

Introduction

Sprawl is rapidly becoming a major issue for the citizens of New Jersey. Sprawl is unwise development, without concern for quality of life or the survival of wildlife. Sprawl is inefficient development; it's development without a plan.

Sprawl is development, but development is not necessarily sprawl. Development includes the creation of schools, homes, businesses and the infrastructure that we need to conduct healthy and productive lives. With population densities equaling or exceeding those of most European countries, can we develop without sprawl? That is the critical question facing the citizens of New Jersey.

If we have any chance of success we need a good idea of what lands should be saved. As stated in the New Jersey State Plan, we not only need to know town centers, or where development should take place, we also need to know land centers where development should not take place. And perhaps even more importantly, where should we blend the two? Where can we develop and not hurt the land or its wildlife?

These are tough questions that we must answer now as the landscape of New Jersey changes dramatically. Stalling or ignoring these questions will keep us on our current path and its ultimate outcome – the complete suburbanization of our state.

Wildlife can help us answer these questions. Our wildlife is the pulse of the land's ecological health. Degrade or destroy land and its wildlife either will die, leave, or be replaced with common species. For example, the presence of a barred owl in a patch of woods indicates that it is one of the state's few large and ecologically functional woodlands. Chop up that wood-land into home lots, even forested woodlots, even 10-acre woodlots, and barred owls will disappear and with them a whole community of wildlife, from bobcats to wood thrushes.

Ironically, despite all the sprawl of the last 30 years, many beautiful patches of woods, fields and wetlands remain scattered throughout the State. These are our land centers. These are the places we want to protect if we want to enjoy a "Garden State" and pass it on to our children. Identifying these ecological gems is one of the most important goals of the Endangered and Nongame Species Program's Landscape Project within the Department of Environmental Protection's Division of Fish and Wildlife.

The Landscape Project uses wildlife to map all of our state's important habitat patches. The principle is simple. New Jersey's critical habitats were delineated by first collapsing the NJ Department of Environmental Protection (DEP) aerial photography-based land-use and land-cover information into habitat categories. Next, contiguous patches of habitats were determined from boundaries between different habitat categories and major roads. These habitat patches were then intersected with documented occurrences of nongame wildlife species, which were – and continue to be – derived from a variety of sources, including DEP surveys and staff reports, private consultant reports and reports from the general public. Habitat patches were then ranked based on the conservation status of the wildlife that occurred in the patches: (5) for federally endangered or threatened species, (4) for state endangered, (3) for state threatened and (2) for wildlife of special conservation concern. A rank of (1) was assigned to patches that have not adequately been surveyed to determine the presence or absence of rare wildlife. Detailed methodologies regarding species occurrence areas and mapping methods for Version 2.1 and Version 3.0 Highlands are provided in the respective Landscape Project Reports.

The combination of precision and practicality makes these maps unique. The Landscape Project protocols for outlining and ranking significant habitat patches were forged from rigorous scientific scrutiny and years of painstaking field inventory. All of the work has undergone repeated reviews by professional and academic peers. The Landscape maps are both accurate and defensible after years of collaboration with the Department of Environmental Protection's Bureau of Geographic Information and Analysis and its state-of-the-art Geographic Information System; the Rutgers University Center for Remote Sensing and Spatial Analysis and its satellite imagery classification and land cover change research techniques; and the Natural Heritage Program and its comprehensive biodiversity database.

The Landscape maps have value for a diversity of users. Maps that indicate relative importance to wildlife make it easier to decide which lands to protect, which to develop and where both can be accommodated. Now, for the first time, everyone can see where rare species do and do not exist. For developers these maps help identify potential conflicts on certain parcels; for citizens they identify important local habitats. The maps are already assisting land managers, land planners, environmental commissioners, land development consultants, environmental groups, land acquisition programs and many other lay and professional people whose decisions affect the land.

In 2002 DEP proposed and adopted rules made the "Landscape Maps of Habitat for Endangered, Threatened and Other Priority Wildlife" the basis for identifying which lands provide habitat for endangered and threatened (E&T) wildlife species and are afforded protection through the state's Coastal Zone Management (CAFRA) rules and Freshwater Wetlands Protection Act rules. Prior to the 2002 rules, habitats important to E&T species habitats were identified by simply buffering the immediate areas surrounding animal sightings.

This sightings-based system created two major problems. First, sightings often reveal nest sites, roost sites, and dens of rare wildlife. Unfortunately, there are unscrupulous people who would use this information to either collect or destroy endangered animals. However, an information

blackout also prevents well-intentioned people from avoiding development of critical habitats or disturbance of endangered and threatened animals.

Secondly, animals move. Some animals like the bobcat or bald eagle can move miles in a day. Protecting only an area near a particular sighting often does not protect the entire habitat complex needed by so many of the rarer species. Landscape Project maps help solve these problems. The maps display the habitat patches animals use, not exact sightings. This mapping more accurately represents the true needs of wildlife and can be freely distributed because they do not pinpoint an animal's exact location.


The new amendments to the Coastal Zone Management and Freshwater Wetlands Protection Act rules incorporating the Landscape Project maps bring with them the need for wide public access to the information. A number of useful products have been developed including a CD-ROM for use by both professional and lay users, web access to all the maps, a detailed booklet about the project, and a map book encompassing the entire state. The GIS datasets are available to the public for free, allowing a multitude of users to overlay critical habitat with any other GIS layer important to their project. This has allowed users to incorporate standardized critical habitat maps in their planning processes. Landscape Project mapping is also the primary source of endangered, threatened and rare wildlife data for private and public organizations and is currently used for land-use regulation, land acquisition through the NJ Department of Environmental Protection's Green Acres Program, state and private land management, private land trusts' management and acquisition, county and municipal planning and open space acquisition.

Recently updated, Version 2.1 and Version 3.0 of the Landscape Project mapping incorporate new occurrences of endangered and threatened species, new land-use/land-cover information and features a new species-based mapping methodology (Version 3.0) in the Highlands Region. The new versions represent over two years of hard work to improve the methods and data used to make these very complex maps as accurate as possible. This map book features Version 2.1 and Version 3.0 Highlands and represents the Department's commitment to be responsive to the needs of the species we must protect and the general public we serve. Armed with this information, communities and citizens can plan more effective development that protects wildlife habitat. Better planning means less conflict and more efficient development, which is the first line of defense against sprawl.

The Wildlife Action Plan

The New Jersey Wildlife Action Plan (WAP) was originally conceived as a document that would satisfy a requirement of the U.S. Fish and Wildlife Service's State Wildlife Grants program. New Jersey's WAP has evolved into something much more important. Broad support and collaboration among partner conservation agencies and stakeholder groups has helped the WAP become an action plan for the protection and management of our wildlife species of greatest conservation need. The Wildlife Action Plan embodies the collective judgment of the state's conservation professionals regarding which species are in greatest need of focused conservation and how that conservation should be accomplished. This New Jersey Wildlife Action Plan will act as a dynamic tool to protect habitat and priority species for all landowners both big and small, private and public. The strategy identifies tasks for nearly every agency and group that has some influence over land and wildlife policy. The WAP will lead to a more robust system of wildlife and habitat protection that is built on broad participation by a diverse partnership of private and public landowners and conservation organizations.

Landscape Project mapping is the cornerstone of the WAP and explicitly identifies critical habitat for wildlife of greatest conservation need. Using the Landscape Project as a framework, the WAP defines conservation priorities using three different scales including statewide, Landscape Regions and Conservation Zones within Landscape Regions. Strategy information and actions are linked to the Landscape Map so users can access the appropriate section of the WAP for a specific site or area. At the state level, the WAP prescribes goals and strategies that apply to all areas. At the Landscape level it proposes priorities, which apply throughout each distinct Landscape Region, while goals and conservation actions are prescribed at the Conservation Zone level.

The WAP Conservation Zone boundaries are symbolized by a red line () throughout the detailed map pages and are identified by numbers which correspond to Zone names on page four of this book.

More information about the Wildlife Action Plan and Landscape Project Mapping is available on the Division of Fish and Wildlife's website:

www.njfishandwildlife.com

Or by contacting:

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