Dear Members of the Dummerston Selectboard:

Much of Dummerston's natural resources remain in a healthy condition. This is a testament to the good work that has been done by previous town administrations and by the "nature consciousness" of many of the residents. It is also a result of luck that could easily change at some point in the future as the town, like all the rest of the north-east comes under increasing levels of human stress.

As you know, for the past three years the Conservation Commission has been working on a Biodiversity Project to identify, inventory, and map Dummerston's important and sensitive natural resources, such as vernal pools, rare species, and important wildlife habitats and develop a town conservation plan. This information and plan is crucial for effective resource protection and is also important for education, and the focusing of conservation efforts. As we have delved into this study, we have come to realize that this will need to be a long-term project, and that it needs to be on-going as the town's natural environment changes over time. We are making an effort to compile the data to make it easily accessible to all and easily expanded and updated. The web site,

www.dummerstonconservation.com, is part of that effort. As we have moved forward, we have discovered several areas of concern that we feel may need immediate attention We are considering possible actions to recommend to you.

1. Protection of vernal pools

Preliminary field investigations have shown the town is home to a number of vernal pools (perhaps as many as 50) that support sensitive amphibian species. Some pools provide habitat for relatively rare salamanders including blue-spotted and Jefferson's. Both of these species are regionally threatened by habitat destruction. Unfortunately, so far as we are aware there are no town regulations that protect such ephemeral wetlands from destruction through development. Given that these ponds are dry for much of the year, it is easy to imagine situations in which they could be irreparably harmed with no knowledge of their existence. These are vulnerable habitats and need our protection. The Select Board and the Planning Commission need to be aware of this problem and to work with the Conservation Commission in developing planning instruments that will ensure their continued existence and integrity.

2. Proliferation of invasive plant species

Over the last few years it has become obvious to us that invasive plant species that are rapidly overrunning various tracts of public and private land, and modifying wildlife habitat and the landscape. These species include bittersweet, certain species of honeysuckle, Japanese barberry, yellow flag iris, purple loosestrife, glossy buckthorn and Japanese knotweed. Strategies for addressing this serious issue might include:

Mapping the distribution of the most serious "hotspots" Landowner education on identification and removal. Working with the highway department, road crew and contractors to identify invasives along the roadsides that can easily be removed as part of annual cutting. Hiring low cost workers from diversion programs to remove invasives from town and conservation lands. Sponsoring a town-wide volunteer invasives species removal effort. Consulting with and hiring experts to remove some of the species that are most difficult to control using chemicals approved by the state.

3. Stream degradation

Although the extent of this problem in unknown, it is clear that stream degradation from road run-off, non-point source pollution and particular culverts situations are making streams inaccessible or unlivable to fish and other species. As recently as the 1970's, trout were known to spawn in brooks now cut off by culverts. A commission member reports that five-foot culvert drops have completely destroyed fish populations in certain brooks and streams. The commission has been advised that training is available on the proper way to install culverts to support fish populations. Conservation Commission members are planning to walk the banks of all the streams in town this year to identify problem areas.

Crosby Brook has recently been identified by the state as being of immediate concern. When it enters the CT River in Brattleboro it is essentially dead and state river stewards are looking at possible sources of pollution in both Dummerston and Brattleboro. Strategies will need to be developed to address this issue.

In addition, possible problem areas that contribute to erosion and pollution along the banks of the Connecticut River need to be assessed and addressed.

4. Management and protection of forested lands and wildlife corridors

At present, natural resource issues are not formally addressed under the town's planning process, although they may be addressed informally. Given this situation, the protection of sensitive resources within the town may be jeopardized. For

instance, it has been noted that fewer ruffed grouse have been seen in Dummerston in recent years. The Conservation Commission wants to work with other town boards including the Select Board to insure that Dummerston continues to be a home for deer, bear, moose, beaver, bobcat and other species. Map studies, field trips and informational presentations on the needs and habits of particular species have raised concern regarding the encroachment of human activities on critical wildlife corridors and feeding grounds. In several areas, encroaching development has almost cut-off existing wildlife corridors.

The Conservation Commission plans to work closely with the Planning Commission to assure that they have all the information they need to make key decisions and develop a town plan that protects wildlife. As a first step in that initiative, working with the Planning Commission, we have nominated a Conservation Commission member, Patti Smith to also serve on the Planning Commission so information flows easily between the two groups. In addition to jointly working on the town plan it is important that specific development proposals that come before the planning commission be reviewed also by the conservation commission so that the potential for unintended ecological injury is minimized.

The commission feels that current work by the trails committee supports the development and protection of wildlife corridors.

As you can see, environmental issues that need to be addressed go far beyond the capabilities of the Conservation Commission. The Conservation Commission would like to schedule a joint meeting with the Select Board where these issues can be discussed and planning for their remediation can begin.

I am looking forward to hearing from you.

Mary Ellen Copeland