

The Warren Conservation Commission has identified lands within Town of Warren's Primary and Secondary Conservation areas plus key wildlife corridor areas. What follows are ideas and resources to help protect the amazing natural heritage of your land.

You own a part of an amazing ecosystem. Healthy ecosystems require diverse and robust populations of native species and provide essential services to people including protecting air and water quality, the control of pests and diseases, and are so often the places we go to renew our physical and spiritual health.

Conservation biologists have documented a world-wide decline of plants and animals that threaten how ecosystems function. It has been estimated that since 1970, the world has lost about half of all its animals. Every native species is important to its ecosystem, yet many are in trouble. The current extinction rate has been estimated to be 1000 times greater than normal. This is not just a problem of distant rain forests and coral reefs; it is happening everywhere, and it is happening here, and it is happening because of human activity. This does not have to be. With thoughtful consideration and a little effort we can help protect and enrich the opportunities for wildlife. In doing so we will enrich the world our children will inherit and that, perhaps more than anything we can imagine, will enrich our own lives.

Wildlife is not just song birds and bears. It includes the whole range of life from the smallest soil microorganisms to far ranging bobcats. Every native species has both a place and a purpose, and all are connected. Helping any one helps all.

The Town of Warren is committed to protecting its natural heritage. To do so, conservation biologists believe we need to conserve 50% of the land base. This does not mean we have to leave untouched half of our land; rather, we need a conservation strategy for half. Some will be wilderness, some natural recreation areas, and some the thoughtful management of private land. Currently about 25% of the land in Warren is conserved. Most of this is in the Green Mountain National Forest. Although large by a homeowner's measure, this forest is not large enough to sustain healthy populations of far ranging wildlife. Wildlife corridors provide varied habit across the landscape and help connect large blocks of undeveloped land with one another, providing sufficient scale to maintain healthy ecosystems. These corridors are critical to the long term sustainability of our natural heritage.

## HOW TO HELP

1. Have a smaller lawn. Lawns are wildlife deserts. Think of mowed areas more as throw rugs connected with mowed pathways rather than wall-to-wall carpeting.
2. Remove invasive species. Invasive species displace native species and often cannot be well utilized by beneficial insects and birds. Japanese Knotweed and Buckthorn are common examples here in Warren.
3. Plant native species. Native species of plants are the backbone of ecosystems. See listing of plants in the resources section.

4. Abundance and diversity helps. Rather than single trees here and there, clusters or groves of trees form entangled root masses which resist wind blow over and their dense canopies offer better nesting sites for birds.

5. Plant perennial flowers. They greatly help pollinator insects and are a nectar source for part of the life cycle of beneficial parasitic wasps.

6. The size of your house and lawn matter. The larger the area of your property left to nature the more successful will be its conservation.

7. Create natural structures. Leave piles of brush and leaves to the side rather than burning them. They will become home to many forms of small creatures which in turn will be food for larger ones. Many song birds rely on insects that live in or near such places. Stone walls, piles of rocks, and rotting logs also help. Birds both rest and hunt from the tops of broken trees and fence posts. If you are really energetic, build a bee or beetle hotel (see references).

8. Mulch around trees. More than 90% of moths and butterflies spend part of their lives under the cover of mulch at the base of trees. Leaves, twigs, bark, stones, and logs make good mulch.

9. Avoid Pesticides and Fertilizers. Synthetic insecticides and herbicides are toxic and kill non-target species. Synthetic fertilizers are unnecessary for a good lawn in Vermont and often end up in streams, ponds and lakes where they cause real damage. Fertilize flower beds and garden areas with compost. Munching these areas will further promote the biology of the soil and conserve moisture.

10. Outdoor Lighting. Landscape lighting can be beautiful to the Human eye but disorienting to birds, insects and bats. The best solution is to install motion detectors that will provide light when you are in the area and turn off when you are not, and provide the same level of security.

11. Pets. This is complicated. People love their pets, and freely roaming pets can be profoundly disruptive to wildlife. A study done in an English suburb showed that domestic cats were locally responsible for 25% of songbird mortality. Free ranging dogs greatly expand the impact zone of housing on wildlife movement. The best thing for wildlife is to keep pets close, ideally with a fence (physical or invisible) for dogs. When walking in the woods dogs should be kept on a leash or under strict voice command. Wildlife that has to flee from roaming dogs has to expend precious energy, threatening their survival.

12. New development. New houses should be sited to minimize the impact on especially sensitive areas, including all waterways and wetlands and wildlife pathways. Vermont has some regulations regarding set-backs to conservation areas, but they are limited. Current efforts are being made at the Town level to update the zoning to better reflect these concerns. Also, we feel there is more education we can do as a community.

13. Composting. A new Vermont law prohibits food scraps from landfills. Composting is not hard, but it does take effort and knowledge. Food scraps, which are relatively high in nitrogen, should be layered or mixed with low nitrogen material such as leaves, hay, straw, or sawdust. A

compost pile is also a great place to turn garden weeds, grass clippings and leaves into high quality soil that will promote beneficial soil organisms. Compost can attract “vectors” such as rodents, raccoons , fishers, skunks, hawks, crows, jays, and bears, so it is important to have an effective compost system. Commercial composting services are available for those who do not wish to compost on their own. What’s important is to keep food scraps out of the waste stream that is going to the landfill. Properly managed and applied compost can greatly enrich the diversity and density of beneficial soil life.

The Warren Conservation Commission and the Town of Warren have made a commitment to protect the Town’s natural heritage for the benefit of all its citizens, for all its species, and for future generations. If you would like to schedule a consultation with one of us to discuss how to enhance your property to benefit wildlife and increase beauty and diversity, one of us would be happy to meet with you.

Sincerely,

The Warren Conservation Commission

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