, Philadelphia, and Montreal who have the time and the money to enjoy vacation homes in our area. For many of our local landowners the temptation to tap into this money by selling off pieces of their land is great. The wildlife that inhabit the land are at the mercy of these pressures. They are not often foremost in the mind of a landowner who wants or needs more money. Of all the species that have evolved on this earth together over the past three and one half billion years, only one has the ability to own land and manipulate it for its own ends. The other species that have inhabited those lands, sometimes for thousands of years, are entirely at our mercy. Only humans can plan for the benefit of wildlife. If short term monetary gain is allowed to run its course without any control or planning, Weybridge, like much of the world before it, will slowly, two acre lot, by two acre lot, lose its wildlife habitat, its scenic beauty, its agricultural land, its cultural and historical heritage and its ability to function as part of the working ecosytem which has evolved here. It is not just in the interest of wildlife that we should plan for its continued existence, but in the interests of the common good and the health and enjoyment of the many generations that will come after us.

The Importance of Corridors and Preserving a Variety of Habitat Types, Including Farmland

In many of these reports I will mention the importance of connecting corridors between pieces of wildlife habitat. These corridors are important in many ways. Many forms of wildlife feed in different types of habitat from which they raise their young. Or they may need to move between available food supplies, or seek shelter from floods or winter storms.

Merganzers, a type of ducklike bird which feed on fish, nest in trees, which may be some distance from the water. Deer, which may hide their young in the tall swale or swamps along the river valleys, seek protection from the wind and snows of winter in dense woods. Red Foxes which may den under a shaley bank in the woods, hunt for mice and grasshoppers in open hayfields. Turkeys which may feed on acorns when they are available in the fall, often feed in meadows in the summer. Otter are largely nomadic, traveling along river valleys or occasionally across dry land in search of good feeding areas. Beaver young must leave their parents dam areas, to build dams of their own in new locations, with good supplies of water and food. Our "river" beavers don't need to build dams, but they do need to find the right types of trees along the rivers on which to feed. If a Bobcats mate on Snake Mt. is trapped, where does a new mate come from? It must be able to travel from a separate family, in another area. In general the larger the carnivore, the greater the distance between family groups that must interbreed. It is important for the health of a local group of animals to breed with other groups which may be some distance away. The list could go on and on. The point is that animals need to be able to travel between different types of habitat in order to survive.

Each of our roads, housing developments, dams, or even pets, is an additional obstacle which they do their best to overcome in their travels. They are at our mercy for we have taken control of the land for our purposes.

One way to address part of this need is to maintain areas that are large and contain a variety of habitat types. Another way is to maintain undeveloped farmland around significant wooded sections. But due to the relatively small size of most remaining habitat fragments, and the large distances travelled by larger animals, connecting corridors are also needed.

Corridors (passageways connecting different fragments of wildlife habitat, through which animals can travel safely) should be planned and maintained. These do not need to be wilderness. They can come in different forms for different kinds of animals. For some species a corridor could merely be a large area of agricultural land, a wide hedgerow away from homes, a swampy little brook between fields, or a wooded river valley. We in Weybridge are fortunate in having two large natural corridors that could

be improved and maintained, the Otter Creek and the Lemon Fair Valleys. We also have a variety of smaller drainages that could be protected, such as Beaver Brook. Together these lowlands could form a network of wildlife corridors connecting all of the significant habitats in Weybridge. Many of these significant habitats are in the lowlands as it is.

Designating the river valleys and adjacent lands as natural corridors serves many purposes at once. I have copied here the list of benefits of maintaining naturally vegetated buffer strips along water bodies from the Pamphlet How to Include Fish and Wildlife Resources in Town and Regional Planning

"Naturally vegetated shorelines contribute to maintenance of water quality and shoreland protection in the following ways:

Provide bank support and stabilization.

Help prevent bank undercutting and bank collapse.

Provide food and shelter for fish and wildlife.

Intercept, absorb, and filter out pollutants such as silt, fertilizers, toxic chemicals, and livestock wastes.

Keep water temperatures cool during hot summer months when fish are susceptible to heat stress.

Slow surface water runoff.

Increase wildlife diversity.

Reduce flood and ice damage.

Preserve natural character of waters."

In addition there are scenic and recreational advantages of using these areas as corridors, as well as the fact that these are areas that due to flooding and wet soils have not been, and should not be, developed. We should also remember that available water is as crucial to wildlife as it is to us.

Given that it is important to provide wildlife travel corridors. It makes good sense to locate corridors where they can serve these other useful functions, without coming into conflict with existing developments and to include farmland as one of the surrounding habitat types.

In Defence of Hedgerows and Dead Trees

Hedgerows (naturally vegetated areas between and along the margins of fields) benefit wildlife in a variety of ways. An ideal hedgerow would be fairly wide, lined with shrubbery, and contain a variety of large trees, some of which are dead. The shrubbery provides food, cover and nesting sites for a variety of small mammals and birds, one example is the Mockingbirds that can be seen feeding regularly in the wild rose hedge across the road from Gibbs barn. The large trees provide hunting and resting perches for many of our hawks, including the Kestrels and Red Tailed Hawks often seen here in the summer, and Rough Legged Hawks which visit us in the winter. The dead trees provide nesting sites for birds such as Bluebirds, and Red Headed Woodpeckers, both are unusual, and both can be found in Weybridge. They also act as nesting and denning sites for mammals including our Flying Squirrels, which are rarely seen due to their nocturnal habits. In addition these hedgerows provide visual cover and serve as corridors for a wide variety of animals, from Deer to Wild Turkeys.

Land owners should be encouraged to keep or develop such hedgerows when it can be done safely.

The Importance of Wetlands, Buffer Zones and the Prevention of Further Forest Fragmentation

Wetlands

The importance of preserving wetlands not only for wildlife but for many other reasons has been much documented. I have gathered a few pamphlets on that subject that cover the topic well and should be looked over. However as a general rule; More types of wildlife are benefitted by the preservation of wetlands, than any other category of habitat.

Buffer Zones

I have included a copy of the Vermont Natural Heritage Programs statement on buffer zones and I refer to them in the reports and show them on some maps. It is important for development not to encroach too closely on significant biological areas. A protected buffer of land should be maintained around these areas. The effective size varies depending upon the species or habitat that you are trying to protect.

Forest Fragmentation

We in Vt. are fortunate to have the Green Mt. National Forest so close by. Without it private interests would have carved the forest into much smaller pieces. Here in Weybridge forestland exists only in areas that were difficult to grow crops on. Our forests are either steep, rocky, ledgey, or wet. Now with more pressure to provide housing or other types of development, these areas, since they are not prime agricultural lands, are the ones being considered for development. The last remaining vestiges of natural ecosystems are beginning to be developed. People are overcoming the wetness by ditching and draining, the steepness by plowing and terracing, and the rocks and ledges by bringing in soil. If this process is not controlled and localized in less significant areas, we will lose our last forests of any significance to wildlife. As stated well in the guide, How to Include Fish and Wildlife Resources In Town and Regional Planning. from the VT. Fish and Wildlife Dept., many species require large unbroken areas of forest in order to survive.

The Vt. Natural Heritage Program Policy

on

BUFFER ZONES FOR NATURAL AREAS

Recommending practical and reasonable buffer strips around wetlands, ponds, and other sensitive ecological features is sometimes problematical. Furthermore, the direct and indirect impacts of various activities, such as clearcutting and development, on plant and animal communities are not fully understood. However, buffer strips are important for several reasons, such as:

- 1) they lessen the risk of windthrow to isolated tree stands or to shallow-rooted trees;
- 2) they reduce the effects of dessicating solar radiation on plant or animal species which favor moist, shaded conditions;
- 3) they prevent excessive soil erosion;
- 4) they may prevent establishment of exotic species;
- 5) they muffle the sound of nearby construction, logging, agricultural, and recreational activities;
- 6) they reduce or prevent runoff of organic and chemical pollutants to wetland or open water systems;
- 7) they stabilize and regulate water temperatures;
- 8) they protect aesthetic values of natural areas by providing visual screening to nearby disturbance.

Necessary buffer widths depend on the type and size of the natural community and slope, soil moisture, soil type, wildlife or plant species of concern, and current and proposed activities surrounding the natural area. For animals, different buffer zones are recommended for different species. In general, larger buffer zones benefit more species and better protect entire plant or animal communities. Along with buffer zones, corridors of similar habitat between areas prevent habitat fragmentation and allow interchange of individuals within and among populations.

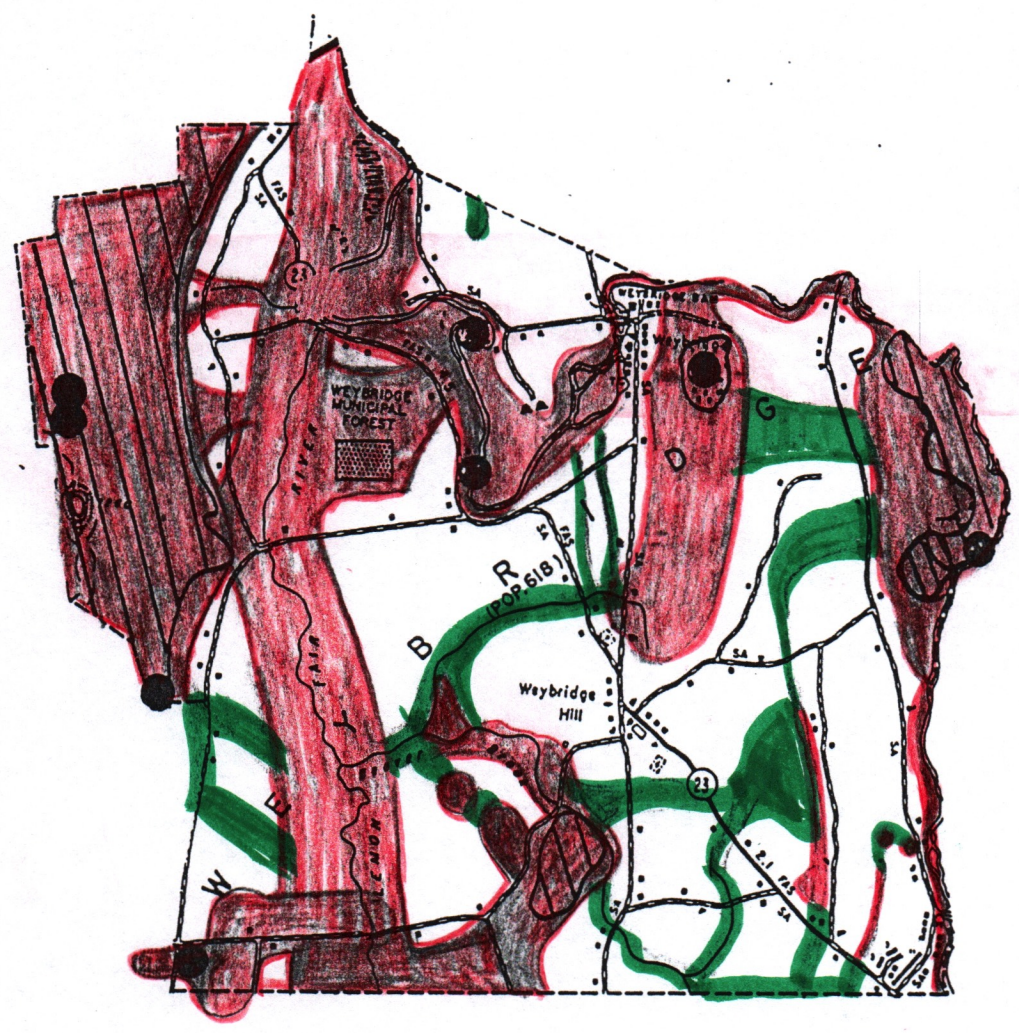
Considerable knowledge of topography, surficial geology and groundwater hydrology is often critical for delineating buffer zones. Thorough knowledge of a site is frequently lacking; time and manpower constraints preclude exhaustive inventories of all plant and animal groups in a given area. We attempt to set reasonable buffer zones which will satisfy the requirements of a broad range of species, including those of special concern, and to protect the integrity of outstanding natural communities.

We suggest a minimum buffer zone around wetlands (e.g., bogs, fens, swamps, and marshes) and pristine ponds of 100 ft within which no disturbance should be permitted. Outside of this zone, we suggest a secondary buffer zone of 100 ft within which only selective timber cutting and hiking trail development should be permitted. Activities outside the 200 ft zone should be evaluated on a case-by-case basis.

Public Access

Public access to the Otter Creek, Lemon Fair, Snake Mt. and other interesting natural areas in many cases has been provided by the goodwill of the landowners. Many areas have been used for years for hiking, picnicing, canoeing, hunting and fishing. If these lands were to change hands this access could be cut off to everyone. The Planning Commission or Conservation Committee should consider formalizing some access agreement for whatever purposes the landowners feel comfortable with. For example even though our rivers are public, without places to put in or take out a canoe, or fish from the bank, people will not be able to enjoy and appreciate them. In some cases restrictions may need to be arranged in order to respect the wishes of the landowner or to protect the natural resource.

Composite Map
Red areas In reports
Green areas Connecting
Corridors



1990 SIGNIFICANT HABITAT MAP
 1" = 1 mile
 ▨ Winter deer range
 ● Rare plants, animals, or significant natural community or state natural/fragile area
 VT Dept. of Fish & Wildlife

AREAS OF BIOLOGICAL SIGNIFICANCE
WEYBRIDGE, VT.

SITE NAME:

Barnes Bro's Hackberry (with notes on the surrounding area)

SITE CODE: 670

LOCATION:

Across Otter Creek from Leonard Wales house and continuing south along the creek for approximately 1000 ft. making up the narrow wooded margin between the river and the fields.

LATITUDE/LONGITUDE:

N44 03'15 W73 14'00

44.05417 73.23333

SIGNIFICANCE:

This area is included on the significant habitat map from the Vt. Natural Heritage Program. It contains a stand of mature floodplain forest with Hackberry codominating. Hackberry is a rare tree in Vt.. It is more frequently found farther west and south. We have a few scattered trees along the riverbank upstream and a younger stand on Wymans island which was reported separately. This stand has some beautiful specimens of this tree with diameters around three ft. It is also a very uniform stand with Hackberry being one of the dominant trees. An arrangement exists with the owners of this land to protect these trees.

A small island just to the north of this area separated from the eastern bank of Otter Creek only at times of high water also contains some large Hackberry. Although the stand is not as pure, with Silver Maple and Box Elder mixed in, it is still significant.

Surrounding Area

The agricultural fields behind the narrow riverside forest margin form a large, fairly remote and protected floodplain. This area is one of the two major staging areas for waterfowl along the Otter Creek in Weybridge. All types of migrating ducks and geese use this area to rest and feed.

See the Lemon Fair Valley report for more information on the significance of these waterfowl staging areas.

This area is presently a part of the riverside corridor of undeveloped land that allows wildlife movement throughout much of Weybridge. Although not planned, this corridor came about partly as a result of the seasonal flooding of the

creek, which provided good farmland(when drained) and unsafe areas for housing. Unfortunately this corridor has been pinched off in areas where the banks of Otter Creek are steeper and hence dry. Wildlife would benefit from the maintenance of the remaining sections of this corridor.

GENERAL DESCRIPTION:

The narrow forested margin of Otter Creek gives way to broad floodplain fields which were planted in corn when I visited this site. The fields contained low spots which were apparently too wet for good cropland. The fact that this land is on a peninsula has insulated it from development and human disturbance other than farming.

Other species present include:

Plants:

Green Dragon(one specimen of a threatened species explained more fully in the Wonacott Floodplain report, this particular plant was referred too in that report and is right on the edge of the field in danger of being tilled under, a better colony exists farther north), Canada Lily, Common Arrowhead, Silver Maple, Box Elder, Reed Canary Grass, Stinging Nettle, Spotted Jewelweed, Nannyberry, Swamp Milkweed, American Elm, Ash

Animals:

Deer, Great Blue Heron, Ring Billed Gull, Raccoon, Muskrat, Beaver, Crow, American Toad

Other mammals not sighted on this visit but expected to use this area include; Mink, Otter, Whitefooted and Deer Mice, Meadow Voles, Skunk, Jumping Mice, Red Fox, Bobcat(reported by a resident) and Coyote.

Waterfowl expected to use this area during migration include Snow Goose, Canada Goose, Mallard, Black Duck, Pintail, Green Winged Teal, Blue Winged Teal, and Wood Duck.

AREA:

The protected site is around one acre. It would be approximately two acres including the island and approximately 170 acres including the whole peninsula below the old access road shown on the USGS topo. map of the area.

COMMENTS/RECOMMENDATIONS:

The area has been extensively ditched to allow greater areas to remain in cultivation. A number of low spots still hold water too long to be good agricultural land but not long enough to be good breeding areas. This might be a good site for a small wetlands restoration project(funded at least in part by the U.S.Fish and Wildlife Program). In addition some of the riverside margins might qualify for

reimbursement through the Agricultural Stabilization and Conservation Service(ASCS) and thier Conservation Reserve Program. This program pays (up to fifty dollars per acre annually) to establish and maintain natural buffer strips along rivers, on land that has been in crops.

I did not visit the specific site of the Hackberries this summer but rather the island just north of it. I have visited the Hackberry site on other occasions. A variety of field trips have been led to this site by myself and others. Arranged by the Nature Conservancy these trips have taken many interested people to see the Hackberries, usually in the winter months.

This whole area being particurly low in elevation(less than 150 ft.) should not be developed. In general along this section of Otter Creek I would suggest no more development below the old access road to the gravel pits, with a fifty foot forested or natural buffer zone between the river and pasture or croplands. This would protect not only the riverbank and floodplain sites but the migratory staging areas as well. Setting the development limit at the old access road provides a buffer zone above the staging areas. It also would act as one segment of a riverside wildlife corridor.

As a minumum it would be beneficial to protect all existing forested or naturally vegetated floodplain along Otter Creek.

REPORTED BY: Jim Andrews

DATE: August 1990

AREAS OF BIOLOGICAL SIGNIFICANCE
WEYBRIDGE, VT.

SITE NAME:

Bittersweet Falls and Beaver Brook Gorge

SITE CODE: B6

LOCATION:

Beaver Brook from Bittersweet Falls upstream approximately 2500 ft. towards James Rd. until the valley opens up, and from Bittersweet Falls Rd. to the top of the falls.

LATITUDE/LONGITUDE:

N44 01'45 W73 13' 00

SIGNIFICANCE:

Above the falls is an unusual plant community for Vt. and probably the only plant community of its type in Weybridge. Three species predominate; Canada Yew, Mountain Maple, and Bulblet Fern. Although they are found together at scattered other sites in Vt., all these species are unusual in Weybridge. This is the only site at which, I have found them. Large Hemlock shelter the valley from its rim helping to provide the shade and as a result, maintain the moisture needed for the other species.

The size and health of the surrounding Hemlocks is also unique in Weybridge and unusual in Vt.

Although I did not locate any rare species during my visit, the deep, cool, narrow valley is very attractive and unusual. The falls itself is a local landmark and also holds the same interesting, if not rare, species.

In the attractive area below the falls are the only Balsam Poplar trees that I have seen in Weybridge.

GENERAL DESCRIPTION:

Bittersweet falls is a small but scenic falls. Above it is a narrow, dark, cool, valley with steep banks rising seventy ft. or more on both sides of the river. On the upper edges of the banks are stands of mature Hemlock, frequently with diameters of over two feet. On the bottom of the valley the community is made up predominately of American Yew, Bulblet Fern, Mountain Maple, Liverwort(species), and Spikenard. Mixed in along the sides of the valley are occasional Yellow

and Black Birch. There is evidence that many people have used the area immediately adjacent to the falls recreationally in past years. The area below the falls has been kept open by the owners, adding to its scenic appeal. The unusual community above the falls is largely undisturbed.

Other species identified on this visit include:

Below the falls

Plants:

Sweet Scented Joe Pie weed (Spotted?), Wild Parsnip, Willow, Basswood, Hog Peanut, Goldenrod (species), American Elm, Sugar Maple, Green Ash, Prickly Ash, Vervain (species), False Nettle, Common Evening Primrose, Balsam Poplar, Summer Grape, Alternate Leaved Dogwood, Heal All, White Pine, Red Pine, Daisy Fleabane, Jack in the Pulpit, Blackberry, Virginia Creeper, Burdock, Staghorn Sumac, Grasses, Sedges, Boneset, Sensitive Fern, Black Eyed Susan, Wild Lettuce, False Solomons Seal, White Birch, Hemlock, Spotted Jewelweed, Black Birch, Bitternut Hickory, Coltsfoot

Animals:

Green Frogs, Cedar Waxwings, Damselflies (green bodies, black wings), Northern Two-Lined Salamanders, Red Eyed Vireo, Dace (species), Eastern Goldfinch

On or above the falls

Plants

Liverworts (species), Bulblet fern, Spikenard, Mountain Maple, Mad Dog Skullcap, American Yew, Monkey Flower, Wild Mint, Evergreen Wood Fern, American Shield Fern, Christmas Fern, Common Polypody, Bush Honeysuckle, Hop Hornbeam, Yellow Birch, Violet (species), Lady Fern, Maidenhair Fern, Poison Ivy, Purple Flowering Raspberry, Gill over the ground, Bittersweet Nightshade, Wild Ginger, Canada Anemone, Black Locust, Red Berried Elder, Butternut

Animals

Chickadee, Red Squirrel, Northern Two Lined Salamander, Green frog

AREA:

approximately seventy acres, figuring 500ft. on either side of the brook for 3000ft.

COMMENTS/RECOMMENDATIONS:

This area is part of one of the five largest remaining pieces of contiguous woodland in Weybridge. The central area of approximately 230 acres extends from the ridge North of Bittersweet Falls, south along the edge of the ledge to

the Weybridge/Cornwall line. Overgrown pasture and pasture in current use, border this parcel along the upper edge. Below the edge of this ridge are some very impressive springs providing what appears to be a year round source of water as well as habitat for a variety of living things such as Dusky Salamanders. The availability of water and the overgrown pasture make this excellent Deer habitat.

See the Ledgeside woods write-up for a description of the larger area.

As Weybridge grows I could envision this area as being part of a public park with its unusual variety of aesthetically pleasing habitats.

The brook below (North of) the dirt road holds spawning Pickerel and has a narrow corridor of woods along most of it until it leaves the Red Maple Swamp on its way to the Fair. This swamp has lots of deer sign and the woods and swales along the brooks and between fields (which offer feed) provide the needed, protected travel corridors used by deer as well as many other species. It makes a great deal of sense to maintain and improve these lowland and wetland travel corridors. Many of them exist now because they were difficult areas to clear or plant. They could serve many purposes at once; travel corridors, shaded spawning areas, breeding and migrational stopover areas for waterfowl, erosional barriers, and absorption areas for farm runoff, to list a few. If these corridors were cut off the wildlife value of the areas they connect would be greatly lessened. Many smaller wooded areas that exist in scattered locations hold wildlife because they are part of the larger connected system.

Development is encroaching on this ridge from all sides. Connecting corridors are already beginning to be cut off.

REPORTED BY: Jim Andrews

DATE: August 1990

Bittersweet Falls C4
+ Beaver Brook Gorge

6372 III
(PORT HENRY 1:62 500) 1.5 MI. TO VT 17

4881
4879
4878
30"
4877
4876
4875



AREAS OF BIOLOGICAL SIGNIFICANCE
WEYBRIDGE, VT.

SITE NAME:

Blue Spotted Valley

SITE CODE:

B2 (B1, B4: Snipe)

LOCATION:

North of Rte. 23, east of the village, in the marshy valley that parallels Sheep Farm Road on its western side

LATITUDE/LONGITUDE:

N44 01' 45" W73 11'30"

SIGNIFICANCE:

A population of the rare Blue Spotted Salamander was found inhabiting the small woods along the western edge of this valley. The valley itself holds the water in which it breeds. Apparently it breeds in a small pool of water that collects at the base of the valley as it begins to narrow.

GENERAL DESCRIPTION:

This is a very long and straight wetland that is bordered on the east by a steep ledgy outcropping. On the west is an open scrubby woods interspersed with Prickly Ash, second growth, exposed bedrock and open pasture. The whole area has been heavily trampled and much of the soil is exposed. This valley might have been more productive in the past, if it held more water and before it was pastured. It looks as if it should be good deer territory, with many old Apple trees, but I found no sign. The area to the west, that is no longer pastured is much healthier and should hold Rabbits, Grouse, and Warblers in the spring.

Other species present include:

Plants:

The area is largely unremarkable, and holds nothing that can't be found elsewhere in a healthier condition, except for one escaped exotic maple that somehow became established here. It is Siberian Maple, sometimes called Amur Maple, and it is frequently planted in yards for its small size and good fall color. I don't consider it particularly significant, but it is a novelty. I found one other different plant here in the swamp; Bur Marigold, which is not a rare plant. This might be a very interesting marsh if it were not so heavily grazed and had a little more water. Remnants of Sedges, Cattails, Reeds and other marsh plants still remain.

Animals:

The Blue Spotted Salamander was about the only animal of interest in the pastured section. I found three in the wooded area between the spring and the small pond. A Red Tailed Hawk seen here could nest in some of the larger White Pines in the area and some mammals had used the ledge to den in. The unpastured area to the west probably has a variety of birds and small mammals in the early summer.

AREA:

The Blue Spotted Salamander may be restricted to an area of approximately five acres. The "marsh" is almost a mile long.

COMMENTS/RECOMMENDATIONS:

I don't think this is a particularly large or healthy population of salamanders. I would like to check it in the spring. However, they are presently considered a rare species in Vt. If this area were not included in the pasture, they might increase in numbers. But, it is the watersupply for the cows as well.

This shallow marsh may be good habitat for Snipe in the spring. A small marsh just on the hill to the east is reported to have breeding Snipe and I have seen them in the valley that parallels this on the eastern side.

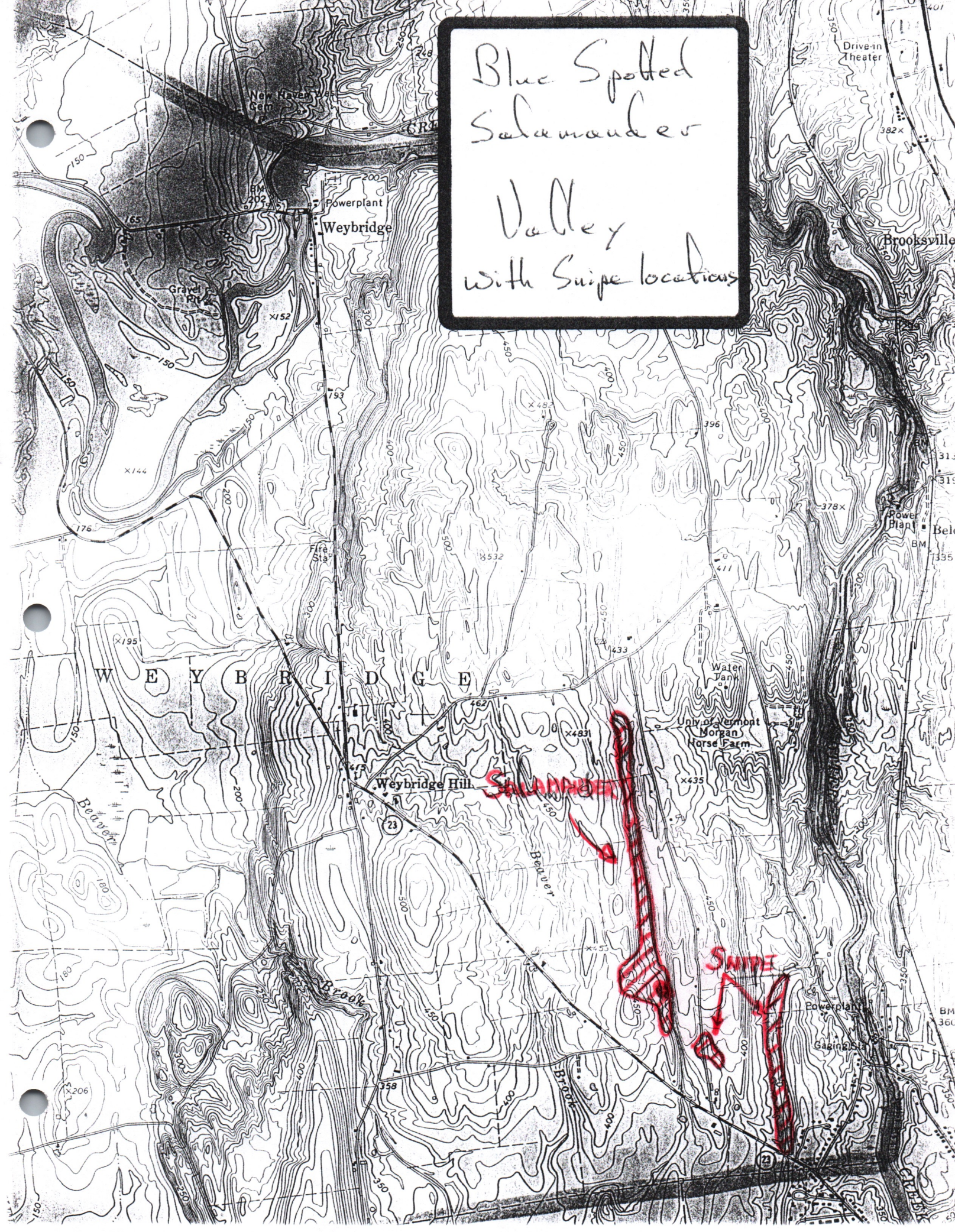
This may be a potential wetland restoration site.

REPORTED BY: Jim Andrews

DATE: Sept. 1990

Blue Spotted
Salamander

Valley
with Snipe locations

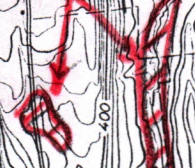


W E Y B R I D G E

Weybridge Hill

SALAMANDER

SNIPES



Brooksville

Power Plant

University of Vermont
Morgan Horse Farm

Powerplant

Gaging Sta

BM 3360

BM 3360

BM 3360

BM 3360

BM 3360

BM 3360

BM 3360

BM 3360

BM 3360

AREAS OF BIOLOGICAL SIGNIFICANCE
WEYBRIDGE, VT.

SITE NAME:

Blue Spotted Swamp

SITE CODE:

B17

LOCATION:

Along the western bank of Otter Creek midway between the Lemon Fair bridge on Rte. 23 and the Otter Creek bridge on Rte. 17.

LATITUDE/LONGITUDE:

N44 04'10" to N44 04'50" W73 14'10" to W73 14'50"

SIGNIFICANCE:

This is the largest and most significant wetland in Weybridge in my opinion. The core of the area is a large wooded swamp that apparently has not as yet been ditched or drained. It is around 3000 ft. long and 500 ft. wide, covering an area of approximately 30 acres. Unlike other swamp remnants in town this one still holds water. The water level is presently higher than normal due to beaver dams blocking drainage to the north. As a result of the dams, sections of open water have been created which in turn encouraged Wood Ducks and Mallards to breed here. Swamp Sparrows sing in the shrubbery and deer surround the swamp. This is the first place I've found in Weybridge that has a diversity of breeding waterfowl not just migrants, although it is important during migration as well.

Between the swamp and the river are some temporary woodland pools which apparently are serving as breeding sites for the rare salamander complex known as the Jeffersonianum Hybrid complex. I located more of the Blue Spotted type salamanders here, than have been seen anywhere in the state. One of the complex that was found along Snake Mt. a couple years ago was a hybrid form unknown to science. Perhaps some of these may be equally unusual.

This is excellent deer habitat, with much sign.

GENERAL DESCRIPTION:

This area is a mosaic of floodplain forest, wooded swamp, temporary pools and an old oxbow of the creek which are interrupted by an island of higher land. Some of the higher land is cropland and some is wooded. I have not explored it all, due to a request by one of the landowners, but the northern end holds the beaver dams, and hence the open water. Further south the wooded swamp widens, consisting

primarily of an unidentified reed, mixed with Northern Arrowhead, Pickerelweed, Burreed, and small patches of Cattails under an overstory of dead Red Maple. The depth of water during my visit was from six inches up to three ft. Most areas of the swamp were thickly vegetated with emergent marsh plants. The swamp margins varied considerably. Reed Canary Grass and fields are on the west. Ostrich Ferns and floodplain forest are on the east. And a more abrupt transition to an upland type of forest is along the higher land. This variety of community types all within a small area is unique.

Other species present include:

Plants:

Trees; Silver Maple, Sugar Maple, Red Maple, Basswood, American Elm, Hop Hornbeam, Shagbark Hickory, American Hornbeam, White Pine, Hemlock, Yellow Birch, White Oak, Bitternut Hickory and Green Ash

Understory; Jack in the Pulpit, Sensitive Fern, Ostrich Fern, Royal Fern, Christmas Fern, Lady Fern, Northern Arrowhead, Pickerelweed, Arrowwood, Wild Grape, Burreed, Sedges, Buttonbush, Poison Ivy, Blue Cohosh, Prickly Ash, False Skunk Cabbage, Moneywort, Blue Flag, Yellow Loosestrife, and Canada Anemone

Animals:

Birds; Warbling Vireo, Red Tailed Hawk, Northern Oriole, Ruffed Grouse, Mallards, Wood Duck, Gallinule (probable), Green Backed Heron, Woodcock, Cedar Waxwing, Yellowthroat, Swamp Sparrow, Song Sparrow, Wood Peewee, Flicker, Red Eyed Vireo and Cardinal with Bobolink and Meadowlark in the fields

Other vertebrates; Deer, Chipmunk, Raccoon, Beaver, Leopard frogs (many), Green frogs, Red Backed Salamander, American Toad, Wood frog, and Jeffersonianum complex salamanders for sure, with Woodchuck, Skunk, Mink, Muskrat, Red Fox, Coyote, and many other small mammals highly likely

AREA:

woods alone would cover around 70 acres, it would be approximately 150 acres including fields in and immediately adjacent to the woods

COMMENTS/RECOMMENDATIONS:

The owners of the southern three quarters of this piece of land requested no further surveying on their land for this report.

It is likely that there are more species of marsh birds nesting in this area than I was able to survey. The northern end should be checked in late spring.

REPORTED BY: Jim Andrews

DATE: August 1990

AREAS OF BIOLOGICAL SIGNIFICANCE
WEYBRIDGE, VT.

SITE NAME:

Firehouse Woods

SITE CODE: 1513

LOCATION:

East of the road to Quaker Village, from behind the new Firehouse, north to Otter Creek, and east to the open fields along Cave Road and Morgan Horse Farm Road, with a small piece west of the road, south and west of the old Firehouse

LATITUDE/LONGITUDE:

N44 02'40" to N 44 04'10" W73 12'00" to W73 13'00"

SIGNIFICANCE:

This woods is one of the three largest remaining tracts of contiguous woodland in Weybridge, along with Snake Mt. and Otter Creek Gorge. As a result, like the other two, it holds species that would not be found in smaller broken fragments. Red Eyed Vireo, Scarlet Tanager, Wood and Hermit Thrush, and Black Throated Blue Warbler are examples of some of the deep woods species one would expect in a woods of this size.

Although not already identified as a deer wintering area, a woods of this size offers distance from dogs and other human related activity. Sections of the woods have good thick evergreen cover and feed. I would suspect that this area might well be used by deer in the winter. It should be checked.

This area also supports a good Turkey population.

Within this area is the Weybridge Cave, one of the largest caves in Vt. It does not appear to be of biological significance, due to the fact that it freezes shut some winters. The state land does provide a core of protected woodland, which the town of Weybridge could strive to expand.

At Least two unusual plants are found in these woods; Wood Lily and Walking Fern.

GENERAL DESCRIPTION:

This woodland is quite diverse. It contains a number of different community types. Just east of main road is a steep rocky ridge that at times forms a cliff. It holds the plants that typify many of the Weybridge ledges, Herb Robert, Bulblet Fern, Rue Anemone, Wild Ginger, etc... Above these is a relatively level plateau which ranges from a dry rocky woods to wet washes and a very few small marshy areas interspersed with rocky outcroppings. This area is made up predominantly of mixed hardwoods, with many Red Oak, Beech, Shagbark and Bitternut Hickory, Hop Hornbeam, Sugar and Red Maple and White and Gray Birch. Along the tops of the higher ridges are a few dry grassy knolls. The topography slants gradually downhill to the north, changing to a higher percentage of conifers. North of the powerline there are areas that are almost entirely evergreen with either Hemlock or Pine predominating.

Species identified on this visit include:Plants:

Trees; Shagbark Hickory, White Birch, Red Oak, Hemlock, American Beech, White Pine, American Hornbeam, Hop Hornbeam, White Oak, Red Maple, Bitternut Hickory, Gray Birch, Butternut, Basswood, Sugar Maple, and Ash
 Shrubs and Herbs; Red Baneberry, Virginia Creeper, Evergreen Wood Fern(marginal), Rue Anemone, Blood Root, Wild Ginger, Bedstraw, Wild Sarsaparilla, Walking Fern, Blueberry, Round Leaved Dogwood, Round Leaved Hepatica, Prickly Ash, Marsh Marigold, Sensitive Fern, Boneset, Cattail, Horsetail (Swamp?), Burreed, Marsh Fern, Raspberry, White Wood Aster, Grasses, Violets, Goldenrod, Polypody Fern, Blue Cohosh, Bracken Fern, Lichens, Beech Drops, Wood Lily, Hog Peanut, Lopseed, Tree Clubmoss, Turkey tail(fungus), Beggar Ticks, Witch Hazel and Trillium

Animals:

Deer, Turkey, Gray Squirrel, Raccoon, Chickadee, Mourning Dove, Wood Peewee, Robin, Black Throated Blue Warbler, Red Eft, Red Backed Salamander, Eastern Goldfinch, Red Eyed Vireo, Gray Tree Frog, Coyote, Downy Woodpecker, Red Tailed Hawk and Ruffed Grouse

AREA:

approximately 500 acres

COMMENTS/RECOMMENDATIONS:

I would recommend protecting these woods from development and maintaining connecting corridors between these woods and surrounding wildlife habitat. It would be ideal if the Otter Creek Gorge were protected. This and other pieces of important habitat could then connect to, and be connected by the Otter Creek corridor.

Access to surrounding farmland is also of great importance to certain larger species such as Deer, Red Fox and Turkey. At certain times of the year they depend upon these areas for food. If a woods is protected but all surrounding farmland is developed, these species will decline. Therefore, it would be wise to try to maintain undeveloped farmland adjacent to this and other wooded parcels. It is far better for most wildlife to keep land in agriculture, than to let it be cut up into small lots and developed.

Development is starting to encroach on this area along the river and from both roads. If it could be centralized into one or two small areas wildlife would benefit.

REPORTED BY: Jim Andrews

DATE: August 1990

Firehouse Woods

F4



AREAS OF BIOLOGICAL SIGNIFICANCE
WEYBRIDGE, VT.

SITE NAME:

Lafountains Upland Sandpipers

SITE CODE:

B3

LOCATION:

Along the ridge south of Robert Lafountains barn and home in a pasture with a few scattered Junipers; directly east of Willy Lafountains garage. Also directly behind Robert Lafountains barn and in the pasture running east all the way to the river.

LATITUDE/LONGITUDE: N44 00'55" W73 15'00" (center of apparent main nesting area)

SIGNIFICANCE:

This species of sandpiper is threatened in the state and in Weybridge is known only from this site, despite extensive surveying. It has nested at this site for many years. I have records of it here since 1980. The present landowners remember seeing these birds when they were children. This site holds more birds of this species with greater regularity than any other site known in the state.

GENERAL DESCRIPTION:

The habitat where these birds are nesting and feeding is primarily pastureland. Hayfields and croplands are surrounding the area and may be used for feeding but don't appear to be nesting areas. The largest number of birds (six) have been seen most regularly in the pasture on top of the ridge south of and across the road from the house and barn. This pasture holds scattered Red Cedar and is surrounded by fence lines and hedgerows providing many fenceposts and dead elms from which the birds call and defend their territories. Smaller numbers have been seen in the pasture behind the barn and reaching to the Lemon Fair.

AREA:

Approximately 115 acres of probable nesting habitat and an additional 25 acres of connecting feeding areas.

COMMENTS/RECOMMENDATIONS:

This bird exists within the state as a result of farming. It requires large areas of open land. What makes this particular site a desirable nesting site for them may be the specific use of the two key nesting and feeding areas for low intensity pasture, not crop or hayfields. This specific

combination of land annually used as pasture, adjoining crop and hayfields may be significant.

This is a site that the State Natural Heritage Program is aware of and has located on its map of local areas of statewide significance.

As long as the present landuse pattern on this site continues, this should continue to be a successful nesting area. Clearly development, or a change from pasture to cultivated land, of the key areas could eliminate the birds in this area.

More information on the specific characteristics of this site which make it attractive to these birds would be useful.

Other species seen on this site and commonly found on other agriculture fields in the area include:

Eastern Meadowlark, Savannah Sparrow, Bobolink, Kestrel

More unusual species seen at this site include:

Eastern Bluebird, Red Headed Woodpecker (need hedgerows with dead snags) and Northern Harrier (feeding in this area summer '90)

The area adjoining the Lemon Fair is a significant waterfowl feeding area in the spring and fall when flooded.

REPORTED BY: Jim Andrews

DATE: July 1990

Upland
Sandpiper
Nesting Areas
with
Feeding Areas
G3
1

6372 III
(PORT HENRY 1:62 500)
1.5 MI. TO VT. 17

4881
4879
4878
30"
4877
4876
4875

Brittle Azra Stow
Cem
X145

OTTER

LEMON FAIR

FAIR

LEMON

FAIR

RIVER

Gravel Pit

Beaver

Fire Sta

Weybridge Hill

Brook

Beaver

Brook

CREEK

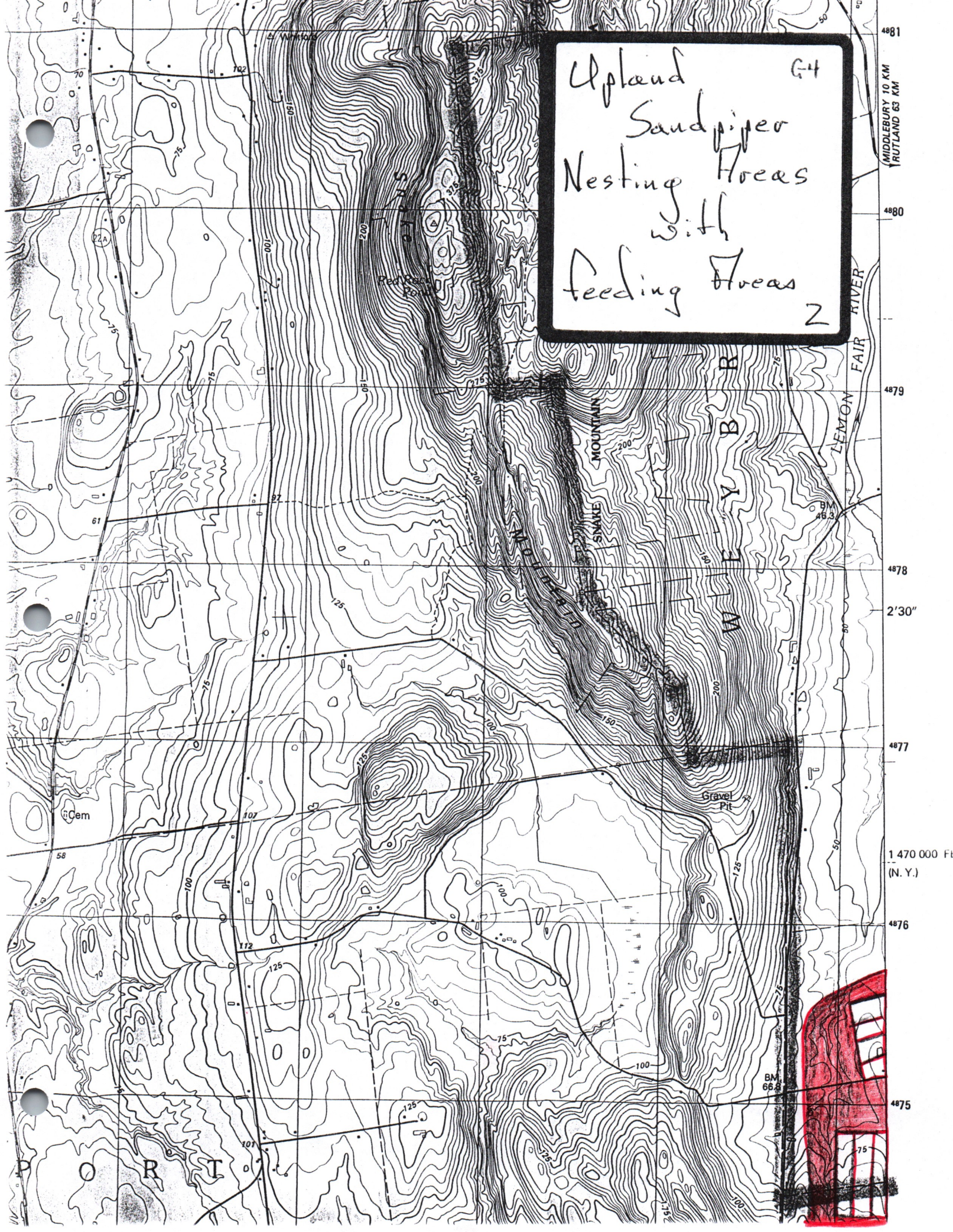
Powerplant
Gaging

W E Y B R I D G E

Upland Sandpiper
Nesting Areas
with
Feeding Areas

G-4

2



4881

MIDDLEBURY 10 KM
RUTLAND 63 KM

4880

FAIR RIVER
LEMON

4879

SNAKE MOUNTAIN

WILEY BROOK

4878

2'30"

4877

Gravel Pit

1 470 000 FT
(N. Y.)

4876

BM
66.8

4875

P O R T

LaFontaines Island
Sandpiper



Cranberry Bog

WILDLIFE MANAGEMENT AREA

SNAKE MOUNTAIN

W H I T E Y B R I D G E

LEMON FAIR RIVER

LEMON FAIR

OTTER

W E Y

Beaver

BM 66.3

Brittle Azra Stow Camp

X145

X175

X144

X195

X 23

X173

X206

LEMON FAIR RIVER

AREAS OF BIOLOGICAL SIGNIFICANCE
WEYBRIDGE, VT.

SITE NAME:
Ledgeside Woods

SITE CODE: B11

*The settlement known
as Weybridge Hill*

LOCATION:
Along the edge of the ridge from north of Bittersweet Falls (below the ~~center of town~~) south along the edge of the ridge (known locally as the ledges) to the Cornwall/Weybridge town line. It is bordered on the west by the edge of the woods as it hits the more level land of the valley bottom and on the east by the open pasture along the top of the ledges.

LATITUDE/LONGITUDE:
From N44 00'45 to N44 02'15 and W73 12'30 to W73 13'30

SIGNIFICANCE:
This woods contains the Yew-Mt. Maple-Hemlock community in the beaver brook gorge described separately. In addition it contains a variety of other locally significant features that combined make it a very diverse and valuable piece of wildlife habitat.

The area is part of one of the five largest remaining pieces of contiguous woodland in Weybridge and as such provides suitable habitat for a variety of birds and mammals that do not live in smaller forest fragments. The central area of approximately 230 acres extends from the ridge North of Bittersweet Falls, south along the edge of the ledge to the Weybridge/Cornwall line. The woods itself however continues south along "the ledges" into Cornwall, broken occasionally by roads and houses. Overgrown pasture and pasture in current use, border this parcel along the upper edge. Below the edge of this ridge are some very impressive springs providing what appears to be a year round source of water as well as habitat for a variety of living things such as Dusky Salamanders. The availability of water and the overgrown pasture make this excellent Deer habitat.

The rocky, shaded, ledges visible from Lemon Fair Rd. also have outstanding wildlife value in terms of their spring wildflowers. I know of no area in Weybridge that exhibits such a profusion of Trillium, Wild Ginger, Bloodroot, Round Lobed Hepatica and Dutchmans Britches as this roadside does in early spring. Its easy visibility here adds to its value. I can remember being brought to see this spot by my mother when I was a child. I believe it would show good

foresight and planning if our great grandchildren could continue to enjoy it with their children.

Also unique about the woods south of Bittersweet falls are the mature White Pine and Hemlock groves along the lower edge of the ledge. These groves contain some of largest and most impressive specimens of these trees in Addison County, with diameters commonly over two feet. Certain species which need this type of coniferous woods, such as the Red Breasted Nuthatch were found here. This section of the woods is shown on the Vt. Natural Heritage Program map as a winter deer yard. It is one of only three such areas in Weybridge.

The rich moist soils near the springs hold unusual groups of medium sized Black Birch and Black Cherry.

Turkey, Ruffed Grouse, Rabbit, Gray Fox, Weasel, and Red Fox are some of the other game species known to inhabit the area. The rocky ledges provide good denning sites for a wide variety of mammals.

On a small Northwest facing moss covered cliff just south of the Bittersweet falls road and west of the falls is a nice community containing Walking Fern and Maidenhair Spleenwort as well as Herb Robert and Bloodroot. The Walking Fern is an unusual species in Vt. and this is one of three areas in Weybridge where I've seen it.

Walking Fern was also found on the west facing ledge of the small rocky woods Northwest of the road, and in two places on either side of Sampson Road. The north facing ledge west of Sampson road has a very large and healthy population of this species. Also on the west side of the road are some heavily used deer trails.

The small shaley bank north of the road, below the dairy down to the brook, appears to an important travel corridor connecting to the wooded swamps and meadows along the Fair. Some large denning trees have been left, mostly Maples but some Bitternut and Shagbark Hickory as well. The soft shaley banks are riddled with dens of various mammals. Scouring Rush is an interesting plant along the brook and Spotted Salamander must have a breeding pool somewhere in the area because I found one under a rock with many Red Backed Salamanders.

GENERAL DESCRIPTION:

The northern extreme of this area is a steep shaley bank of mixed hardwoods and Hemlock down to and crossing Beaver Brook. As one travels south ^{one} ~~they~~ would encounter the falls and the unusual Yew and Mt. Maple community in the gorge above it (described separately). Continuing south along the

bottom edge of the ridge are the mature White Pine and Hemlock stands. Next to the road is the small cliff with the Walking Fern and Maidenhair Spleenwort. Upslope from them are the springs with their associated Black Birch and Black Cherry. Further south are more typical northern hardwoods with some good sugarbush size Sugar Maple stands interspersed with the dry rocky outcroppings that hold the abundant spring wildflowers and provide denning sites for many mammals.

Three smaller pieces of woodland are separated by roads from the larger central core, but share the characteristic of being along the edge of a hill which has kept them from being planted. Two are north of the Bittersweet falls road, and one is south and west of the Lemon Fair Road. This latter piece connects with a similar woods of ledgeside habitat in Cornwall continuing south along "the ledges".

In addition to the species listed in the Bittersweet Falls report other species identified on this visit include:

Plants:

Shagbark Hickory, Geranium (species), Basswood, Northern Red Oak, American Beech, Black Cherry, Lopseed, Raspberry(species), Trillium, Round Lobed Hepatica, Violet(species), Enchanters Nightshade, Herb Robert, Elderberry, Christmas Fern, Helleborine, Wild Ginger, Hemlock Varnish Shelf Fungus, Maidenhair Spleenwort, Walking Fern, Common Scouring Rush, Hop Hornbeam, White and Red Baneberry, Lady Fern, Sharp Lobed Hepatica, Rue Anemone, Herb Robert, False Solomons Seal and Alternate Leaved Dogwood In or near the springs were; Water Hemlock, Willow(shrub species), Goldenrod(species), Duckweed and Cattail(broad leaved). In adjacent pastured woods and overgrown fields were; Red Cedar, Purple Loosestrife, Buttercup(species) Elecompane, Wild Apple, Wild Bergamot, Quaking Aspen, Queen Annes' Lace, Milkweed(species), Buckthorn and White Oak.

Animals:

Red Breasted Nuthatch, Robin, Hermit Thrush, Cicada, Red Eyed Vireo, Cows, Red Backed Salamander, Land Snail, Wood Thrush, Chipmunk, Cardinal, Red Tailed Hawk, Rose Breasted Grosbeak, Wood Peewee, Northern Dusky Salamander, Wood Frog, Clymene Moth, Downey Woodpecker, Turkey, Scarlet Tanager, White Tailed Deer, Spotted Salamander, Catbird

Animals seen at other times:

Red Fox, Gray Fox, Weasel(probably Long Tailed, possibly Ermine), Ruffed Grouse

AREA:

central core approximately 230 acres, with surrounding woodlands approximately 330 acres

COMMENTS/RECOMMENDATIONS:

Individual sections of this woods deserve consideration in their own right; the deer yard, the falls, the gorge, the mature stands of Hemlock and White pine, the wildflower ledges, the springs and their surrounding communities, the small cliffs and the denning areas. However in total it is worth more than the sum of its parts as a contiguous and diverse woodland providing habitat including nesting, denning, feeding and watering sites.

As Weybridge grows I could envision this total area as making a good park with its unusual variety of aesthetically pleasing habitats. However the yarding area should not be disturbed in winter. Development and in particular the dogs that might come with it, should not be allowed to encroach too closely.

(The following comments are the same as those contained in the Beaver Brook report).

The brook below (North of) the dirt road holds spawning Pickerel and has a narrow corridor of woods along most of it until it leaves the Red Maple Swamp on its way to the Fair. This swamp has lots of deer sign and the woods and swales along the brooks and between fields (which offer feed) provide the needed, protected travel corridors used by deer as well as many other species. It makes a great deal of sense to maintain and improve these lowland and wetland travel corridors. Many of them exist now because they were difficult areas to clear or plant. They could serve many purposes at once; travel corridors, shaded spawning areas, breeding and migrational stopover areas for waterfowl, erosional barriers, and absorption areas for farm runoff, to list a few. If these corridors were cut off, the wildlife value of the areas they connect would be greatly lessened. Many smaller wooded areas that exist in scattered locations hold wildlife because they are part of the larger connected system.

Development is encroaching on this area from many sides. Connecting corridors are already beginning to be cut off.

REPORTED BY: Jim Andrews

DATE: August 1990

6372 III
(PORT HENRY 1:62 500) 1.5 MI. TO VT 17

4881
4879
4878
30"
4877
4876
4875

Brittle Azra Stow
Cam
X145

OTTER

Powerplant
Weybridge

Ledgeside Woods
Including
1. Bittersweet Falls
2. Beaver Brook
3. Spruce + Deer yard
4. Wild Flower ledge
5. Small Fern Cliffs

LEMON FAIR
150
X175

X144

W E Y B R I D G E

LEMON FAIR
150
X153

Beaver

Weybridge Hill

X173

FAIR



BRISQ
RIVER

X206

358

350

AREAS OF BIOLOGICAL SIGNIFICANCE
WEYBRIDGE, VT.

SITE NAME:

Lemon Fair Valley

SITE CODE: B10, B11, S1

LOCATION:

The Lemon Fair River, its banks, and the adjacent lowlands, from the southern border of Weybridge, to its junction with Otter creek.

LATITUDE/LONGITUDE:

From N44 01' to N44 04' and from W73 14' to W73 15'

SIGNIFICANCE:

The lower portion of this valley from the bridge North of Gibbs to the junction with Otter creek is habitat for a species of plant that is threatened in Vt. Twelve plants were found in six locations along the banks of the Fair, on July 25, 1990. This plant, called Green Dragon, grows best on undisturbed moist rich shaded streambanks and flood plains.

The upper portion of the valley, from the bridge North of Gibbs to the Weybridge-Cornwall border, holds small segments of floodplain forest consisting largely of Green Ash, Silver Maple, Swamp White Oak and Willow. The very large three ft. diameter Swamp White Oak scattered in two of these segments are excellent nesting and roosting sites for large birds of prey such as Great Horned Owl and Red Tailed Hawk that hunt in the valley. These trees also serve as denning sites for a variety of mammals, as well as nesting sites for smaller birds.

The woods and swales along the river here provide good summer cover for deer. The area is both trapped and hunted for Muskrat, and supports smaller numbers of other furbearers such as Mink, Weasel, and Otter and a host of small mammals.

The largest and most varied floodplain forest remnant was along the western bank of the river east of the Robert Lafountain farm.

By far the most frequently mentioned value of this valley was its use as a feeding and resting area for a tremendous variety and amount of migratory waterfowl in the spring and fall. It was mentioned as one of Weybridge's most valuable wildlife resources by representatives of the Vt. Fish and Wildlife service, the Vt. Institute of Natural Science, and

local hunters, Birders and residents. Tom Myers Vt. State waterfowl biologist stated that "the Lemon Fair Valley is of tremendous value to waterfowl as one of our states few great staging areas". The ability of the surrounding floodplain forests, farmland, and swales, to trap and hold water because of its relatively level topography, combined with the lack of surrounding development, and for some species, the open spaces and crop remnants left by current farming practices, act together to make this a migrational staging area of state and regional significance. One of the species using this area, the Pintail, is, according to national wildlife authorities, declining in numbers more rapidly than any other bird species in the U.S. Other species using this valley, such as the Wood Duck and Black Duck have experienced large population declines in recent years. Thousands of Canada Geese and Snow Geese, which many people enjoy watching, have used this floodplain as a staging area for years.

According to Bob Smith of the Patuxant Wildlife Research Center of the U.S. Fish and Wildlife Service in Maryland; waterfowl store up much needed fat reserves in these staging areas that are needed for nesting when they arrive on their nesting grounds. Waterfowl use these same feeding and resting areas year after year. If these areas are altered such that they are no longer suitable for staging, the birds arrive on their nesting grounds without enough stored fat. This adversely effects the success of their nesting. According to Smith, due to development in some areas of the country waterfowl now fly over large areas where they once rested and fed. As a result they use up their fat reserves and reproduce less successfully. Which in turn contributes to their declining population. In the fifties he adds, everyone assumed they would stage somewhere else, now they are running out of options. Some waterfowl in the midwest are suspected to fly nonstop to their nesting areas from their wintering grounds.

The waters of the Fair are also an important spawning and feeding ground for warm water fish species such as Bullhead, Northern Pike, Pickerel, and Carp in the spring, and at other times of high water.

The Red Headed Woodpecker, a very rare bird in this state, has been seen regularly in this valley for years.

The Upland Sandpiper a threatened species in Vt. mentioned in another report uses the southern part of this valley to nest and feed.

The open fields along the river, like other open and rural farmlands in the Champlain Valley, serve as wintering grounds for species of birds from the far north including Rough Legged Hawk, Horned Lark, and Snow Bunting.

GENERAL DESCRIPTION:

The Lemon Fair Valley is a broad flat largely undeveloped agricultural area with a few areas that are not in cropland due to excessive wetness or seasonal flooding. Many historical wetlands have been ditched to provide more cropland or quicker access. Large areas flood every spring and occasionally at other times of the year. A few small wooded segments remain.

Other species present include:

Plants:

Northern Arrowhead, Flowering Rush, Willow (some to three ft. dbh), Pickerelweed, Red Maple, Swamp Milkweed, American Elm, Silver Maple (some three ft. dbh), Green Ash, Swamp White Oak (some three ft. dbh), False Wood Nettle, Sugar Maple, Blue Flag, Cardinal Flower, Water Parsnip, Violets (unknown species), Moneywort, Fringed Loosestrife, Swamp Dogwood, Sensitive Fern, Red Osier Dogwood, Spotted Knapweed (roadside), Spikerush (unknown species, three ft.), Sedges (unknown species, one short slender and grasslike, one three ft. with a drooping cottony flower), River Bulrush, Burreed (Big?, five ft.), Carrion Flower, Riverbank Grape, Green Dragon, Speckled Alder

Animals:

Song Sparrow, Phoebe, Grackle, Yellow Billed Cuckoo, Green Frog, Leopard Frog, Spotted Sandpiper, Cedar Waxwing, Blue Heron, Red Winged Blackbird, Eastern kingbird, Yellowthroat, Chipping Sparrow, Woodcock, Common Crow, Hairy Woodpecker, Red Tailed Hawk, Northern Harrier, Tree Swallow, Blue Jay, Robin, Great Crested Flycatcher, Belted Kingfisher, White Breasted Nuthatch, Eastern Goldfinch, Eastern Wood Peewee, Fresh water Mussels (Eastern Floater), Carp (three ft.), Muskrat, Deer

Also seen in this area but not during this survey are:

Otter, Mink, Coyote, Woodchuck, Upland Sandpiper (threatened), Painted Turtle, Snapping Turtle, Bullhead, Grasshopper Sparrow (one found dead in the road near Denis' bridge, very rare), Savannah Sparrow, Red Headed Woodpecker (very rare, not seen this year but regularly seen in this valley) Osprey (in migration), Rough Legged Hawk (in winter) Snow Buntings and Horned Larks (in winter) Cattle Egrets (once), Great Egrets (August 1990)

Waterfowl seen using this area during spring and fall migration include:

MOST COMMON

Canada Goose (thousands), Snow Goose (including the Blue form, frequently in one or two large flocks of thousands), Black Duck, Mallard, Pintail (hundreds),

LESS COMMON

Woodduck, Northern Shoveler, Blue and Green Winged Teal, and a very rare hybrid form of Teal (seen only once) Canvasbacks (seen only a few times), American widgeon, Common Goldeneye, Bufflehead, Scaup, Ring Necked Duck

AREA:

approximately 1600 acres in Weybridge (based on an average of 2000 ft. on either side of the river)

COMMENTS/RECOMMENDATIONS:

This valleys use as a migrational staging area does not stop at the town line but continues south through Cornwall, Bridport and Shoreham. A particularly important staging area exists in Bridport just north of the junction of the rivers two branches. Those areas where the surrounding land rises least in elevation and which hold some flood water are the most important. A concerted effort to manage the complete region would most benefit migratory waterfowl. If that is not possible Weybridge could play a responsible leadership role. This area could easily be managed for the dual roles of agriculture and wildlife.

Open areas that hold water, and are located so as to provide some sense of security, and therefore act as important staging areas, can also be found along the Otter Creek from the Twin bridges downstream to our border with Addison and Waltham. They are marked on the map but are not included in the acreage estimate.

According to the state waterfowl biologist Tom Myers;

1. other than appropriate habitat the areas that waterfowl stage in are related to a lack of disturbance while staging,
2. that development would pose a definite threat to waterfowls continued use of this area,
3. that a recommended buffer zone area is difficult to pin down without studying the maps of this area carefully, but that one would be looking at a bigger dimension than usual for an area as important as the Lemon Fair Valley,
4. that this area has tremendous potential as a management zone for breeding as well as migrating waterfowl, with the addition of a few small dikes, but presently doesn't hold water long enough for much success in breeding.

The rare plant Green Dragon is found only on the banks that are not in pasture. The lowest section of the eastern bank is in pasture right into the edge of the river, this plant as well as many others could not survive under these conditions.

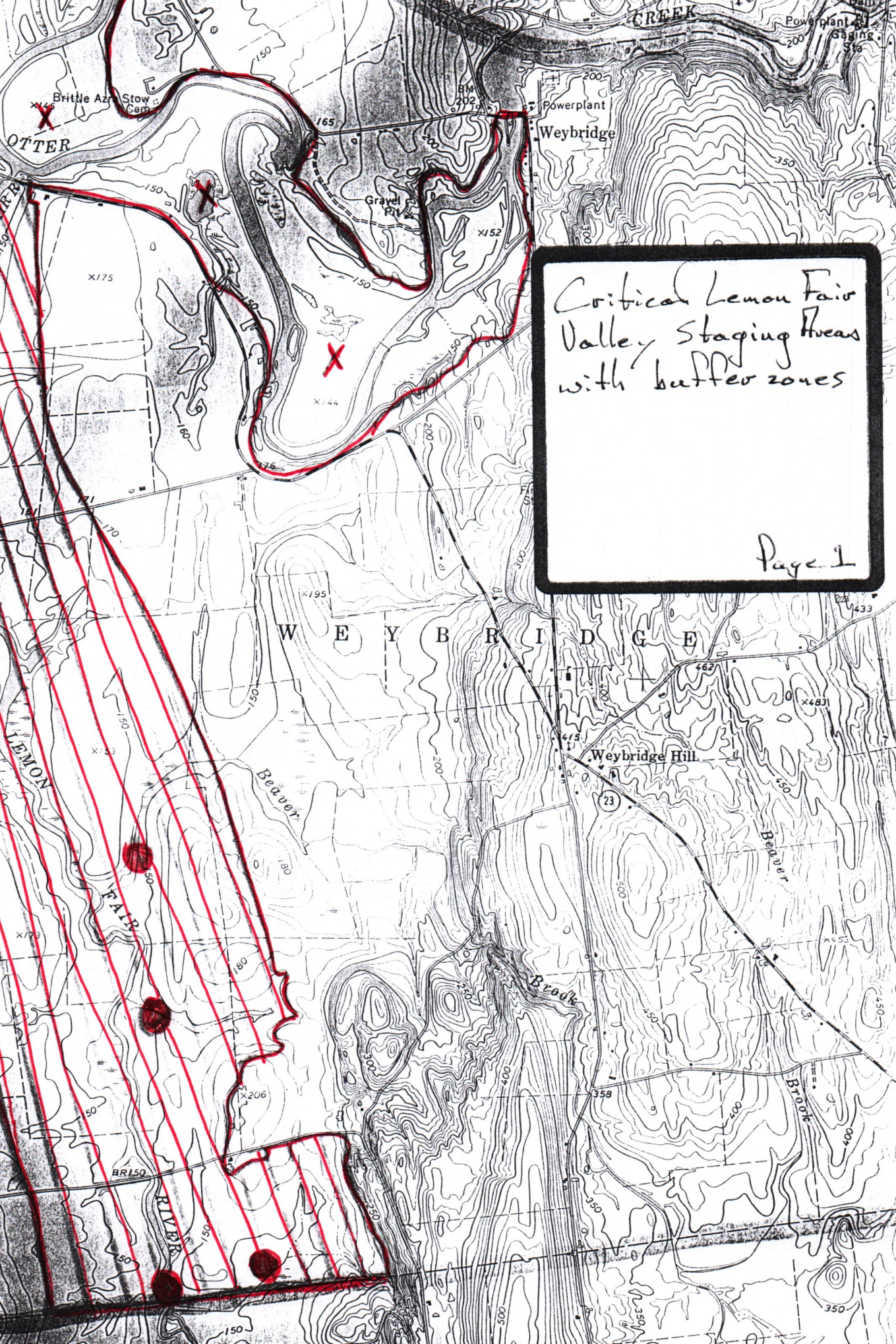
Two new programs were brought to my attention by the local Soil Conservation Service. One, administered by the Agricultural Stabilization and Conservation Service, pays up to \$50,000 annually in rental fees to have farmers maintain vegetative filter strips along waterways. The cost of establishing these strips, if any, is shared by the program and considering the needs of wildlife is encouraged. The other administered by the U.S. Fish and Wildlife Service involves wetlands restoration for areas that are just too wet, too often to provide dependable agricultural income. Both these programs should be investigated in relation to this valley. Some local farmers may be interested in the income that they could provide while improving wildlife habitat at the same time.

In 1988 a Middlebury College student (Lisa E. Lewis) identified five of the species of fish in the Lemon Fair River upstream from Weybridge. They were Emerald Shiner, Blunt Nosed Minnow, Creek Chub, White Sucker, and Brown Bullhead. This is only a partial list.

REPORTED BY: Jim Andrews

DATE: July 1990

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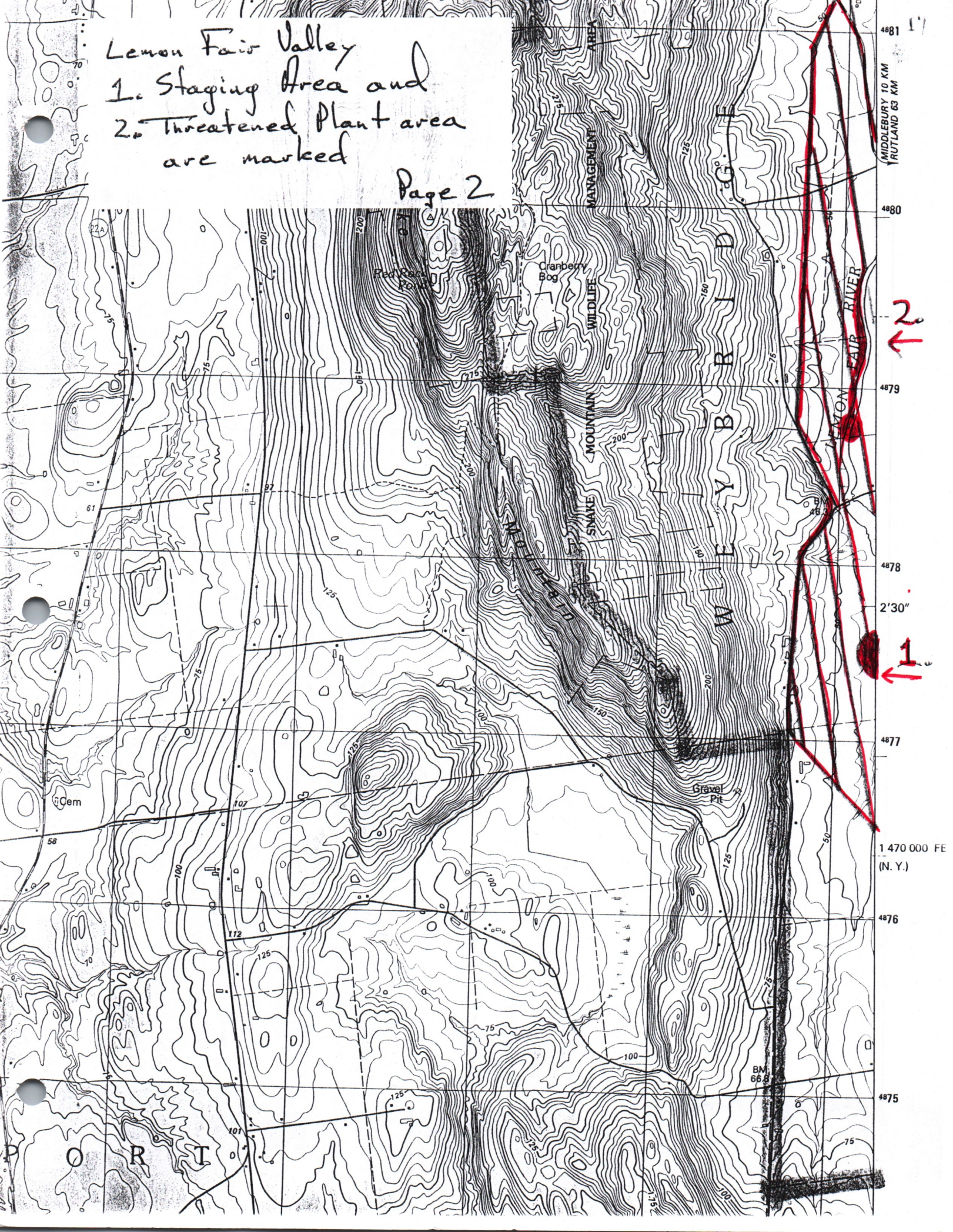


Critical Lemon Fair
Valley Staging Areas
with buffer zones

Page 1

Lemon Fair Valley
1. Staging Area and
2. Threatened Plant area
are marked

Page 2



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MIDDLEBURY 10 KM
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AREAS OF BIOLOGICAL SIGNIFICANCE
WEYBRIDGE, VT.

SITE NAME:

Otter Creek Gorge

SITE CODE:

B15

LOCATION:

The Otter Creek floodplain and immediately adjacent land on the Weybridge side, from the southeast corner of town to the twin bridges

LATITUDE/LONGITUDE:

N44 01'00" to N44 04'15" W73 10'40" to W73 13'00"

SIGNIFICANCE:

This section of the river valley includes a variety of significant biological features.

The faster shallow water below the dams makes this section at least a fishing territory, if not a potential nesting territory for a pair of Osprey. This bird is now known to nest in only four locations in Vt. I observed a pair regularly during my site visits. Other experienced birders have observed immature Bald Eagles in this area as well. (Gorge Green Belt Proposal)

The same fast water sections below the dams are some of the best fishing areas in the county for large Brown and Rainbow Trout as well as Small Mouth Bass. The slower sections are excellent for Northern Pike, Small Mouth Bass, Perch, and other small pan fish.

This section includes some of the Fresh Water Mussel beds reported by Mark Desmeules in the study he did for Otter Creek Audubon. Otter Creek is one of two rivers in Vt. known for its great diversity of mussel species. No rare species were identified however.

South of Pulp Mill

The area immediately below the Huntington dam contains a large stand of mature White Pine. Although significant in their own right, large pines are also a favorite nesting site for Osprey and other large birds of prey.

There are five setbacks on the Weybridge shore of the river that hold good potential for breeding dabbling ducks such as Wood duck and Mallard. These areas also are good shallow water feeding areas during migrations, spawning areas for warm water fish, feeding areas for furbearers and contain

some rare marsh vegetation. In Weybridge this type of wetland is unique to this section of Otter creek.

Common Merganser is a regular sighting on this stretch of river. It speaks well for the quality of water, for this bird requires good visibility underwater, in order to locate its prey. It also is sensitive to disturbance during nesting.

Furbearers such as Beaver, Muskrat and Mink are known to be in this area. I would expect Otter to be at least an occasional visitor.

Green Backed Heron and Blue Heron were both seen using this area. The Green Heron may breed here.

The flatwater above the Twin Bridges is frequently visited by migrating shorebirds, and waterfowl. At times of low water the mud flats have held a variety of species, including Dowitcher and Yellowlegs. The Spotted Sandpiper may nest in the area.

In the area near Beldens falls there are historical records for two rare plants, an aquatic plant and an open wetlands plant, and one threatened plant. None of these plants were reconfirmed on a recent visit but they may still be in the area.

One plant near Beldens was reconfirmed on the recent visit. It was a rare upland forest plant now known from only two locations in Vt. The state Natural Heritage Program has this area listed as a significant area on their map of Weybridge, as a result of these records.

In a study done by botanist Elizabeth Thompson for Otter Creek Audubon in 1986, she surveyed the section of Otter Creek from the Middlebury falls to the covered bridge power plant, with a quicker look downriver to the next dam at Beldens. In her report she states that the wetlands at the Weybridge Middlebury border on the west side of the river " is a fairly large and intact wetland with a diverse assemblage of plant species. It is the most interesting natural feature in the study area and should be preserved." and " in this relatively swift and steep banked stretch of the river... wetlands make up a relatively small area of the total floodplain area. Wetlands thus add significantly to the diversity in this stretch of the river"

The wetland and pond below the covered bridge dam in front of the Weybridge garage holds a rare sedge presently known from only eight sites in Vermont, according to Thompson. She further states that this site should be protected and this plant monitored. She also states that the Natural

Heritage Program could help set up a monitoring program for this sedge. Her entire report is in the appendix.

Below Battell gorge inland from the western bank of the river is a very interesting and well preserved swamp. Although no rare species were observed there on this visit it should be rechecked in spring.

This section of river forms the border of the large and very diverse Gorge Woodlands. Together they make a very valuable piece of wildlife habitat.

This section of river and its banks form part of the major wildlife corridor extending through Weybridge and beyond.

GENERAL DESCRIPTION:

Starting at the Twin bridges and going upstream the steep left bank, here part of Weybridge, is eroded and largely disturbed partly as a result of pasture which extends right to the river. The right shore is a low floodplain with a few little setbacks that extend into the floodplain through cattails and in places, wooded swamp. It is good habitat for shorebirds, ducks and mammals. A couple small islands hold a small variety of marsh plants such as Northern Arrowhead, rushes and grasses. These small islands and the shallow water around them are commonly frequented by wading birds such as Great Blue Heron, and Yellowlegs. Moving upstream over the flat water large hemlocks start to cover the shoreline, some of which have been recently cut. Merganzers can often be seen sitting on a small rocky island near the southern shore. Above here the river moves faster between high steep banks and eventually has the appearance not of our creek but of a large rocky trout stream. It is quiet and gives the sensation of seclusion. Large white pine line the right bank. Above the Huntington Dam the river is flat again with pasture on the west as the river swings around the corner. Another marsh of a more exposed type with a couple small islands is included within a pasture and is heavily trampled in sections. Again the river narrows with conifers on steep banks. A long thin peninsula juts into the creek ending near some more small rocky islands with the current flowing quickly around them. Around the corner the New Haven river enters to form a broad shallow expanse of fast water. The creek above here is too fast and narrow to paddle upstream. Above this rapids a wide quiet pool is filled with bass and pike and bordered by rock and some small caves. A large swamp is out of sight in the woods on the right. The gorge here is very narrow with vertical walls rising twenty feet on each side. Thick white cedar densely cover the ledgy shores. Above is another rapids and another dam known for excellent fishing. Once above this dam the river is level and quiet for some distance. A narrow opening in the bank on the right opens

into an open marsh which is excellent duck and muskrat habitat. Further upstream is another. Just below the outlet of the covered bridge dam is the marsh and pond with the rare sedge. Heavily carved rocks here, are a favorite sunbathing spot. Above the bridge are more mussel beds in the quiet muddy bottomed slow water. Lastly is a marsh, largely grown in, but with a few passageways kept open by beaver, muskrat, and snapping turtles that lay their eggs in the nearby field. In all it is a tremendously varied and, with the exception of the dams, largely undeveloped section of river.

Species identified on these visits include:

From Twin bridges to Huntington dam;

Plants:

Trees; Red Maple, Red Cedar, White Pine, Shagbark Hickory, Hop Hornbeam, Basswood, Northern Red Oak, Staghorn Sumac, Green Ash, White Cedar, Black Locust, Sugar Maple, Hemlock, Butternut, Quaking Aspen and White Birch
 Shrubs and Herbs; Pasture Juniper, Turtlehead, Alder, Queen Annes Lace, Goldenrod, Spotted Jewelweed, Barberry, Witch Hazel, Yarrow, Rue Anemone, Burreed (big?), Thistle, Milkweed, False Solomons Seal, Tartarian Honeysuckle, Grasses, Wild Grape, Northern Arrowwood, Rush, Virginia Creeper, Broad and Narrow leaved Cattail, Forget Me Not, Beggar Ticks, Boneset, Beach Clotbur, Maidenhair Fern, White Wood Aster, Wild Bean, Duckweed, Purple Flowering Raspberry, Wild Sarsaparilla, Poison Ivy, White Baneberry, Oxeye Daisy, Horsetail, Sensitive Fern, Marsh Fern, Coltsfoot and Green Algae

Animals:

Land Snails, King fisher, Turkey Vulture, Spotted Sandpiper, Field Cricket, Ring Billed Gull, Green Frog, Cicada, Blue Winged Teal, Osprey, Red Squirrel, Green Heron, Muskrat, Beaver, Blue Jay, Raccoon, Pileated Woodpecker, Eastern Goldfinch, Whirligig Beetle, Great Blue Heron, and Chickadee
 Many other species have been seen in this area at other times including; Bald Eagle, Common Merganser, Mallards, Black ducks, Common Goldeneye, Dowitcher, Yellowlegs
 Northern Pike, Smallmouth Bass, Rainbow Trout, Brown Trout, Yellow Perch, and Deer

Above Huntington Dam to the border;

Plants;

Trees; Willow, Box Elder, Butternut, Staghorn Sumac, American Elm, Buckthorn, Apple, Red Cedar, Shagbark Hickory, Basswood, White Pine, White Cedar, Hemlock, White Birch, Red Maple, Northern Red Oak, Sugar Maple, American Beech, Black Cherry, Hop Hornbeam and Bitternut Hickory

Shrubs and Herbs; Honeysuckle (probably Swamp Fly which is a rare plant that should be rechecked, it is above the sedge marsh and below the dam), Stout Goldenrod, Grays Sedge, rare(Thompson), Sporobolus neglecta, rare (Zika), American Yew, Shadbush, Pasture Juniper, Sensitive Fern, Duckweed, Virginia Creeper, Red Osier Dogwood, Goldenrod, Queen Annes Lace, Red Clover, Turtlehead, Iris, Purple Loosestrife, Sweetflag, Spotted Jewelweed, Boneset, Rush (four ft), Burreed, Speckled Alder, Broad Leaved Cattail, Wild Parsnip, Vervain, Polypody Fern, Rue Anemone, Barberry, Hog Peanut, Yarrow, Marsh Skullcap, Lance Leaved Goldenrod, White Wood Aster, Poison Ivy, Highbush Cranberry, Wild Sarsaparilla, Witch Hazel, Ostrich Fern, Red Baneberry, Evergreen Wood Fern (Marginal), Lady Fern, Trillium, False Solomons Seal, Christmas Fern, Maidenhair Fern, Closed Gentian, Beach Clotbur, Pond weed, Cardinal Flower, Spinulose Wood Fern, Harebell, Walking Fern and Round Leaved Dogwood

Animals; In this stretch or immediately upstream DesMeules reported five Species of freshwater mussel; Heavy Toothed Wedge Mussel, Eastern Floater, Squaw Foot, Eastern Lampmussel, Fluted Shell and Eastern Eliptio, freshwater Snails, Osprey, Catbird, Blue Jay, Kingfisher, Semipalmated Sandpiper, Yellowthroat, Cedar Waxwings, Damsel flies, Raven, Chipmunk, Cows, Barn Swallows, Eastern Goldfinch, Bullfrog, Dragonfly, Ring Billed Gull, Phoebe, White Breasted Nuthatch, Great Blue Heron, Common Merganser, Spotted Sandpiper, Chickadee, Cicada, Crow, Great Crested Flycatcher and Wood Peewee, Beaver and Leopard Frog
Animals seen here at other times include, Common Goldeneye, Blue winged Teal, Rough Winged Swallow, Green Backed Heron, Muskrat, Deer, Brown Trout, Rainbow Trout, Brook Trout, Smallmouth Bass. Northern Pike and Yellow Perch

Species lists for the Beldens falls area, and the marshes above and below the covered bridge, were made by Zika and Thompson and are in their reports, included in the appendix.

AREA:

115 acres in Weybridge, using a 200 ft. wide strip on our side of the river, approximately 230 acres total, counting both sides,

COMMENTS/RECOMMENDATIONS:

As a wildlife corridor Otter creek is far more valuable if surrounding towns protect their sections as well. This would allow wildlife to travel freely along and across the river throughout the Champlain valley.

Elizabeth Thompson recommends a 100 foot buffer zone around each of the two wetlands that she visited in Weybridge. She further recommends a 200 ft. strip, protected by

conversation easements on both banks of the section of the river she surveyed.

Botanist Peter Zika did a survey of Vt. river gorges in 1983. In that report he surveyed Beldens falls and what he refers to as Battell gorge which is the next gorge downstream, just out of site from the dam. In his report he states that Battell gorge is "perhaps the prettiest undammed gorge in Vt." He also states that it should be rechecked earlier in the spring for rare plants. Excerpts from his report are in the appendix.

The Heritage Program warns that water temperature changes caused by salt, storm water runoff, industry, or dam construction could adversely effect the mussel populations. Further surveying and monitoring of the mussels is recommended. See the appendix for details.

The small caves near the Battell Gorge may hold bats in winter, if they extend far enough and don't flood. They should be revisited in winter to check.

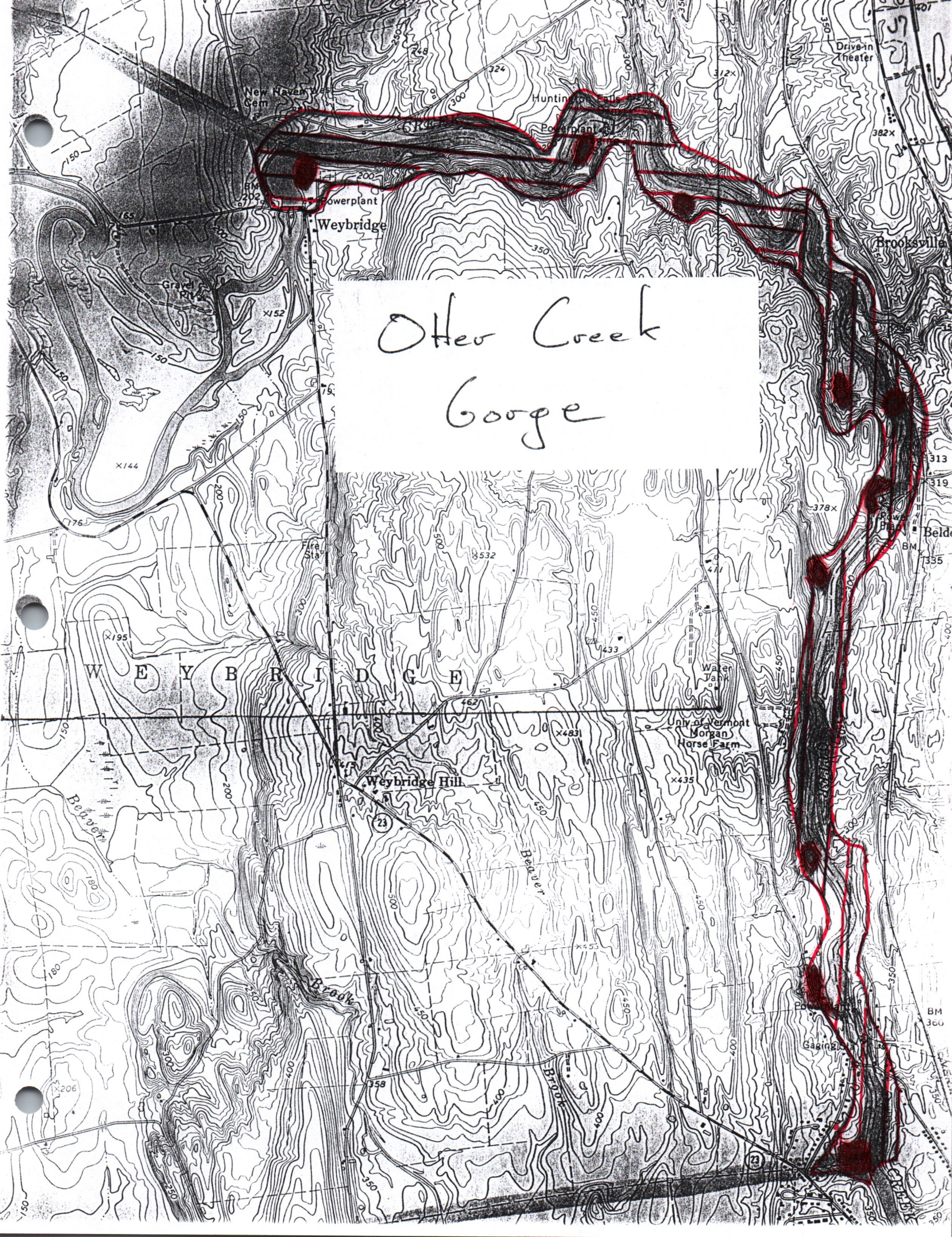
An excellent study on a variety of aspects of this section of Otter creek, has been done by five Middlebury College students. Their report The Otter Creek Gorge Greenbelt: a Preliminary Proposal recommends that a 200 foot zone on either side of the river be protected by conservation easements. Their full report is available through the Weybridge Conservation Committee. I whole-heartedly support their proposal. This truly is a beautiful section of river with significant wildlife value as well.

The 200 ft. recommended in the Greenbelt proposal would not be large enough in some areas to protect some significant natural features or the sense of seclusion.

REPORTED BY: Jim Andrews

DATE: Sept. 1990

Otter Creek Gorge



AREAS OF BIOLOGICAL SIGNIFICANCE
WEYBRIDGE, VT.

SITE NAME:

Otter Creek Gorge Woods and Fields

SITE CODE: B14, D2

LOCATION:

This piece is located along Otter Creek, on the east side of town, from the Morgan Horse Farm north, behind Robisons to "Farmin Armins" field south of the plank bridge. It is bordered on the west by the Morgan Horse Farm road and on the east by Otter Creek.

LATITUDE/LONGITUDE:

N44 02'30" to N44 04'00" W73 10'30" to W73 11'30"

SIGNIFICANCE:

This area is a known winter deer yarding area and as such is located on the Heritage Programs map of significant areas in Weybridge. It is also excellent spring, summer, and fall habitat for Deer.

The core of this area is made up of a woods that is one of the three largest pieces of contiguous woodland in Weybridge and as such it contains species that smaller fragments cannot.

This total area contains remote fields, not visible from the roads and surrounded by woods on all sides, easy access to year round water, and a variety of habitat types including rocky woods, ravines, fields, river, small brooks, marshy river setbacks and a small swamp without any intervening development. As a whole it is an excellent piece of year round wildlife habitat for a wide variety of plant and animal species.

This area is part of the Otter Creek Corridor, a largely intact undeveloped corridor along Otter Creek, which could be managed as an excellent protected wildlife travel corridor, as well as protecting scenic, recreational, soil conservation, and flood control interests.

Species of interest include some unusual ferns for Weybridge; Walking Fern, Oak Fern, and Ebony Spleenwort.

These woods provide feeding and nesting sites for many of our aquatic species such as Wood duck, Common Merganser, Beaver, and possibly Osprey, which is a fish eating hawk which is just beginning to breed in Vt. again, after having been eliminated by pesticides. I found no evidence of an

Osprey nest, but a pair were seen in this area regularly during my visits this August and single birds have been seen often in past years.

GENERAL DESCRIPTION:

As stated previously this is a varied and diverse system. The core is made up of a rocky mixed hardwood forest with many ledgey outcroppings. Between the woods and the road are a series of hayfields, with one group of fields included within the forestland. As you proceed east the land breaks into a series of small brooks and ravines with the largest draining into the open wetland near the southern extreme of these woods. The river gorge drops of quite steeply in some areas with softwoods becoming more common along the banks. An interesting swamp is completely enclosed by forest along the floodplain and may contain other significant species earlier in the spring. There are a tremendous variety of plant species present in this area.

Species identified on this visit include:

Plants:

Trees; American Hornbeam, American Elm, Pasture Juniper, Shagbark Hickory, Basswood, White Pine, White Cedar, White Birch, Northern Red Oak, Sugar Maple, American Beech, Black Cherry, Hop Hornbeam, Bitternut Hickory, American Yew, Black Locust, Shadbush, Black Ash, Bur Oak, Green Ash, White Oak, Gray Birch, Black Birch, Hemlock, Large Toothed Aspen and Apple

Shrubs and Herbaceous Plants; Ostrich Fern, Lady Fern, Christmas Fern, Maidenhair Fern, Sensitive Fern, Polypody Fern, Spinulose Wood Fern, Walking Fern, Royal Fern, Marsh Fern, Bracken Fern, Maidenhair Spleenwort, Ebony Spleenwort Bulblet Fern, Evergreen Wood Fern, Oak Fern, Hay Scented Fern, False Solomons Seal, Herb Robert, Trillium, Red Baneberry, Puffballs, Amanita Muscaria, Wild Ginger, Hog Peanut, White Wood Aster, Virginia Creeper, Jack in the Pulpit, Sharp Lobed Hepatica, Bittersweet Nightshade, Lichens, Elder, Beechdrops, Wild Sarsaparilla, White Snakeroot, Poison Ivy, Rue Anenome, Marsh Bedstraw, Foam Flower, Gray Stemmed Dogwood, Tree Club Moss, Prickly Ash, Witch Hazel, White Baneberry, Spikenard and Barberry
In the small swamp; Horsetail (Branching and rough), Swamp Milkweed, Cattail, Royal Fern, Burreed, Blue Flag, Marsh Fern, Royal Fern and Black Ash

Animals:

Northern Two Lined Salamander, Northern Duskey Salamander, Green Frog, Eastern American Toad, Wood frog, Red Backed Salamander, Osprey, Robin, Wood Peewee, Blue Jay, White Breasted Nuthatch, Chickadee, Red Eyed Vireo, Pileated Woodpecker, Downey Woodpecker, Turkey Vulture, Crow, Phoebe, Hairy Woodpecker, Red Squirrel, Muskrat, Beaver, Deer, Mosquitos, Cicada, and Crayfish (in brook)

AREA:

approximately 550 acres

COMMENTS/RECOMMENDATIONS:

I visited this site in late August. At this time of year many of the breeding birds have dispersed. There are undoubtedly many species in this area which I did not find.

This report does not cover those areas that are immediately adjacent to Otter Creek. They are covered in a separate report.

Much of this land is already protected by the generosity and foresight of the Otter Creek Land Trust. If the adjacent landowners would agree to conservation easements a very significant piece of wildlife habitat could be saved.

An adjoining piece of woodland across the road to the west, also protected by the land trust, looks similar to the upland rocky mixed deciduous woodland reported on here, but was not visited.

Inclusion of surrounding fields in the areas protected by easements is very important for food sources for wildlife.

REPORTED BY: Jim Andrews

DATE: August 1990

Other Creek Gorge Woods and Fields



L1

AREAS OF BIOLOGICAL SIGNIFICANCE
WEYBRIDGE, VT.

SITE NAME:

Otter Creek Waterfowl Staging Areas and Wildlife Corridor

SITE CODE:

S1

LOCATION:

Along the floodplain of Otter Creek from the Twin Bridges to the northern border of town

For waterfowl staging areas the areas of particular significance are located;

1. On the peninsula across the river from Leonard Wales home and below the Wonacott residence

2. On the peninsula across the river from the Brosnan/Chamberlain residence and below the Brittle Azra Stow Cemetery.

LATITUDE/LONGITUDE:

N44 03'00 to N44 05'15 W73 13'00 to W73 15'00

SIGNIFICANCE:

These areas are of tremendous statewide and regional significance as migratory waterfowl feeding and resting areas. The area which is across from the Brosnan/Chamberlain residence is more visible and hence better known. It holds larger numbers and a greater variety of types of waterfowl, more regularly than any other site I know of in Weybridge. As far as early spring migration is concerned, if the Otter creek has flooded there will be great concentrations of waterfowl here.

I have copied the notes on the importance of these staging areas from the report on the Lemon Fair valley. These areas were specifically mentioned by Bill Crenshaw, our regional wildlife biologist in conjunction with his comments on the Lemon Fair Valley and hence they can be looked at together as regards migratory waterfowl.

By far the most frequently mentioned value of this valley was its use as a feeding and resting area for a tremendous variety and amount of migratory waterfowl in the spring and fall. It was mentioned as one of Weybridge's most valuable wildlife resources by representatives of the Vt. Fish and Wildlife service, the Vt. Institute of Natural Science, and local hunters, Birders and residents. Tom Myers Vt. State waterfowl biologist stated that "the Lemon Fair Valley is of

tremendous value to waterfowl as one of our states few great staging areas". The ability of the surrounding floodplain forests, farmland, and swales, to trap and hold water because of its relatively level topography, combined with the lack of surrounding development, and for some species, the open spaces and crop remnants left by current farming practices, act together to make this a migrational staging area of state and regional significance. One of the species using this area, the Pintail, is, according to national wildlife authorities, declining in numbers more rapidly than any other bird species in the U.S. Other species using this valley, such as the Wood Duck and Black Duck have experienced large population declines in recent years. Thousands of Canada Geese and Snow Geese, which many people enjoy watching, have used this floodplain as a staging area for years.

According to Bob Smith of the Patuxant Wildlife Research Center of the U.S. Fish and Wildlife Service in Maryland; waterfowl store up much needed fat reserves in these staging areas that are needed for nesting when they arrive on their nesting grounds. Waterfowl use these same feeding and resting areas year after year. If these areas are altered such that they are no longer suitable for staging, the birds arrive on their nesting grounds without enough stored fat. This adversely effects the success of their nesting. According to Smith, due to development in some areas of the country, waterfowl now fly over large areas where they once rested and fed. As a result they use up their fat reserves and reproduce less successfully. Which in turn contributes to their declining population. In the fifties he adds, everyone assumed they would stage somewhere else, now they are running out of options. Some waterfowl in the midwest are suspected to fly nonstop to their nesting areas from their wintering grounds.

The Otter Creek is known among Vermont rivers for its diversity of Fresh Water Mussels. Some of these are rare species. This section of the river should be no exception, although I did not survey for them.

This section of the river is a very productive warm water fishery. It holds large numbers of Small Mouthed Bass, and Northern Pike, two very popular game fish, along with a variety of other species including Pickerel and Yellow Perch. In the faster more oxygenated waters below falls some trout species can be found.

The large trees in the narrow forested border of the river provide denning sites for mammals and perching and nesting sites for larger birds.

Given that;

1. it is important to maintain connecting strips between blocks of forested land,

2. it is equally important to maintain naturally vegetated buffer zones along rivers,
3. many of Weybridges most significant wildlife features are in the floodplains of the Otter Creek, the Lemon Fair and Beaver Brook,
4. that these areas have not as yet been developed due in part to their seasonal flooding,

it seems logical to maintain the areas along our rivers as wildlife corridors, buffer strips, and to protect significant natural areas all at the same time. This also serves purposes beyond the wildlife scope of this report as well.

I have copied here the list of benefits of maintaining naturally vegetated buffer strips along water bodies from the Pamphlet How to Include Fish and Wildlife Resources in Town and Regional Planning

"Naturally vegetated shorelines contribute to maintenance of water quality and shoreland protection in the following ways:

Provide bank support and stabilization.

Help prevent bank undercutting and bank collapse.

Provide food and shelter for fish and wildlife.

Intercept, absorb, and filter out pollutants such as silt, fertilizers, toxic chemicals, and livestock wastes.

Keep water temperatures cool during hot summer months when fish are susceptible to heat stress.

Slow surface water runoff.

Increase wildlife diversity.

Reduce flood and ice damage.

Preserve natural character of waters."

GENERAL DESCRIPTION:

Those areas of the river which have low relatively level floodplain along them frequently have narrow 10 to 20 ft. forested strips bordering them, giving way to agricultural fields which are used by migrating waterfowl and create a wide wildlife corridor. Those areas with steeper banks may have woods, fields or residences but do not get the same degree of migratory waterfowl use nor do they have as wide a wildlife corridor.

In general the forested strips along the creek contain Silver Maple, Red Ash, Box Elder, and Willow with wider or steeper areas having a greater variety. The wider sections of floodplain forest typically contain an Ostrich Fern understory with other shrubs and herbaceous plants mixed in, such as the nettles. As stated in other specific reports a variety of rare and threatened species can be found in specific areas up and down this valley.

A great variety of mammals feed, breed and travel in these areas along the creek including Deer, Fox, Bobcat, Coyote, Beaver, Otter, Muskrat, Mink, and many small mammals. Birds using these areas range from Osprey, Kingfisher, Green Backed Heron, Great Blue Heron and Merganzers to Warbling Vireos, Cedar Waxwings and Yellow Warblers, to name only a few of the scores of species.

Reptiles and amphibians found in the area include Jeffersonianum complex, hybrid salamanders, Painted and Snapping Turtles, Garter and Northern Brown Snakes, Green Frogs, American Toads, Leopard Frogs, and most likely Spring Peepers, Wood Frogs, Gray Tree Frogs and Bullfrogs as well.

AREA:

approximately 80 acres of naturally vegetated buffer strip, and approximately 1100 acres of land mostly used for agriculture, but protected from development, figuring on 1500 ft. from staging areas

COMMENTS/RECOMMENDATIONS:

The recommended size of the naturally vegetated buffer strip along a river of this size is fifty feet. It varies up to 100 ft. around wetland areas and more where the streambank is very steep. However to provide an adequate undeveloped zone (which does not need to be naturally vegetated, so cropland is not effected) a much greater distance is required in order not to disturb the migrating waterfowl and cause abandonment of their traditional staging areas. I would recommend keeping development behind natural sight barriers when possible and at a distance of at least 1500 ft.

The Fish and Wildlife planning document mentioned above suggests specific language that a town plan can use to protect riverside corridors, and provides charts to use in establishing their size. It also contains a great deal of other useful information and I suggest it be read over carefully by the town planners.

The quality of the water is of course critical to the health of all species depending on it. We all must work to minimize the effects of agricultural runoff as well as other sources of pollution. Buffer strips greatly help in this regard.

In most of this area the naturally vegetated strips are not of the recommended size. Wildlife would benefit from maintenance of what already exists as well as widening of this strip wherever possible. At least two programs exist which should be investigated further relative to establishment of these buffer zones. One is the CRP (Conservation Reserve Program) administered locally by our ASCS office (Mr. Miner, 388-6748). The other is a wetlands restoration project administered by the regional US Fish and Wildlife office in New Hampshire (Bob Scheiver, 1-603-225-1411). The ASCS program pays up to fifty dollars per acre for ten years to return cropland to naturally vegetated land, if it is along rivers or in high erosion areas.

Our own Conservation committee could become a commission so as to be able to purchase or accept gifts of development rights or conservation easements. Organizations developed specifically to save marginal farms from being sold and developed are available in the form of the Vt. Land Trust and others. The Nature Conservancy can provide funds and or expertise to help maintain areas of state wildlife significance. In summation there are many options in existence to use in preserving the farms and wildlife habitat such as we have in this valley. Local landowners residents and planners need to be made aware of these options.

Two other areas that deserve mention from within these corridors but have not been reported on elsewhere are:

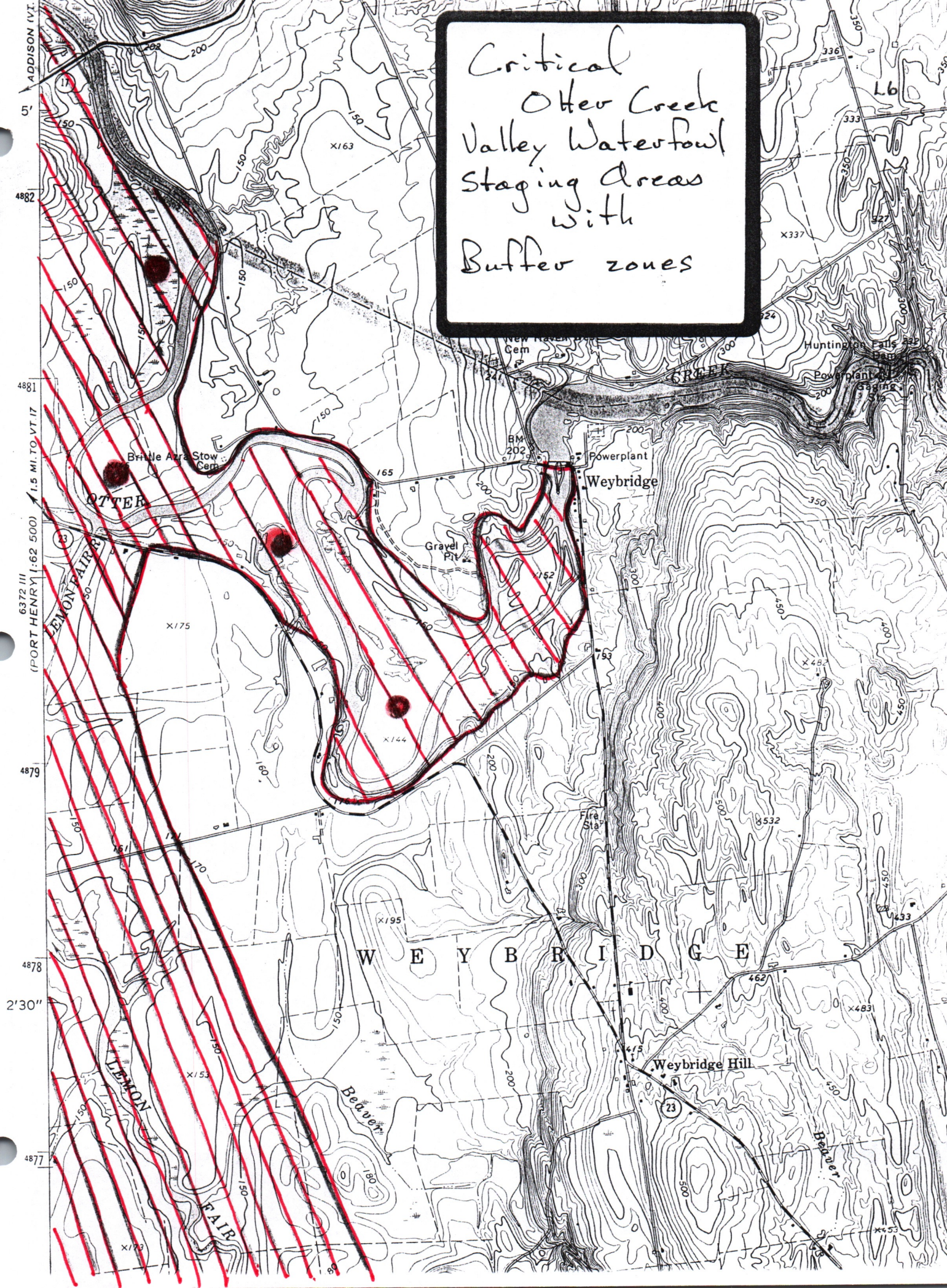
The wetland below Roger Wales home which once was much larger and wetter but has been drained. This spot still contains a large remnant of its natural vegetation and would definitely be a good reclamation project. It serves as a migrational stopover area in times of flooding. It would serve a much greater diversity of wildlife if it were reclaimed.

The small pond/wetland in the area of the landslide along the western bank of the creek southeast of Wes Smiths house. This is a small yet diverse pond holding marsh vegetation, fish, and a tremendously healthy population of Painted Turtles.

REPORTED BY: Jim Andrews

DATE: August 1990

Critical
Otter Creek
Valley Waterfowl
Staging Areas
with
Buffer zones



AREAS OF BIOLOGICAL SIGNIFICANCE
WEYBRIDGE, VT.

SITE NAME:

Cedar Swamp and Red Maple Swamp

SITE CODE:

B9 B7, B8

LOCATION:

These two separate wooded swamps are west of the dairy and northwest of Bittersweet Falls in the Beaver Brook valley. The White Cedar Swamp is on the southeastern corner of the smaller parcel of woods, south of the main branch of Beaver Brook but draining into it. The Red Maple Swamp lies northeast of the main branch of the brook and extends northward to another branch of the brook, forming a roughly triangular piece.

LATITUDE/LONGITUDE:

N44 02' 00" W73 13' 45"

SIGNIFICANCE:

The White Cedar Swamp is the only example of this community I found in Weybridge. Where these communities do exist, they are rapidly being exploited for fenceposts. As a result many of them throughout the valley have been reduced in size or entirely removed. This one probably was larger in the past. It is only a few acres now. These communities frequently contain other unusual plant species, but I did not locate any here, other than Black Ash.

The Red Maple Swamp is a larger piece (around forty acres). It has been largely drained but still has a few interesting species (Waterthrush, Cardinal flower, Bur Oak, Button Bush) and is an important piece of habitat for Deer and Woodcock.

Both these pieces are part of a travel corridor along Beaver Brook and its branches, between the Lemon Fair lowlands and the higher and drier woods along the ledges.

GENERAL DESCRIPTION:

The White Cedar Swamp is the southeastern corner of an approximately five-acre piece of otherwise hardwood swamp. Along the seep leading into it are a variety of wetland plants. In the open fields around it were many Savannah Sparrows.

The larger Red Maple swamp to the north continues in smaller broken pieces up both branches of Beaver Brook. The central core is around forty acres. It is a swamp that has been deprived of much of its water through ditching. The channel

still contains small pickerel and at least one species of small chub or dace.

Both woods are traversed by much used wildlife trails.

Other species present include:

Plants:

Trees; White Cedar, Red Maple, Black Ash, Black Birch, American Hornbeam, Swamp White Oak, Hemlock, White Pine, Willow, American Elm, Green Ash, and Bur Oak

Understory; Spotted Jewelweed, False Wood Nettle, Burdock, Virginia Creeper, Hog Peanut, Reed Canary Grass, Grape, Swamp Dogwood, Poison Ivy, Sensitive Fern, Blue Flag, Cardinal Flower, Pickerelweed, Water Parsnip, Royal Fern, Button Bush, Arrowwood, Black Currant(?), Sedges, Jack in the Pulpit, Baneberry, Spinulose Wood Fern, Dandelion, Raspberry, Prickly Ash, Burreed, Witherod, Swamp Milkweed, Arrow Leaved Tearthumb, Hog Peanut and Vervain

In and along the small seep leading into the Cedar Swamp; Boneset, Cattail, Northern Arrowhead, Joe Pieweed, Hairy Willow Herb, Gray Birch and Quaking Aspen

Animals:

Deer, Raccoon, Ruffed Grouse, Cedar Waxwings, Eastern Goldfinches, Chickadees, Blue Jay, Crow, Song Sparrow, Savannah Sparrow, White Breasted Nuthatch, Red Eyed Vireo, Woodcock, Great Crested Flycatcher, Black and White Warbler, Phoebe, Waterthrush (probably Northern), Hairy Woodpecker, Green Frogs, Dace (unidentified), Pickerel (species), Damselflies (green with black wings), Mosquitos

AREA:

approximately forty five acres for the two main pieces

COMMENTS/RECOMMENDATIONS:

Whenever possible small wooded fragments like these should be preserved as part of the mosaic of cropland, small satellite woodlands and larger woodlands that together make up our wildlife habitat and form an interconnected web of food, cover and breeding grounds. These specific pieces contain some unusual species and are part of a much used travel corridor. When individual pieces are isolated their wildlife diversity drops and the overall system becomes less resilient.

The low areas along Beaver Brook up through the Red Maple Swamp flood during periods of high water, and during those times are good feeding and resting areas for waterfowl. Before they were so well ditched, they probably held water long enough for ducks to breed in them as well. This may be an area where a wetland recovery program would work, if the landowners had any interest.

REPORTED BY: Jim Andrews

DATE: August 1990

6372 III
(PORT HENRY 1:62 500) 1.5 MI. TO VT 17

White Cedar and Red Maple Swamps

m3

4879

4878

30"

4877

4876

4875



AREAS OF BIOLOGICAL SIGNIFICANCE
WEYBRIDGE, VT.

SITE NAME:

Snake Mt. D3, S2

SITE CODE: —

LOCATION:

The eastern slope of Snake Mt. from the Western boundary of town to the dirt road at its foot.

LATITUDE/LONGITUDE: from N44 01'30' to N44 04'45' and W73 17'00 to W73 15'30"

SIGNIFICANCE:

This area is the largest contiguous woodland in Weybridge. As a result of that it holds a variety of animal species that would not be found elsewhere in any numbers, such as: Black Throated Blue Warbler, Black Throated Green Warbler, Scarlet Tanager, Hermit Thrush, Wood Thrush, Ovenbird, Veery, Yellow Rumped Warbler, Black and White Warbler, Wood Peewee, Winter Wren, Bobcat, and Gray Fox. Of these species only Gray fox is unusual in other rural parts of the state. The birds could be found in large forested parcels elsewhere in the state, but this is the best remaining habitat for them in Weybridge as well as the central Champlain valley.

This area is also shown on the states significant habitat map because it is the largest and most significant winter habitat for deer in this part of the Champlain valley. Only one other smaller area has been located in Weybridge. Many of the deer seen in the fields and along the rivers in the spring, summer, and fall, rely on this area in the winter for food and shelter. Evergreen cover, primarily in the form of Hemlock is available in this area. It provides both winter food and cover for deer. Many other types of winter food are also found here.

The small brooks in this area hold populations of Northern Two Lined Salamander a species that needs clean cool brooks.

This area contains the only bog community in Weybridge which is of state significance. Many unusual plants usually associated with peatlands are found there as well as one rare species.

The existence of a rare species of dry upland wildflower has recently been verified in the oak hickory woods along our southern boundary.

This area is a part of a large forested area totaling two to three times this size including parts of Addison and Bridport. It is the largest and most significant piece of forestland in this part of the Champlain Valley.

GENERAL DESCRIPTION:

This area contains a variety of different habitats. The southern end is a dry rocky Oak, Maple, hardwood forest with some Shagbark Hickory, Ash and Beech. Included within are pockets of pure Oak, Hickory, with an open grassy understory. These sections included small numbers of Chestnut Oak, a fairly unusual species in Vt.. As you move north along the side of the ridge, the habitat changes to a wetter Beech, Maple, Hemlock, forest that is not nearly as rocky and is more typical of much of the Green Mts. Mixed into this region are areas of open beaver dams, pure stands of Hemlock, and more recently logged areas with a very dense understory (good for some species such as Black Throated Blue Warbler, Cottontail Rabbit, and Ruffed grouse). Also mixed in are scattered Red Pine which are also unusual.

In a saddle below the ridge on the east side are a couple small areas that have trapped and held water for centuries. One is the bog area with Sphagnum moss, Pitcher plants(unusual), Black Spruce, Tamarack, Sheep Laurel, Ostrich Fern, Royal Fern, Smooth Winterberry and Highbush blueberry, other species reported in the bog are Pale Laurel, Leatherleaf, and Bog Rosemary(unusual). Most of these species cannot be found anywhere else in Weybridge and are ordinarily found only in boggy areas.

Another very small shrubby swamp is dominated by Buttonbush and Royal Fern. Above these areas are two beaver dam areas connected by a dark narrow ravine. The upper dam area is surrounded by an attractive stand of mature Hemlock and a few Red Pine.

On the northern extreme of the Weybridge portion of Snake Mt. are some open dry Oak Hickory woods.

Other species present include:

Plants:

False Solomons Seal, Hop Hornbeam, Trillium, Bloodroot, Wild Ginger, Christmas Fern, Wood fern, White Birch, Witch Hazel, Maidenhair Fern, Pointed Leaved Tick Trefoil, Herb Robert, Striped Maple, Rattlesnake Fern, Round Lobed Hepatica, Purple Flowering Raspberry, White Pine, Poke Milkweed(unusual in Vt.), Common Blue Eyed Grass, and Sedges

In the area of the Beaver Dam were: Common Elder, Staghorn Sumac, Swamp Milkweed, Broad Leaved Cattail and Jack in the Pulpit

On the edges were: Tartarian Honeysuckle, Apple, Red Cedar, Pasture Juniper and Poison Ivy

Animals:

Red Backed salamander, Red Eyed Vireo, Woodchuck, Cottontail Rabbit, Gypsy Moth, White Breasted Nuthatch, Turkey, Red tailed Hawk, Downey Woodpecker, Chipmunk, Red Squirrel, Gray Squirrel, Blue Jay, Black Capped Chickadee, Eastern Wood Peewee, Land Snail, Rose Breasted Grosbeak, and Mourning Cloak Butterfly,

In the area of the Beaver dam and more recently logged areas: Red Eft, Beaver, Ruffed Grouse, Chestnut Sided Warbler, Flicker, Great Crested Flycather, Raccoon, Green Frog, Wood Frog and Spring Peeper

In the edge areas: Cardinal, Song Sparrow, Garter Snake, White Throated Sparrow, Kingbird, Cedar Waxwing, Yellow Billed Cuckoo and Mockingbird

AREA:

approximately 1,300 acres, however it is part of a much larger forested area

COMMENTS/RECOMMENDATIONS:

Much of this area is already under state ownership and management. However fairly large parcels of private land are also contained within it. Selective logging and most forms of recreation present no threat to the wildlife of this area. However, clearing, development, or isolation of this area by allowing development to surround it, would all adversely effect wildlife, not only within the confines of this area, but throughout the surrounding valleys, and to some extent the birdlife of a larger region, due to its importance as a resting and feeding area during migration.

I would suggest not allowing development or clearing above the elevation of 100 meters as shown on the U.S.G.S. topographic maps and managing development below that level so as to provide access to and from this area through a variety of undeveloped corridors. Perhaps plans could make use of travel corridors already in use along hedgerows and valleys which already afford some protection.

A report was prepared on the flora of Snake Mt. for the Vt. Dept. of Fish and Wildlife in 1987 by Everett Marshall of the Vt. Natural Heritage program. The purpose of the report was in part to assess the effects of recreational use on the rare flora. Most of the surveying took place on land which was not in Weybridge, although the bog area and certain ridgetop and trailside areas were. The report concludes that recreational vehicle use was creating excessive erosion

along the trails but was not threatening the rare plants. In the town of Weybridge were one rare plant species in the bog, in addition to the many unusual plants normally associated with peatlands and an upland flower found in the dry Oak Hickory woods near the Addison-Bridport-Weybridge border. We have similar habitat in Weybridge near the northern end of Snake Mt. that may hold this plant as well. There is an historical record of another rare plant in this area, however it has not been verified in recent years.

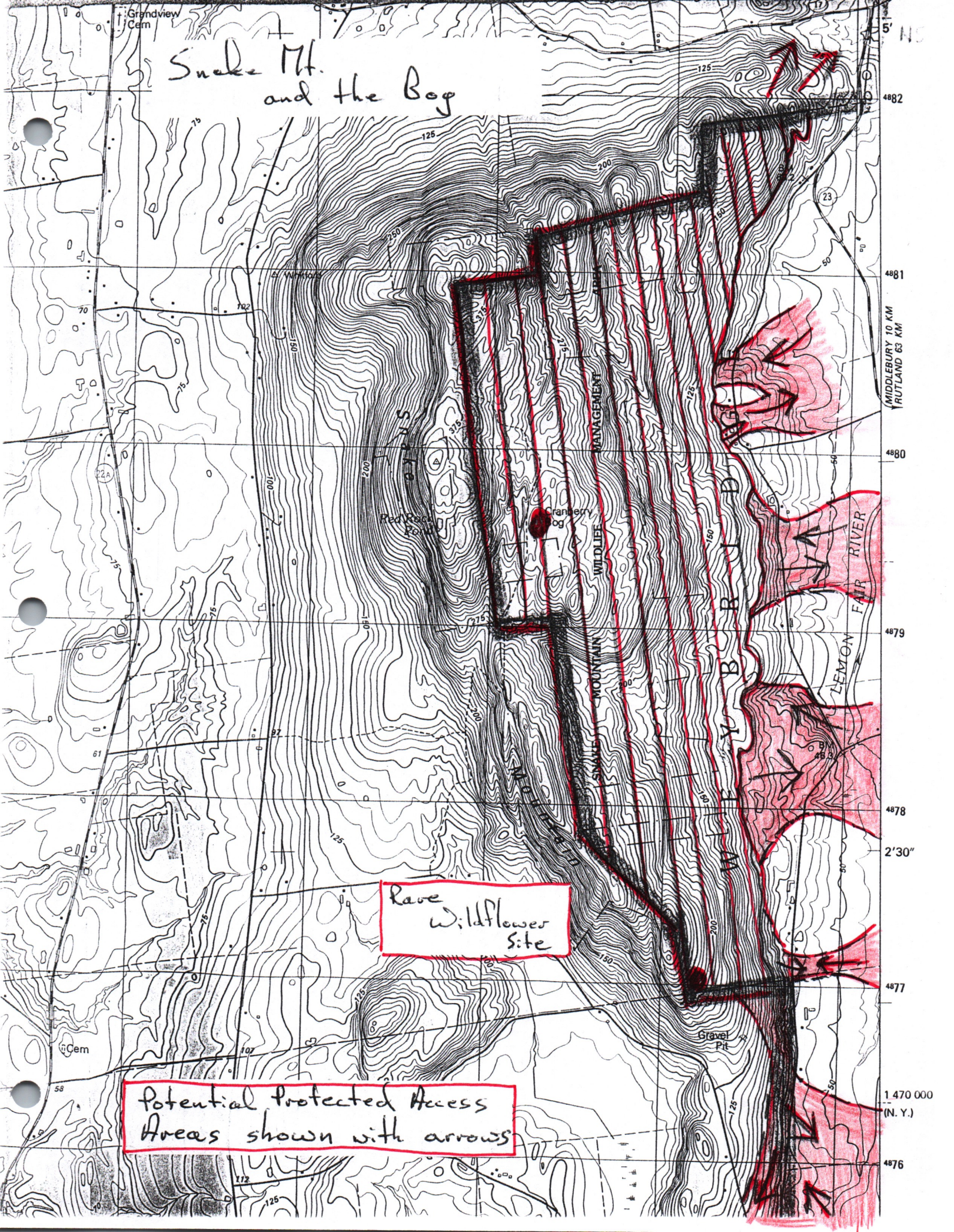
Local residents reported to me that a great deal of erosion occurred as a result of the mid August rains we had this year, in and around the areas that are being logged. Clearly if ORV's cause erosion, operators of bulldozers and other logging equipment need to be particularly cautious. Because of the high recreational usage of this area, combined with shallow soils and steep inclines, perhaps logging should be limited to the winter months, and kept away from trail areas. I would also hope that it would be directed away from the areas that hold yarding deer and rare plants and conducted in a manner which is consistent with wildlife management goals.

Winter recreation should be kept well away from deer yarding areas.

REPORTED BY: Jim Andrews

DATE: July 1990

Snake Mt. and the Bog



Rave
Wildflower
Site

Potential Protected Access
Areas shown with arrows

5' NC
4882
4881
4880
4879
4878
2'30"
4877
1 470 000
(N. Y.)
4876

MIDDLEBURY 10 KM
RAUTLAND 63 KM

AREAS OF BIOLOGICAL SIGNIFICANCE
WEYBRIDGE, VT.

SITE NAME:

Wales Woods

SITE CODE: B5

LOCATION:

This woods is almost entirely surrounded by cropland and pasture. It lies north of Prunier Road, east of the Lemon Fair, and southwest of route 23. It includes the Weybridge municipal woods.

LATITUDE/LONGITUDE:

N44 03'00 to N44 03'45 W73 14'00 to W73 14'45

SIGNIFICANCE:

This woods is one of the five largest blocks of contiguous woods in Weybridge and as such contains a variety of wildlife that would not be found in smaller parcels, such as Scarlet Tanager, Ovenbird and Wood Thrush. It also offers protective cover for our shy mammals such as Deer, Red Fox, and Rabbits.

Most of this area is an excellent and mature example of a wet Hemlock woods. At least three different species of clubmoss and six different species of fern can be found there. It is unique in being the only nonflooded woodland we have that is almost entirely level. Most of our woods were left because they contained steep ledges that couldn't be tilled. Apparently this piece avoided the axe because of its very wet soils.

I was impressed with the diversity of hardwoods mixed in and around the Hemlocks. Three species of oak including one very unusual species which is only known from our part of the state (Bur Oak) can be found here. Bur Oak is a tree of moist lowlands best known in Vt., from Addison County. Some large healthy specimens were located in these woods. Other hardwoods included Shagbark Hickory, Red and Sugar Maple, Hop and American Hornbeam, Black Cherry, Yellow Birch and Beech.

There were a number of heavily used deer trails traversing these woods and I suspect that this could be a yarding area, although it has not been identified as such yet. It should be checked this winter. It is however an important piece of the wildlife corridor that connects the Otter Creek

floodplain with the Lemon Fair floodplain and Snake Mt. It is important deer habitat for at least three seasons.

GENERAL DESCRIPTION:

The core of the woods is a wet mature Hemlock community with frequent small standing pools of trapped water. Along the margins the Hemlock give way to hardwoods. A small muddy brook drains to the east into Otter Creek with a small corridor of woods along it allowing protected wildlife travel. The Municipal woods make up a small section of the more southerly part and hold planted Red and White Pine. A narrow section along the southern extreme is recent second growth. The eastern edge has been heavily logged and hence has a dense understory of Blackberries and other sun loving shrubs.

Species identified during these visits include:

Plants:

Trees; Hemlock, Red and White Pine, Yellow Birch, Red, White and Bur Oak, Red and Sugar Maple, Large Toothed and Quaking Aspen, Shagbark Hickory, American Beech, American and Hop Hornbeam and Basswood

Understory plants; Wild Sarsaparilla, Trillium, Violets, Indian Cucumber Root, Sphagnum(?) Moss, Dogwood, Hepatica, Foxglove Beardtongue, Running Pine (Lycopodium complanatum var. flabellium), Shining Club Moss (lucidulum but eight ranked not six), and Tree Clubmoss (obscuram), Whorled Wood Aster, Bracken Fern, Interrupted Fern, New York Fern, Maidenhair Fern, Christmas Fern, Spinulose Wood Fern, Clintonia, and a species of parasitic plant that may have been associated with oaks

Fungi; Hemlock Varnish Shelf, Yellow Tuning Fork(?), and Amanita muscaria

Animals:

Scarlet Tanager, Eastern Wood Peewee, Great Horned Owl, Black Billed Cuckoo, Ruffed Grouse, Great Crested Flycatcher, Downey Woodpecker, Wood Thrush, Tufted Titmouse, Blue Jay, Ovenbird, Chickadee, Yellowthroat, Crow, Red Backed Salamander, Wood Frog, American Toad, Deer, Red Fox and Cottontail Rabbits

AREA:

approximately 180 acres

COMMENTS/RECOMMENDATIONS:

I would recommend maintaining this woods as it is a significant piece of wildlife habitat and an important corridor. Selective cutting could continue. Hopefully some of the mature Hemlock areas could be left alone as well as a selection of large denning and nesting trees.

This woods should be checked in winter to see if deer are wintering there.

Due to the wet acidic conditions it should be checked in the late spring for Orchids.

The fields on the west side along the Lemon Fair are often a stopping place for Snow and Canada Geese.

REPORTED BY: Jim Andrews

DATE: August 1990

Wales Woods

04

6372 III (PORT HENRY 1:62 500) 1.5 MI. TO VT. 17

4879

4878

4877

4876

4875

Brittle Azra Stow Cem
X145

OTTER

LEMON FAIR R

X175

Gravel Pit
X152

X144

W E Y B R I D G E

LEMON FAIR R

X153

Beaver

Weybridge Hill

23

FAIR R

X173

X206

Brook

Beaver

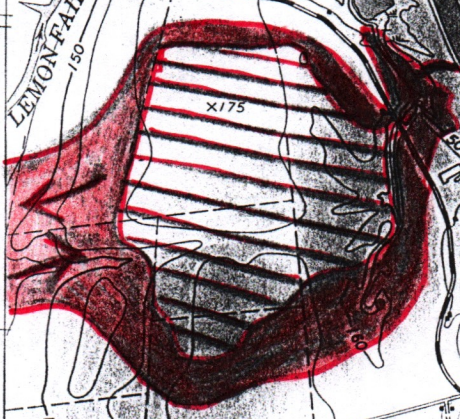
RIVER

BR 150

358

Beaver

350



AREAS OF BIOLOGICAL SIGNIFICANCE
WEYBRIDGE, VT.

SITE NAME:

Weybridge Bat Caves

SITE CODE:

B16

LOCATION:

The exits are just north of Weybridge Garage, and the entrances over the ridge to the northwest

LATITUDE/LONGITUDE:

N44 01' 40" W73 11'00"

SIGNIFICANCE:

This is the only bat hibernacula that I am aware of in Weybridge. Bats from a wide area of Vt. travel to caves that have the right winter temperature and humidity for them to survive the winter. The total numbers of bats that use this cave are unknown. However on past winter trips I have taken to these caves, I saw small numbers tucked away in crevices in the larger passageways. Total numbers might be much higher in that bats can reach deeper areas with entrances that were too small for me to pass through.

GENERAL DESCRIPTION:

These caves are formed by a little brook that passes right through the small ridge from northwest to south east. There are at least two entrances large enough for human passage and probably more large enough for animals. The larger one forms the main channel, and a second smaller one is partially hidden. The rock, as I remember it, was shale. The exit, near the Morgan Horse Farm road, is much larger, with a higher ceiling and perhaps thirty feet across. The water flowing through the cave empties into the marsh with the rare sedge. A private residence now overlooks the exit.

AREA:

approximately one quarter acre

COMMENTS/RECOMMENDATIONS:

I did not have time to visit this site during the summer of '90. This report is written from memory of past visits. There may be other significant flora or fauna in the area.

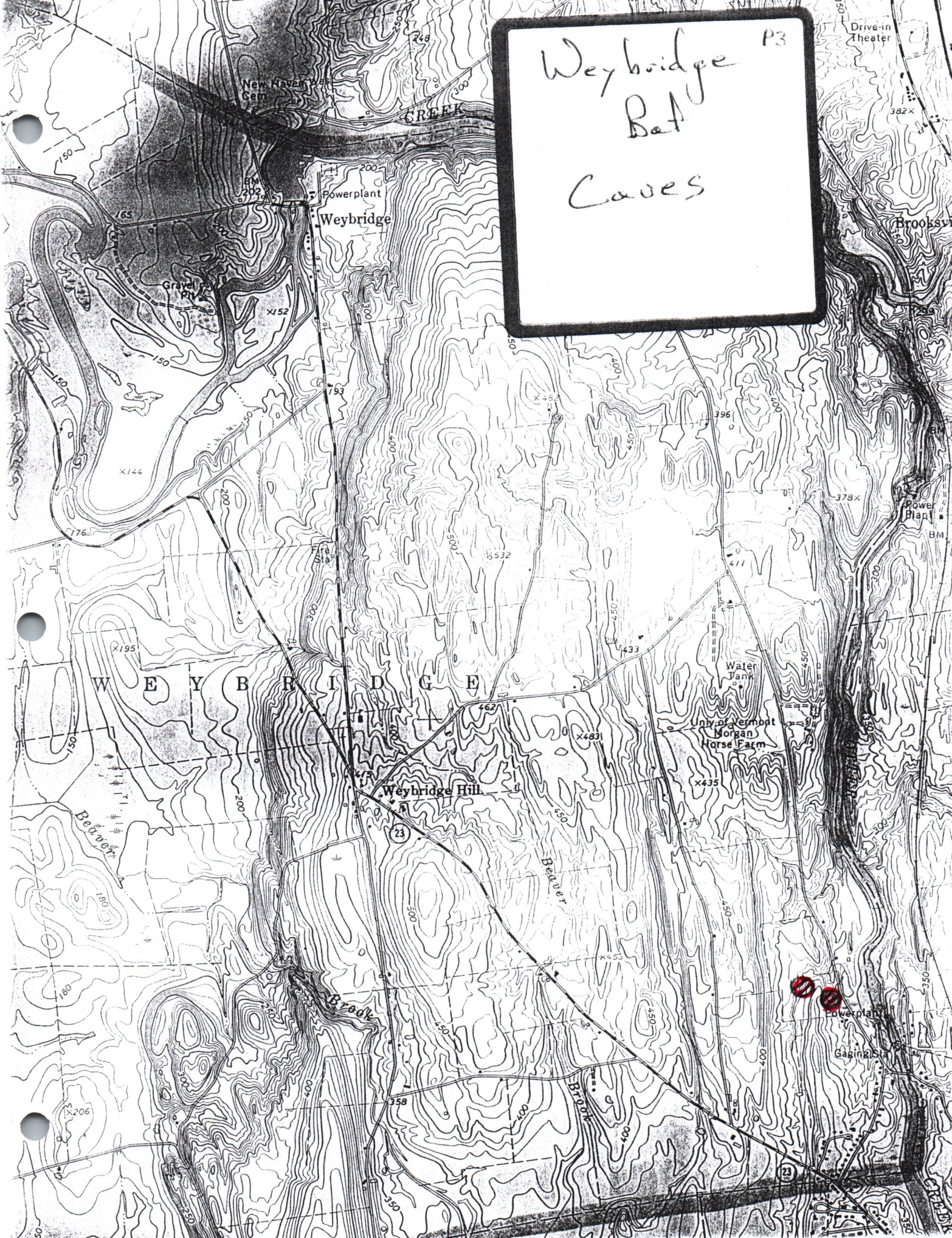
Bat hibernacula are particularly sensitive to disturbance during the period of hibernation. They leave no margin for error in their fat reserves. Consequently if they are disturbed they use up their stored energy and may not survive the winter. Activities that change the temperature and humidity of the cave can be lethal to the bats.

At least one species of bat, the Indiana bat is an endangered species. I don't know if they use this cave, but they are found in at least one other Vt. cave. These should be checked in the winter.

REPORTED BY: Jim Andrews

DATE: Sept. 1990

Weybridge
Bat
Caves P3



Q1

AREAS OF BIOLOGICAL SIGNIFICANCE
WEYBRIDGE, VT.

SITE NAME:

Wonacott Floodplain

SITE CODE: B71

LOCATION:

The wooded floodplain along the eastern bank of Otter Creek west of the Wonacott residence, including the peninsula and extending south to the open fields.

LATITUDE/LONGITUDE:

N44 03'45 W73 13'45

SIGNIFICANCE:

This area is on the significant habitat map of Weybridge supplied by the Vt. Natural Heritage program. It is considered significant because of the presence of a state threatened species of plant known as Green Dragon which had been found there. I located around thirty of these plants, all but one, together in the same location. This is not merely an unusual or rare plant but at this time its existence is considered threatened in Vt.

GENERAL DESCRIPTION:

The floodplain in this area is a wet mostly wooded peninsula that traps floodwater in a variety of woodland pools, small marshy setbacks, and even a small peaty area. The small wet marshy depression where I located most of these plants was adjacent to, and just west of a cleared powerline right of way. The depression was south of the base of the peninsula inland from the riverbank. The plants were growing around the margins of the depression. Another plant was located farther south along the river on the field edge of the wooded streambank.

The one large marshy setback on the eastern side of the peninsula included Pickerelweed, Common Arrowhead, Sessile Fruited Arrowhead, Spikerush(species), a large four foot rush, Sweet Flag, Dogbane(species), Purple Loosestrife, and Water Parsnip

The wet woods contained Box Elder, Wood Nettle, Stinging Nettle, Willow, Joe Pieweed, Wild Cucumber, Hog Peanut, Silver Maple(one close to twenty feet in circumference, D.B.H. four to five feet), Wild Bean, Sensitive Fern, Button Bush, and Ash.

The peat area was along a small marshy drainage leading into the floodplain from along the base of the hill to the southeast. Marsh Fern, Turtlehead, Elder, and Currant (species), were located there, as well as many of the species already listed.

In drier more upland areas were;
Staghorn Sumac, Black Birch, Sugar Maple, Honeysuckle, Virginia Creeper, Black Cherry, White Pine, Shagbark Hickory, Burdock, Nodding Smartweed and a few Hackberry.

Animal species identified on this visit included:
Deer, Muskrat, Leopard Frog, "Red Bodied" Dragonflies, Gypsy Moths, Belted Kingfisher, Robin, Cardinal and Jumping Mouse(species).

AREA:

approximately 1/4 acre of the wet depression that held most of the plants, and an approximate total of forty five acres of wet woodland and marsh

COMMENTS/RECOMMENDATIONS:

I am not sure exactly where the original siting of this plant was in this area. It may have been along the riverbank which is its usual habitat.

This plant is quite unique in form, texture and color. Once seen it is fairly easy to recognize.

The power company should be asked not to use herbicides on this section of right of way but rather to hand cut it due to the proximity of these plants.

This whole area being particularly low in elevation (less than 150 ft.) should not be developed. In general along this section of Otter Creek I would suggest no more development below the old access road to the gravel pits, with a fifty foot forested or natural buffer zone between the river and pasture or croplands. This would protect not only the riverbank and floodplain sites but the migratory staging areas as well. Setting the development limit at the old access road provides a buffer zone above the staging areas. It also would act as one segment of a riverside wildlife corridor.

At the very least, I would suggest limiting any logging or pasturage in the immediate area of the plants and limiting any additional clearing of the already existing buffer zones or floodplain forests.

REPORTED BY: Jim Andrews

DATE: August 1990

Wanacotts Flood Plain



AREAS OF BIOLOGICAL SIGNIFICANCE
WEYBRIDGE, VT.

SITE NAME:

Wymans Hackberry floodplain

SITE CODE: B18

LOCATION:

This is a small island in the Otter creek floodplain just south of the C.V.P.S. bridge to Wymans island. It is separated only at times of high water from the eastern shore. It is approximately .7 miles south of the twin bridges.

LATITUDE/LONGITUDE: N44 03'20" / W73 13'20"

SIGNIFICANCE:

Hackberry is an unusual tree in Vt. Scattered trees can be found in the Champlain valley along shorelines, talus slopes and occasionally on higher ground. Stands in which it is one of the dominant trees are very unusual in Vt. A separate stand downstream is presently listed as a stand of statewide significance and has been protected.

This island is also significant as an example of a relatively undisturbed floodplain forest, even without the Hackberry.

GENERAL DESCRIPTION:

This is a small natural island separated from the the shore only at times of high water. It is a fairly typical example of a floodplain forest except for the the Hackberry present. Overall this stand is younger than the protected site mentioned above with a few older individuals up to three ft. in diameter. The stand is quite pure and healthy with Hackberry dominating. It should be an easy piece to protect do to its relative inaccessability.

Other species present include:

Plants: Silver Maple, Box Elder, Butternut, Basswood, Nannyberry, Ostrich fern, and Stinging nettle, with Dogbane, Canary grass, and Horsetail along the waters edge.

Animals: Warbling Vireo, Northern Oriole, Bank Swallow

AREA:

approximately two acres

COMMENTS/RECOMMENDATIONS:

In many places along the Otter creek in this section a strip of mature forest approximately twenty feet in width has been left bordering the croplands. Some beautiful specimens of old trees can be seen of up to four ft. in diameter. A continuous buffer of fifty ft. is recommended by Vt. Fish and Wildlife and Vt. Water resources for a variety of reasons. See the information from them included elsewhere in this document. Protection of this site along with others within the floodplain could serve many purposes including maintaining water quality, habitat for waterfowl, deer, songbirds, and furbearers, and acting as part of a protected travel corridor for wildlife.

I would recommend protecting this island from logging or development. Limited recreational uses such as hunting, fishing, birding, etc... should not harm its value. Due to its location within a floodplain, and small size, development is not as likely to be a threat, however logging could be.

One local landowner was unsure about ownership of this small island. This should be looked into. The landowner might voluntarily manage this island for the protection of this stand if they were aware of its significance.

REPORTED BY: Jim Andrews

DATE: July '90

Weyman's Hackberry
Floodplain

ADDITION VI.
5'
4882
4881
4879
4878
2'30"
4877

6372 III
(PORT HENRY 1:62 500)
1.5 MI. TO VT. 17



OTTER

LEMON FAIR R

W E Y B R I D G E

LEMON FAIR

Beaver

Beaver

AREAS OF BIOLOGICAL SIGNIFICANCE
WEYBRIDGE, VT.

SITE NAME:

Wymans Sycamore floodplain (with notes on the surrounding area)

SITE CODE: B19

LOCATION:

Just downstream of the twin bridges, on the northwest corner of the largest island, and, the smaller islands just northwest of it.

LATITUDE/LONGITUDE:

N44 03'45 W73 13'00

SIGNIFICANCE:

This stand of Sycamore is relatively small but very unusual for Weybridge and the state. When found, Sycamore is usually in the floodplain of larger rivers, which is the case here. At present it is the largest and purest stand I know of in Addison county. We are at the northern extreme of its range.

Smaller numbers of Hackberry, another unusual floodplain tree, are also in the area.

Surrounding Areas

In this area from the dam downstream to the end of the fast water, I have seen mink as well as a variety of duck species in the spring, fall, and winter. Due to its faster moving water, it stays free of ice longer than the slower deeper waters downstream. The shallow margins and branches of the river like this one, are good feeding and resting areas.

Here, like other areas along Otter Creek, the faster more oxygenated waters below falls hold species of fish which are not found in other areas of the river. Fish such as Brown Trout and sometimes Rainbow Trout live below these dams as long as a certain minimum amount of water is continually allowed to flow over the dam. The pools below the falls can act as oxygen sanctuaries for all fish during hot and/or dry periods.

The remoteness of these islands make them ideal nesting places for large birds. I suspected that I might find the Blue Herons nesting on the islands due to their behavior, however I did not locate any nests.

GENERAL DESCRIPTION:

The stand is on one section of the lower upstream edge of this large level floodplain island, which is largely in crops. The island is accessible by a farm bridge from the east. A ten to twenty foot forested margin exists around the island in most areas. This margin contains a nice variety of hardwoods including Ash, Box Elder, Basswood, American Elm (mostly small or dead), Northern Red Oak, Hackberry and Sycamore. Both of the latter are quite unusual. Some large and beautiful specimens exist. The more concentrated stand described here exists because it is at a lower level than the rest of the island and hence is frequently flooded, so it is not suitable for crops. Across the small branch of the river from this stand, on the two low floodplain island strips are stands of predominantly Red Maple with many Sycamore mixed in.

Other species identified in this area include;

Plants;

Nettles, Ostrich Fern, Elder, White Snakeroot, Cardinal Flower, Jerusalem Artichoke, Cottonwood and Beach Clotbur

Animals;

Yellow Warbler, Catbird, Warbling Vireo, House Wren, Blue Heron, Osprey, Kingfisher and Deer

AREA:

approximately two acres

COMMENTS/RECOMMENDATIONS:

I can foresee no immediate threat to this area other than logging or clearing for a view of the river from the proposed development to the northwest or other streamside landowners. However I do think the owners should be made aware of these unusual trees on their land. They might voluntarily manage for them.

If the town planning commission worked to establish or at least maintain streamside buffer zones and corridors, this area, the Hackberry sites downstream, and the associated wildlife, such as the Bank Swallow colonies downstream, the deer along the rivers edge, and the furbearers such as Mink, Beaver, Muskrat and the occasional Otter, to name only a few species, would benefit greatly. Another benefit of wooded corridors is that they shade the stream keeping it cooler and higher in oxygen with less algal growth which benefits the fish. For the many other advantages see the included bulletin on the subject from the Vt. Dept. of Fish and Wildlife.

I have seen Osprey in this area a number of times. Perhaps a nesting platform placed out here, could convince them to nest on the island.

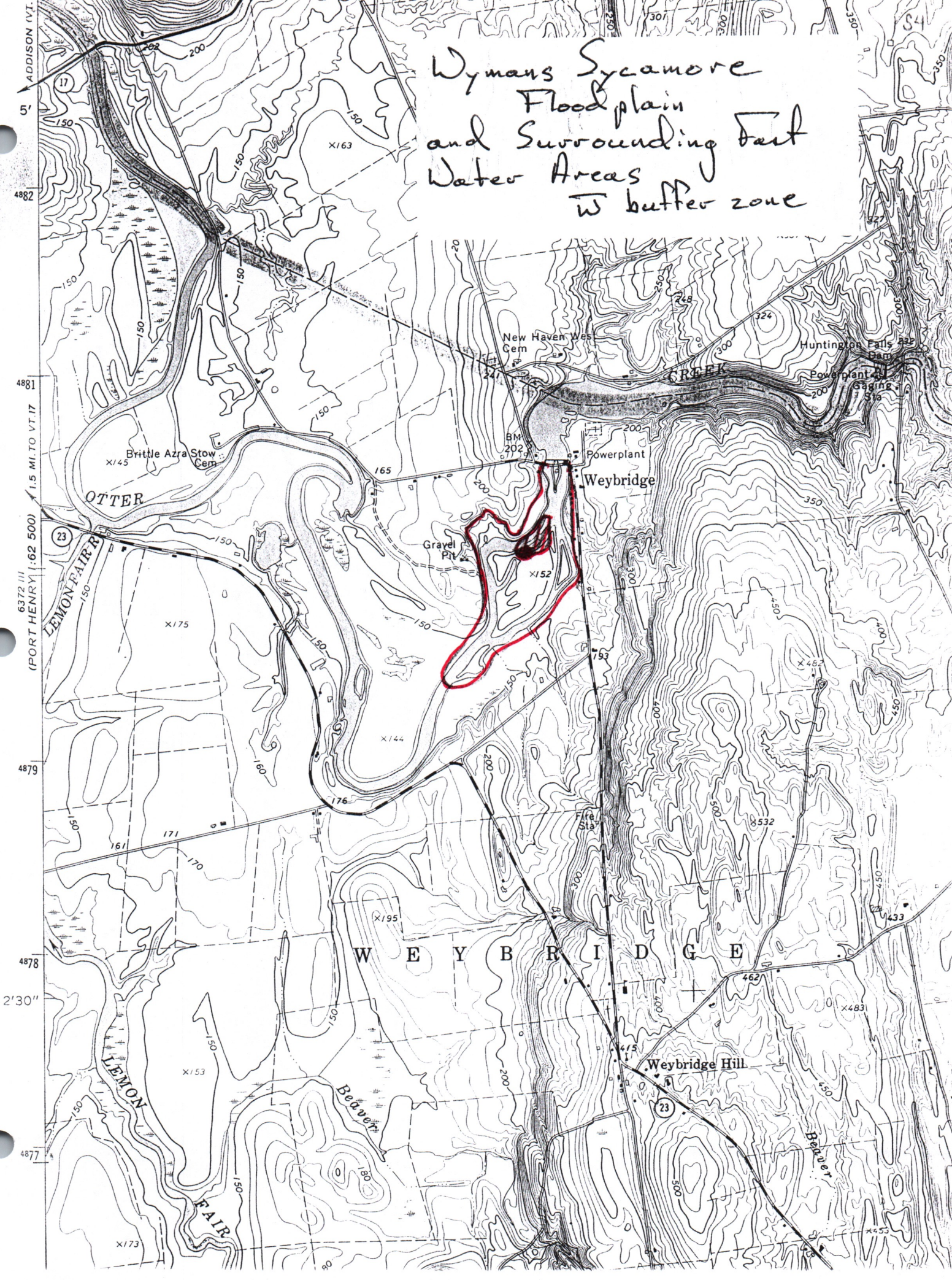
The Sycamore were quite easy to spot due unfortunately to heavy defoliation by the Gypsy Moth Caterpillar. It is however an easy tree to identify even for the novice due to the very unusual gray and green patches on its bark and its Maple like leaves.

A few Sycamore can be found on the small island in the middle of the dam.

REPORTED BY: Jim Andrews

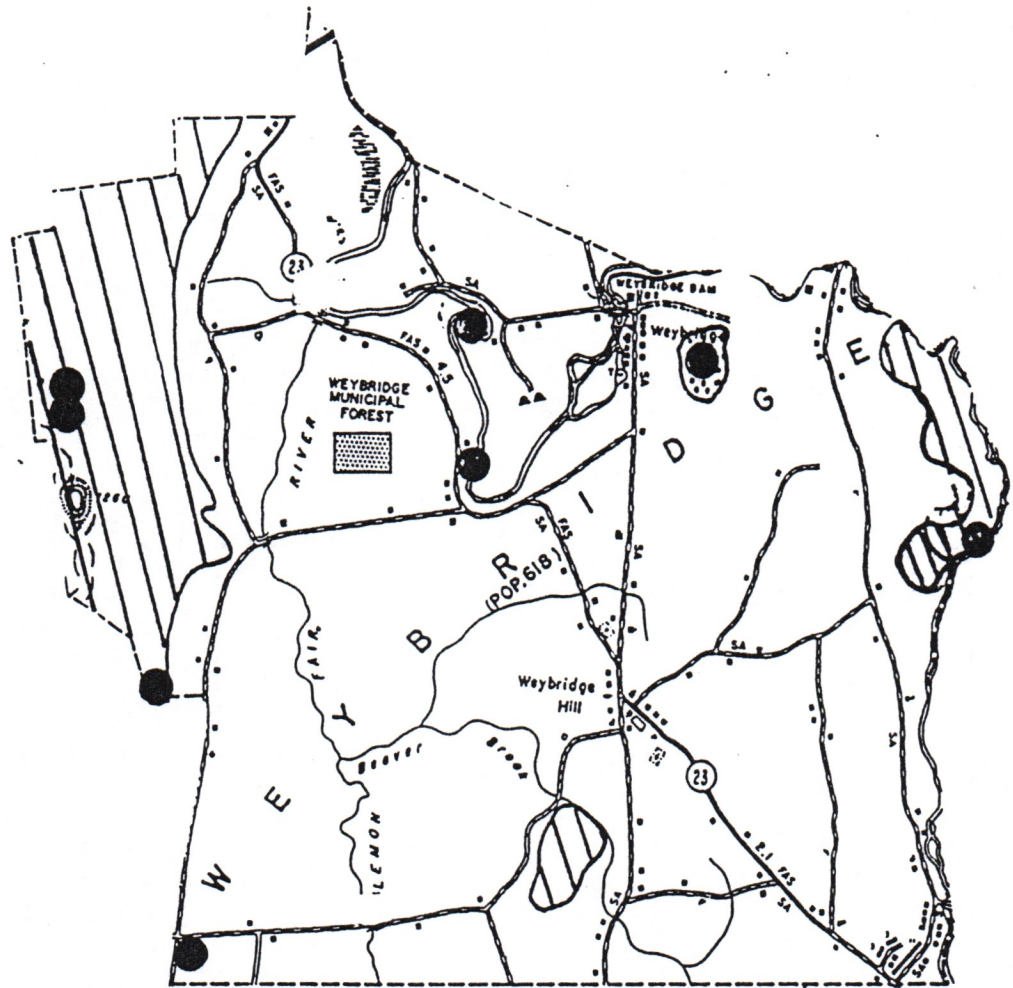
DATE: August 1990

Wymans Sycamore
Floodplain
and Surrounding Fast
Water Areas
w buffer zone




ADDITIONAL REFERENCE MATERIAL AND CORRESPONDENCE IS INCLUDED
IN AN ORIGINAL COPY OF THIS REPORT, ON FILE AT THE WEYBRIDGE
TOWN CLERK'S OFFICE.


LBG 8/95



1990 SIGNIFICANT HABITAT MAP

1" = 1 mile

 Winter deer range

 Rare plants, animals, or significant natural community or state natural/fragile area

VT Dept. of Fish & Wildlife