



In These Woods

Cornell Cooperative Extension
Columbia and Greene Counties

Issue Four: 2023

Wildlife & Recreation

This issue of *In These Woods* explores wildlife and recreation, two of the most cited reasons people own, steward or visit woodlands. This introductory overview offers multiple perspectives and diverse opportunities for you to further enjoy and manage your woodlands in pursuit of these goals.

Keep in mind that the resources available on these two subjects are immense and go far beyond this program. For more information, please see the resource section at the end or contact our teams to help connect you with the information you need.

2023 Issues:

Issue 2 - Understanding Forest Ecology

Issue 3 - Woodland Enhancements

Issue 4 - Wildlife & Recreation

Issue 5 - Agroforestry

Issue 6 - Timber Management

Issue 7 - Invasive Species

Issue 8 - Protecting Your Forest Assets

Issue 9 - Conclusion

About Us

The mission of Cooperative Extension is to enable people to improve their lives and communities through partnerships that put experience and research knowledge to work. Extension staff and trained volunteers deliver education programs, conduct applied research, and encourage community collaborations. Our educators connect people with the information they need on topics such as commercial and consumer agriculture; nutrition and health; youth and families; finances; energy efficiency; economic and community development; and sustainable natural resources. Our ability to match university resources with community needs helps us play a vital role in the lives of individuals, families, businesses, and communities in our region.

You can learn more about the programs and services we provide on our website. You can also contact us directly to help overcome a challenge, share stories and gather tools to help you achieve your goals. Below is the contact information for our two offices. We look forward to hearing from you.

Acra (Greene County)

Agroforestry Resource Center
6055 Route 23
Acra, New York 12405
(518) 622-9820

Hudson (Columbia County)

Extension Education Center
479 Route 66
Hudson, New York 12534
(518) 828-3346

In These Woods Woodland Stewardship Series is a collaboration among Cornell Cooperative Extension of Columbia & Greene Counties, New York City DEP, USDA Forest Service, and the Watershed Agricultural Council's Forestry Program

CCE Columbia & Greene's Agroforestry Resource Center



Cornell Cooperative Extension's Agroforestry Resource Center (ARC) was established in 2003 to help sustain the vast, privately-held forest resources in the Hudson Valley, Catskill Mountains and surrounding region. It is home to the Agriculture and Natural Resources team who focus on regional education and outreach in all woodland and working landscape subject areas.

Agroforestry is defined as the combination of agriculture and forestry practices that create integrated, productive and sustainable land-use systems. These practices can include ginseng, mushrooms, maple and other high-value products.

Through a variety of programs and partnerships, CCE offers land stewards economically viable and ecologically sustainable practices to help preserve and manage woodlands. The ARC includes a diverse and talented group of natural resource educators, an interactive indoor space and a 142-acre model forest that supports an outdoor "laboratory" for demonstration, research and hands-on workshops.

To learn more about the Agroforestry Resource Center, visit:
[Agroforestry Resource Center](#)

Siuslaw Model Forest

Siuslaw (Sy-use-luh) Model Forest is our 142-acre living classroom. It's one of our greatest educational resources and sits right across the street from the Agroforestry Resource Center in Acra. Our Natural Resources team and its partners manage this diverse property for all to experience. It's home to innovative demonstration sites, habitat, trails, and real-world examples of woodland stewardship principles and best management practices.



Siuslaw as a Model

In 2007, Siuslaw was designated a NYC Department of Environmental Protection Model Forest. Siuslaw is one of four model forests in the region that all demonstrate the importance of sustainable land stewardship, forest health and water quality protection through education.

Today, Cornell Cooperative Extension hosts many public education programs in the forest and partners with researchers, ecological monitors, and other institutions and organizations like SUNY ESF and the Watershed Agricultural Council's Forestry Program to bring these resources to the community.

The Siuslaw Model Forest is open to the public during our regular business hours (8:30-4:00 Mon-Fri). There are miles of trails for non-motorized recreation and many interpretive signs that educate around best management practices and activities you can bring home to your woods.

Agroforestry

Check out our tree and understory crop demonstrations, along with the shiitake and oyster mushroom laying yard - great inspiration for your backyard or small commercial operation.

Timber Stand Improvement (TSI)

See the different stages of growth and practices employed to restore habitat or thin dense stands of trees to encourage healthy forest conditions.

Best Management Practices (BMP)

Walk the woods roads and learn about open topped culverts, broad based dips, water bars and other techniques for preventing erosion and protecting water.

Enhancements

There are bird nesting boxes, pollinator houses, American chestnut restoration planting, habitat thinnings and plenty of tree identification markers to keep you learning!

A Forester's View

Ron Frisbee

This letter topic is the fun stuff! The survey data shows that the majority of folks own their woodland because... "I love my woodland because it allows me to enjoy nature and wildlife. I own my woodland primarily for recreation, relaxation, and the natural beauty of the woods." Everyone will have their own take on how active their enjoyment is...from simply observing and noticing their surroundings to building ponds, vernal pools, trails, creating preferred species habitat....yup, manipulating, OK...enhancing. The idea that we can "build it and they will come", can be successful within the context of a species' habitat, range requirements and the physical features and climatic conditions of the property. The manipulation or enhancement of habitat by various wildlife specific organizations is well documented. Ducks Unlimited pond creation in the major flyways preceded current efforts to restore cold-water fisheries by Trout Unlimited. The addition of large woody debris to the Battenkill River in Vermont and New York is a great success story (add woody debris to create cover for young-of-the-year trout to escape mergansers = more trout!)

If you have a passion for a particular species of wildlife, there is likely an organization that can turn that focus into action plans on your woodlands. As managers or woodland influencers, we have decisions to make that require choices. Are we inclusive of all species and lean towards maximizing biodiversity or do we exclude most to promote the chosen few? An example may be the decision to convert an old, grown-up briar patch in former ag land to a wildlife food plot of corn. As many wildlife species will happily partake of the corn planting long before you have a chance to pick some, it would seem to be inclusive of all. Looking at the lost biodiversity from the old field is the cost. Given that the food plot will be abandoned at some point, (yes, but his/her equipment required remains in the barn!) the cycle of life and succession will resume and biodiversity will be enhanced over time through those processes. It is a challenge to maximize everything at the same time, so let's focus on what is fun for YOU.

What has been fun for me to experience is the joy that my clients get from their activities in their woods. From the couple who thrill at a trill to the bang another gets along with his buck, recreation is happening. Technology is chosen by many to enhance their experiences: from electronic bird calls sparking a real life challenge trailside to satellite-linked real time trail cameras accessed by cell phone 24/7, a good time is enjoyed by all.

Ease of access to the woods is perhaps the most valuable of investments. Whether trails are special purpose (hiking/biking/XC ski) or generally designed to reach all areas of the property such as skidding out firewood and timber or maintaining the boundary lines, ease of access allows you to enjoy your property more fully. I look forward to expanding the original skid trails on our woodlands to create interconnected loops rather than the branched system used to get the logs out. One client utilized a past Soil Conservation Service (now NRCS) cost share program for access trails to install a trail system that will see another timber harvest this summer after allowing access to the entire property for the past 25 years to bring out firewood; access their pond; get to the wild strawberry field; soak up the views; and watch their boys grow into men who also love these woods.

The siting of trails is not rocket science. I look for deer trails that may connect the points of interest my clients want to visit. Deer always take the easiest route. Points of interest have included water or rock features, huge trees, scenic overlooks, fern glades, agricultural relics, unexplained stone cairns, goldenrod meadows, and strawberry fields forever. Given that most of the hills have been logged, there will be an existing trail system that was used to get the logs out. Some of these trails were designed to ensure longevity and others have been poorly sited and contributed to the sediment loading in the watershed downstream.



When designing trails, always consider what will happen when our increasingly heavy rain events dump inches of water on your paths. Our over-used state hiking trail resources are often deeply rutted and washed out where rocks and roots reach out to stub your toe if you dare look up to enjoy the view. Interrupting the flow of water often, at least once with each 6 foot of elevation change, and trying to follow the contours across slope will ensure your safe travels even in retirement. I try to avoid straight up and down and prefer not to have to backtrack but loop back to where I started.

Another important quality of life feature favored and enjoyed by many folks is a pond or other water feature. All the wildlife will utilize a water feature to some degree, but the woods is full of amphibians that really appreciate a short travel distance to get in the water. After crossing several electric fences and avoiding cow pies, I can gain access to the swimming hole on our farm. I would appreciate a pool deck-side but it is hard to skip rocks and impossible for the grandboys to discover crayfish and all things yucky. Even a wheel rut in a wet part of a trail by a skidder can become an asset as it collects water and holds it over time for use by all numbers of frogs, toads,





salamanders, and insects. Besides providing aquatic habitat, many water features add aesthetic appeal to a property as well as practical attributes such as irrigation and fire protection. Also consider siting water features to act as sediment traps and storm surge buffers between where road culverts divert water into your woods and fields and the perennial streams. Some sites are well-suited for pond construction and others do not have soils with enough clays to hold water.

The NRCS Web Soil Survey is a great resource: <https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm> Create an Area of Interest and soil characteristics, forest productivity, suitability indexes will overwhelm your senses! Two stream improvements on our farm contribute to aquatic habitat and bank stabilization and provide calming sounds of babbling brook and fish jumping.



Who is in your woods?

“Signs, signs, everywhere there’s signs...” Posted signs probably put up by folks that hunt so they can feel they are hunting safely assuming no one else is in their line of fire. Or maybe by folks who don’t hunt and want to create a sanctuary for the deer they love to watch. Yes, we people leave signs everywhere.

The sign I speak of is the evidence some creature passed this way before you came along. Noticing and awareness and problem solving skills must be at the ready. Some field guides are helpful too! Train yourself to stalk, as if you’re practicing Tai Chi as you move through the woods. Feel the ground before putting weight on your foot. Trying it on a quiet day when the leaves are wet works best. Standing still and seeing the woods return to all it’s activities just disrupted allows you to observe both plant and animal communities not visible at higher speeds.

Can you figure out who made the sign in the following pictures?



The answer is Bear! Town of Jewett is where I remembered my Grandfather whistling while he worked as I decided to do that LOUDLY while I finished marking timber that day. The size of the overturned rock helped maintain the volume! What's for lunch bear? Under that rock may have been insects, red-backed salamanders (greatest biomass by weight per acre of any creature in our woods!) worms, roots. Lots of rocks to roust about for a lunch?

Tracking after a fresh snow is a fun activity. You get to read the history of what the animal did, perhaps on its way home. One specific tracking activity is bee-lining to find a bee tree! New technology such as trail cameras allow folks to see animals that pass by a particular point and record the time of the activity. The Catskill Forest Association has a trail camera program available to its membership and a wildlife biologist available for consultation. Identifying bird songs also helps you to understand which birds are using your woods. The greater the diversity of habitat and vertical structure, the greater the number of bird species present on that land. Having a diverse habitat assures you of having a diverse wildlife component and a richness of life in your woods. Diversity in our society also assures us of richness and blessings that folks in other parts of the world can only dream about and aspire to.

Managing Woodlands to Improve Wildlife Habitat

Peter Smallidge, NYS Extension Forester and Director, Arnot Teaching and Research Forest, Department of Natural Resources, Cornell University Cooperative Extension, Ithaca, NY 14853.

Manipulations of the trees can create new and varied habitats for wildlife.

Most landowners own their land for a variety of reasons, though at any point in time one objective might be of more interest than other objectives. For many woodland owners, they are interested in seeing more wildlife, whether as birds or game species, or just knowing they are providing habitat. Some owners prioritize creating habitat that they know will benefit wildlife, regardless of what they personally see. As a side note, motion-sensitive trail cameras have become reasonably priced and allow you to see more wildlife. The interest in wildlife for these owners may be one of many objectives including recreation, firewood or timber.

The objectives of wildlife, timber, firewood and recreation are common, and usually compatible on the same property. This article will address some general guidelines and strategies, but numerous resources exist to expand on the concepts presented here. There are several good publications that will help landowners who want to manage their woodlands for wildlife habitat. See the reference section at the end for a couple options.

Getting Started Managing Woodlands for Wildlife

The starting point for “what should I do?” is always “what do you want?”. Knowing your objectives provides targets, and also priorities for actions. Some portions of your land may be more suitable for some objectives than others, so emphasize management actions in areas where you will receive the greatest return on your investment of time and resources. If you don’t know your objectives, think about what you want, tangible and intangible, from your property. Your spouse should go through the same exercise, and perhaps your children who are interested in the property. If there are several people involved in the ownership, it might be helpful to sort objectives that are essential, and those that are of significant interest.



A trail camera, placed strategically at an intersection of varied cover, structure and captures a reality of the interaction of predator and prey. Here, the coyote was successful, but more often they consume small mammals and have almost no impact on deer. Image courtesy of Peter Smallidge



Some trees, such as the one pictured, die from natural causes. Dead standing trees are called snags. In other cases snags can be created through chemical or mechanical girdling. Create snags in safe areas, away from trails and buildings, but a few in the woods will provide countless food, cover and space for many species. Image courtesy of Peter Smallidge

Once you know what you want, you can begin the process of planning. The resources listed below as references offer considerable guidance on the planning process. It is also possible to contact a NYSDEC forester and ask for a (free) stewardship plan, where the plan will document the full variety of your objectives and management actions you can take. You will learn more in your interaction with the forester if you go through some of these steps first, so you understand what the forester is doing.

An essential part of planning, and a common shortcoming of the otherwise best laid woodland plans, is for the owner(s) to self-assess what they can bring to the effort. One way to assess your capacity is with T.I.M.E. This acronym represents Time, Interest, Money, and Energy. You will need some of each, but a shortfall in one category can often be offset from another. Be honest and realistic. Most landowners are most in need of time. Check with other woodland owners through groups such as the NY Forest Owners Association to see if your anticipation of the time required to do certain tasks is reasonable.

The planning process includes the following steps:

1. Map the property. You can do this with online tools such as Google Earth Pro, and include soils information through the USDA Web Soil Survey. USGS topographic maps are also of great value. Review the link below for a ForestConnect fact sheet on these topics.
2. Inventory your woods. This could be as simple as taking your map or image from step #1 and sketching areas of young versus older hardwoods, pine versus maple, scrub lands versus mature forest, springs, seeps, or whatever you have. Include trails, hedgerows, stone walls, streams, ponds, and the small woodland pools that only have water for brief periods of time. You could do a more detailed inventory; instructions are available online by searching for "landowner woodland inventory".
3. Once you have an inventory or at least a sketch of your woods, start to prioritize areas that you could manage to achieve multiple benefits. You will get ideas for what you might do by attending NY Forest Owner Association woods walks in your chapter or neighboring chapter. Cornell's Master Forest Owner volunteers can't provide technical guidance, but can share what they have seen on their own land and that of other owners. Request a free visit from a volunteer at www.CornellMFO.info
4. In addition to the inventory of your woodlands, you need to know about the particular wildlife species that interest you. Unless you want any wildlife species, you need to learn more about your favorite birds, amphibians, reptiles, and mammals. As previously mentioned the NYFOA magazine has a column each issue on "Wild Things in Your Woods" that covers the details of many species. This is a great place to start. The references below also include details about what individual species need. The key is to start with 3 to 10 favorite species that are likely on your property, and build your knowledge.

Trails – After a landowner has permanently marked the boundaries of their property, the second most important task is to ensure there are trails that provide access to all areas. While many owners are willing to bushwhack without a trail, we usually spend more time in areas where we can easily travel. Trails can be as simple as bits of yarn or flagging on trees that guide the attentive eye through the woods, or can be as grand as you choose. The trail should be of sufficient width for humans or vehicles that will travel it. Also, a trail for walking can be more curvilinear than a trail for pulling your ATV logging arch or for x-c skiing. Trails don't directly benefit wildlife, except that when you can see areas repeatedly you will start to imagine and visualize what you might do.



Downed woody material, also called slash, is one example of cover. A variety of small mammals and amphibians would benefit from the security this provides, and access to different types of foods. Owners who harvest firewood can remove less of each tree and easily create this type of cover. Image courtesy of M. Ashdown

Woodland Structure – Structure is what a woodland physically looks like. Structure refers to the heights of the dominant trees, the number of trees per acre, average diameter of trees, the variability in the diameter of the trees, the fullness of the crowns, and more. Consider how you would describe one area of your property from another...that's structure. The different types of structure often correspond to differences in the availability of food and cover, both essential to a diversity of wildlife. You can influence structure, and thus habitat diversity with simple or significant actions. These are described below as culling and "sunlighting."

Water – In most woodlands, the single activity that woodlot pool will result in the greatest variety of wildlife is creating access to water. Adding water to your landscape adds texture. If you have beaver in the area, you can wait and see if they decide to build some dams on your property. If you have a harvest of logs, you can likely ask the logger to expand some wet spots to encourage trapping water for periods of time. You can also design a build a pond, or repair a pond that exists but has become over-grown.



The pool shown here was created after logging and a skidder that drove through a short section of poorly drained soil. The skidder enhanced the pool with a berm of earth to hold more water a longer period of time. This 16" deep pool is almost always a certain location to find a variety of amphibians. Image courtesy of Peter Smallidge

Culling – In the normal course of the growth of a woods or forest, there are more trees than can be supported by the sunlight that is available. As the woods grow and the average tree diameter increases by one inch, approximately 20% of the trees must die. Tree death will happen regardless of our efforts, so the option is for the owner to decide which trees will die, or let natural processes decide. Pick trees that don't support your ownership objectives and safely fell or girdle those trees. Culling can include the more traditional practices of thinning or crop tree management, with retention of considerable amount of woody slash on the ground for wildlife cover. Culling could also include creating snags, which are standing dead trees, and are important as homes for a variety of wildlife species, particularly birds.

Sunlighting – The term “daylighting” is often used in regards to providing sunlight to forest roads so that they dry more quickly after rain and snow. I use the term “sunlighting” here to illustrate the value in making sure there is sunlight on the forest floor to stimulate the growth of herbaceous and woody plants that serve as food and cover for wildlife. Sunlight to the forest floor might be increased with a canopy opening at a cluster of culled trees, or might be something more expansive such as a one acre patch clear cut. Owners can personally open areas of a 0.25 to 3 acres as a personal project, if they have the tools and knowledge to work safely. Thus, sunlighting can occur as a continuum on your property from clusters of small gaps to larger openings. The more of the woody slash you leave behind, the greater the benefit for wildlife. It is also possible, if not advisable, to retain several live stems of nice trees in the clearing as perches and as future timber trees. Realistically, these openings will be used by deer which will preferentially browse, likely over-browse, the desired species and leave invasive shrubs in their wake. Be alert to these conditions and treat the problem as it develops. You might want to fence some areas to exclude deer. Unless you leave enough slash to significantly offend your aesthetic sensibilities, you likely will not exclude deer.

Planting – Many rural woodlands also have a few acres of open meadow or old pasture. These grasslands are important in and of themselves. In some cases, with an abundance of open acreage, you may want to establish some dedicated wildlife plantings on some portion of your open acreage. Pick native species that have specific benefits as food or cover for the wildlife species on your “most wanted” list. The three key aspects of a successful planting are to: (i) select a species suited to the soil, (ii) prepare the site so that competing vegetation is controlled, and (iii) protect the plant from damage by deer and rodents.



In many ways, woodlot management is synonymous with wildlife management. Manipulations of the trees create new and varied habitats. By planning for specific and desirable changes in the vegetation, owners can influence the success and abundance of wildlife species. Plan thoroughly and work safely.

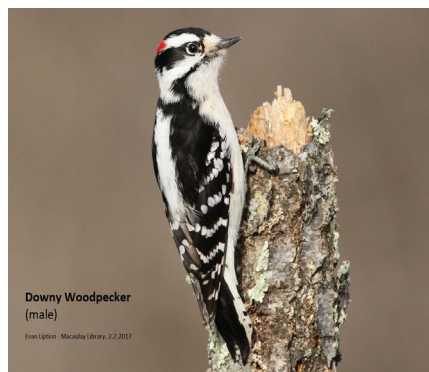
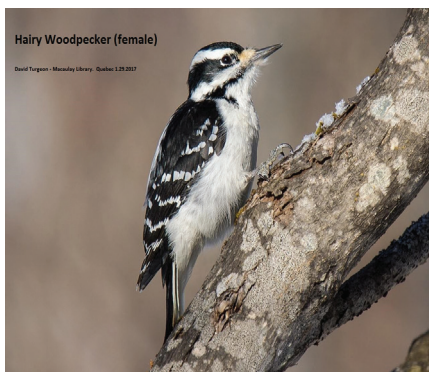
This article originally appeared on www.ForestConnect.com, a program project of Cornell University Cooperative Extension and the NYS Department of Natural Resources. Support for ForestConnect is provided by the Cornell University College of Agriculture and Life Sciences and USDA NIFA through McIntire-Stennis and the Renewable Resources Extension Act

Learn by Seeing More

Forest management strategies that can help birds and lead to more bird watching opportunities also lead to healthier woodlands. These include:

- Diversity of planted vegetation – when possible, maintain native trees and shrubs, especially those that produce seeds, nuts and fruits
- Removing non-native plants that may have a lower nutritional value than the native species
- Diversity of tree and shrubs – in terms of species, size and age
- Thinning to promote new growth and better health of existing trees while enhancing bird and wildlife habitat – minimize these actions during bird breeding season
- Create small openings with seedlings, saplings, shrubs and forbs to create nesting and foraging opportunities
- Create riparian buffers along the edges of water bodies
- Maintain large forest habitat patches
- Leave dead wood standing, leave other woody debris on the forest floor, create brush and branch piles – these actions can help birds by providing resting, nesting, shelter and feeding areas for birds and other wildlife species.

One of the most impactful things you can do is talk to your neighbors, friends and family about the importance of healthy forested lands for birds, wildlife and people. Spreading the word about the connection between forests and birds can lead to community members working together to create a more profound impact on bird conservation while maintaining healthy woodlands through sustainable forestry practices.



Introduction to Habitat Pressures

There are many factors that exert negative pressures on wildlife populations. Some are more local such as the conversion of woodlands to smaller acreages with incursions of roads, power line Right-of-Ways, and openings for homes that provide access to invasive plant and animal species which may disrupt native populations. Other challenges occur on a regional or even global scale that are harder to address on an individual property. These challenges are important to understand as they do have very local impacts - the best example being invasive pressure, changing climate factors, water quality and other.

The population dynamics of the deer herd is a complex example to cite, but basically there are too many. The lack of early successional habitat has forced the deer to rely heavily on what land remains in agricultural production during the growing season and then trying to ride out the winter on their fat reserves and whatever vegetation they can reach. The ecosystem is not in balance but they are fun to watch!

Here are some of the challenges we face and ways to counter that habitat impact:

Shrinking Parcel Size

In New York State the average woodlot acreage has dropped steadily from 24 acres in 1980 to less than 16 acres today. This trend is expected to continue, although today, in the eastern Catskills, it is 12 acres! As tracts of private forest land become smaller and more fragmented their ability to provide important ecological services, such as filtering water and providing suitable wildlife habitat decreases.

Minimal Land Management Planning

Management planning helps private landowners make a long term commitment to the land. Yet current estimates suggest that only 5% of private forest owners nationally have a written management plan.

Harvesting without Professional Advice

Without professional forest management advice PFO may engage in management practices that degrade the quality and productivity of their land for years to come. Only 22% of PFO have sought professional advice prior to timber harvesting on their land resulting in 8 out of 10 harvests being exploitive.

Declining Forest Health and Ecological Values

Unhealthy forests can lead to degraded water quality and wildlife habitat and limit the opportunities for recreation. Forests are threatened by invasive species, insects, diseases and wild fire threats. PFO also often lack the financial and technical know-how resources needed to treat their land and minimize these threats.

Pollinators

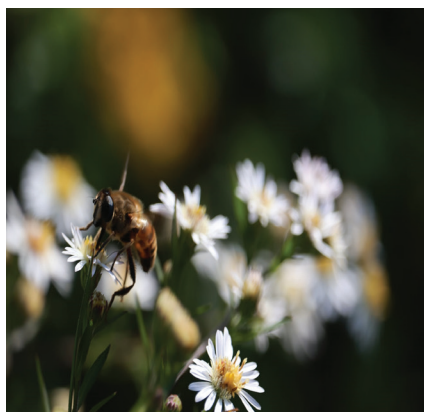
New York State is home to over 450 native bee species. Along with imported honeybees, these natives pollinate a lot of agricultural crops and flowering plants. We also have wasps, hornets, beetles, butterflies, birds and bats that pollinate too!

It's easy to think of the woods as being a separate landscape from our production fields and gardens. In reality, these two worlds are very connected. Pollinators need environmentally safe water, food, space and cover. These are often found or enhanced in your wooded field edges, tree lines and buffers.

For gardeners and producers, agroforestry practices are a great way to combine agriculture and forestry to create a more integrated and sustainable land-use system. The beauty of these practices is they can be incorporated at any scale. Most native pollinators have evolved alongside native trees, shrubs, and flowers. Encouraging this native species overlap in your gardens, buffers and yards is a good step toward building healthy habitat. Remember that there's beautiful biodiversity in what might look like chaos. Leave that lawn un-mowed, keep that brush pile piled and let the milkweeds and native species grow!

In 2016, the USDA National Agroforestry Center published their second edition of, "Working Trees for Pollinators". This brochure describes the role of pollinators and how common agroforestry practices support their needs and yours. A great example are wind breaks. These are tree lines within fields that reduce wind speeds and create field buffer habitat. Fun fact: honey bees can't fly when winds are over 25 mph, so wind breaks can help decrease those gusts.

[Click here to check out USDA Working Trees for Pollinators](#)



New York Nature Explorer

A Gateway to Biodiversity Information

New York Nature Explorer is an online tool for finding out about the animals, plants and habitats in your neighborhood or in your area of interest.

As a gateway to biodiversity information, New York Nature Explorer is intended for:

landowners and land managers;
citizens; municipal officials, planners, consultants;
project developers; researchers; students and;
anyone else interested in the natural world.

Nature Explorer can be used in two ways:

- Users may choose a county, town, or watershed, or they may specify their own location on a map. They will then receive a list of the animals, plants, and significant natural communities that have been found there, as documented in databases maintained by NYS DEC.
- Users may also choose a specific animal, plant, or natural community type, and then get a list of the counties, towns, or watersheds where it has been found.



NATURE EXPLORER

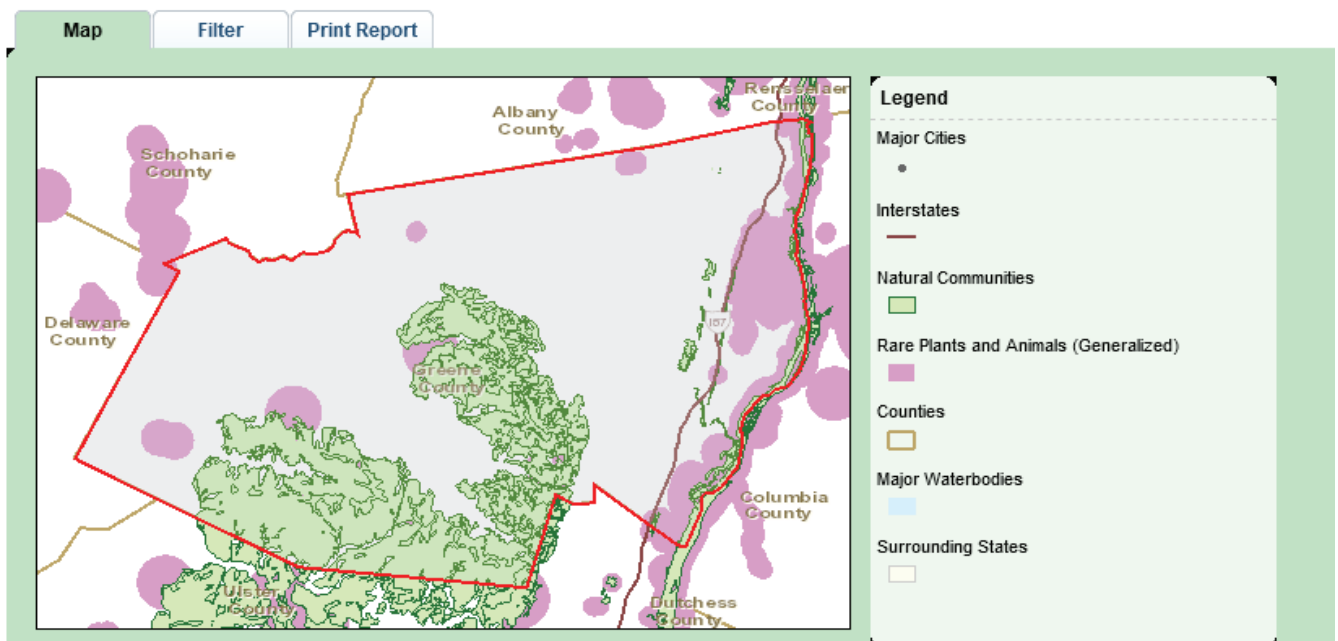
A Gateway to New York's Biodiversity



Nature Explorer currently contains information on birds, reptiles, amphibians, rare animals, rare plants, and significant natural communities.

The search results are not a definitive statement about the presence or absence of all plants and animals, including rare or state-listed species, or of all significant natural communities. The DEC and partners will continue to expand this information over time.

COUNTY SEARCH RESULTS



[Click here to check out this amazing tool to see what's in your woods!](#)

Recreation

Both publicly and privately owned woods can provide healthy recreation opportunities for landowners and visitors alike. Participating in outdoor recreation can have positive impacts on physical and mental health, and can also have economic benefits for your property.

There are plenty of options for outdoor recreation that can be enjoyed all year round. Some may be more applicable for your woods based on personal interest and property features. Steward your property to do what you love, or try something new that interests you! Some examples of possibilities are listed in the adjacent table.

With such great diversity in activities, outdoor recreation is typically categorized as either an active or passive recreation.

Here are a few examples of outdoor recreation activities:

- Walking/Jogging
- Hiking/backpacking
- Wildlife viewing/birding
- Nature photo, painting
- Cross country skiing
- Snowshoeing
- ATV and UTV use
- Horseback riding
- Mountain biking
- Picknicking
- Hunting & Fishing

Passive Recreation: A passive recreation area is an undeveloped space or environmentally sensitive area that requires minimal development. Preservation of wildlife and the environment is emphasized in passive recreation. Passive activities require little to no specialized development or management, and carry no adverse impacts on the land. Many of the most popular outdoor activities are considered passive; including hiking, wildlife viewing and photography.

Active Recreation: Active recreation is generally any recreational activity that requires significant infrastructure for the purposes of structured recreational activities. These activities require special development and management, which may restrict the general use of the land and tends to have a high impact. Examples of active recreation are ATV/UTV use, horseback riding, and mountain biking.

A common feature added for a vast array of recreational opportunities are trails. Trails make the woods safe and accessible for both passive and active recreation. Trails for passive recreation tend to be more low impact, while trails for active recreation like horseback riding, mountain biking, and ATV/UTV use may need more direct development and management. Many properties, both private and public, may already have established trail systems. These can be enhanced with activities like mapping and marking trails, which can help both landowners and recreational users understand where they are and how to get around.

Fostering recreational opportunities in your woods may have an economic benefit too! Recreation leases are a common practice which allows another party to lease recreational rights from a landowner. These binding legal contracts can make it possible for a landowner to have a quantifiable annual income. More detail on recreational leases and other options will be provided in a future letter.

The Power of Nature:

How spending time in forests and nature can keep us healthy!

By Pammi Price

Whenever I walk past the tree where the eagle often perches, I slow down to see if he's there. When he is, I stop underneath the tree and thank that eagle for being a source of joy and a dependable community connection.

This connection with nature is a constant reminder of how nature can keep us healthy!



Time Spent in Nature Provides Many Health Benefits

When we are connected to nature it can bring us joy and can even help us deal with things like anxiety, fear, and disruption of our normal routine.

In fact, a recent study undertaken by Cornell University and the University of Maryland found that just 10 minutes a day in nature can have a positive impact on your health.

According to the New York State Department of Environmental Conservation, some of the health benefits of spending time in forests and green spaces include:

- Reducing stress
- Increasing energy level and focus
- Boosting the immune system
- Helping with healing and
- Improving mood and sleep

Studies have shown that being in nature reduces the stress hormone cortisol and increases dopamine and endorphin levels, boosting your mood. Spending time in nature or even looking at scenes of nature are also associated with mindfulness and general well-being.

Just looking at trees can reduce stress-related hormones. Research has revealed that forest exposure can reduce blood pressure, heart rate and muscle tension. In 1982, Japan came up with the term “shinrin-yoku” to describe forest bathing, encouraging people to make a short, leisurely visit to a forest to improve health and reduce stress.

Even breathing in the airborne chemicals produced by plants—phytoncides—can help us fight off disease and infection by increasing our white blood cell levels. Those white blood cells can kill virus-infected cells in our body!

Don't have time to get to a place in the wilderness? Don't worry, you don't need to visit a forest or park to get these benefits.



Getting Outside Helps

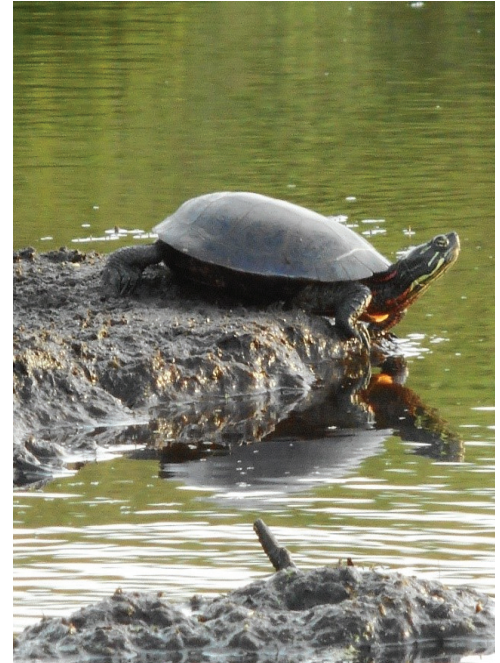
Just stepping out into the backyard can improve well-being and contribute to our quality of life. Studies have found that walking for just a few minutes in a green space during lunch can help you to concentrate and focus for the rest of the day. And getting outside is good exercise, which helps to increase energy levels.

Education and Family Fun is Out There, Too

Nature can help enhance our youngsters' educational opportunities—and keep you healthy at the same time. Sitting in your kitchen and watching birds at a feeder outside the window can help reduce stress and be a fun family activity. You can make it educational by working together learning the bird species.

Don't like watching birds? Don't worry, you and your family can become citizen scientists by participating in a citizen science project and contributing to scientific research. Check out these exciting citizen science opportunities.

Do you live in the city and think nature is far away? Think again! My friend, Akiima Price, a leader in the field of urban environmental education, has activities for you and your family in her free workbook, *What's Good in My Hood*. With it, you and your family can connect to nature in urban areas by exploring things in your neighborhood and how they impact your food, water and shelter. A nature adventure awaits, just outside your door.



Connect to Nature to Build and Strengthen Community

There are many other reasons to connect, or reconnect, with nature. Research has found nature connections can help you be more creative, happier and even smarter! And, psychologists have found that being in nature helps us to value sharing, relationships and community—all things we need to think about as we respond to climate change and other global issues.

Whether you live in the country, in the city, or somewhere in between; get outside, look out your window, explore your neighborhood, visit a forest. Use the power of nature to navigate the world and enjoy the wonders and healing benefits forests hold!



Recreational Leases

Dependable yearly income is – for most woodland owners – more than a luxury or an income bonus, it's a survival necessity. A recreational lease can make it possible for the owner to anticipate a quantifiable yearly income. Recreational leases are binding contracts between two parties – the landowner (lessor) and the person or club (lessee) that is interested in leasing a recreational right. A lease is a legal contract (even if it is verbal), therefore, it is always recommended that you consult a lawyer before entering into a lease agreement.

The following items - at a minimum - must be considered in every lease contract:

1. **Term:** The lease term documents the date the lease begins and the date that it ends. The term length will have differing negotiating extremes for the lessor and the lessee. The lessor, for example, generally wants a short-term lease so as to have the flexibility to adjust to landowner needs and to react to changing market conditions. The lessee, on the other hand, normally prefers a long-term lease so that he or she can predict cost and enjoy the security of not losing the lease. Be aware, the longer the lease term, the more the lease begins to look like a sale of property rights. From a landowners perspective, shorter is better; in fact, one year leases are common.
2. **Area:** A clause in the lease contract should accurately describe the area involved. It's also a good idea to include a map.
3. **Rate Amount:** The amount agreed upon for the lease rate must be clearly noted. Don't forget to consider other incidental costs such as an increase in the property tax from the construction of a hunting cabin or other infrastructure enhancements.
4. **Use Limitations:** A landowner may want to limit some of the activities that are allowed in the lease, for example, the use of ATVs, or motor boats, or the cutting of vegetation.
5. **Compliance with Law:** The lease contract should state that the use of the property is limited only to authorized legal activities, and that the lessee and members of the lease will be personally liable for fines or penalties should they break the law.
6. **Insurance:** There is a law —The General Obligations Law — that protects landowners in general from liability. The General Obligations Law takes the angle that landowners are not to be held responsible for the individual safety of people using their property. The law, however, exempts "gross negligence" which opens the way for a court of law to interpret if the landowner indeed was negligent or not. Don't rely on the General Obligations Law alone. The lease contract should state the kinds and coverage limits of insurances required. It's a good idea to have the lessor named as "additional insured." It's also a good idea to require that insurance cancellation notices be sent to the lessor. Workman's Compensation insurance may be required if, for example, the lessee decides to hire a contractor to build a cabin.

One final point cannot be overstated. A lease contract is a complex legal and binding document. Consult a lawyer to avoid problems.

LEAVE NO TRACE

Whether in your own woods or visiting public lands it is always a good idea to minimize your impact. Follow the 7 principles of Leave No Trace to ensure wild and natural spaces remain that way.

Plan Ahead and Prepare

Plan your hike and hike your plan. Know where you are going and what the weather will be like.



Travel and Camp in Durable Surfaces

Avoid walking through mud or other surfaces that erode quickly. Make this a fun game with kids and tell them they get extra points for walking on only rocks!



Dispose of Waste Properly

Pack out what you pack in. Go the extra step and carry a bag to pick up waste along the trail.

Leave What you Find

As the saying goes, 'take only photographs, leave only footprints.' Help your kids focus on the experience they are having in the moment, and take lots of photos!

Minimize Campfire Impacts

Fires can be a magical part of spending time in the woods, but they can also get out of control quite quickly. Always take care make fires in designated places and keep flames under control.



Respect Wildlife

Seeing wildlife is another extraordinary piece of hiking and camping. Help kids respect wildlife by teaching them to be quiet observers. Have them pretend to be explorers or scientists studying the wildlife in the woods.

Be Considerate of Others

The final LNT principle refers to our fellow hikers and adventurers. Always be respectful of others on the trails. This can be achieved by keeping dogs leashed, not playing loud music, and being friendly when you pass other groups.



Ticks

For many of us, ticks and tick-checks are a routine part of our outdoor experience. Ticks are also becoming more and more prevalent across New York State. It's important to stay vigilant when venturing out so that we may protect ourselves from tick-borne illnesses. Here are a few tips to help keep you safe:

- Wear light-colored pants and long sleeves.
- Tuck your pants into your socks.
- Stay on a trail or in low vegetation – avoid thick, tall brush as much as possible.
- Wear repellants or treated clothing
- When you get home, put your outdoor clothes in the dryer for 20 mins on high heat.
- DO A DAILY TICK CHECK!

The Cornell Integrated Pest Management program has great resources to help you learn and stay safe. You can read fact sheets and watch videos on tick identification and biology, protection and removal, and even managing ticks in the landscape. Check these out and more at:

<https://nysipm.cornell.edu/whats-bugging-you/ticks/>

If you're concerned about tick-borne illness, please consult with your doctor. There are also tick testing resources that can determine if the tick you found is carrying disease. Visit this UMass page to learn more about testing labs in the Northeast:

<https://ag.umass.edu/resources/tick-testing-resources>

Please note that CCE does not test ticks for Lyme disease. If you have been bitten, please seek out medical attention through your primary care physician.



Woodland Enhancement Resources

Forest Management Support

There are enhancement programs available to either help you plan or support your activities depending on your particular goals and circumstances. Here are a few you can explore:

[Forest Stewardship Program - NYS Dept. of Environmental Conservation](#)

[Management Assistance Program - Watershed Agricultural Council](#)
(WAC's MAP Program for New York City Watershed only)

Working With A Forester

[Choosing a Forester - CCE Columbia & Greene](#)

[Finding a Forester - New York Forest Owners Association](#)

[Cooperating Forester Program - NYS Dept. of Environment Conservation](#)

Government Funded Conservation Programs

[NYS Dept. of Environmental Conservation Habitat Management Assistance Program](#)

[USDA Farm Service Agency Conservation Reserve Program](#)

[USDA Natural Resources Conservation Service Environmental Quality Incentives Program](#)

For additional conservation programs visit these websites:

Pheasants Forever
Ducks Unlimited - New York
Audubon New York
Natural Resources Conservation Service
Farm Service Agency
U.S. Fish and Wildlife Service

Additional Resources

CCE's NYS Master Naturalist Program

CCE's NYS Master Naturalist Program is a high-quality, science-based training program designed to teach adults about New York's natural resources, empowering them to educate others and participate in on-the-ground conservation and monitoring projects.

This program hosts trainings to become a Master Naturalist and provides a lot of helpful resources that you take with you or incorporate into your woods:

[Curriculum, Fact Sheets and Learning Resources](#)

[Wildlife Habitat and Ecosystem Conservation, Enhancement and Management](#)

[Master Naturalists in Your Area](#)

Wildlife & Habitat Enhancements

[Enhancing Wildlife Habitat from Cornell Cooperative Extension and the NYS DEC:](#)

[Enhancement of Wildlife Habitat on Private Lands from Cornell University CALS:](#)

[Wildlife Habitat and Ecosystem Conservation, Enhancement and Management:
NY Master Naturalist Program \(Cornell University & Cornell Cooperative Extension\):](#)

[All About Birds! The Cornell Lab of Ornithology](#)

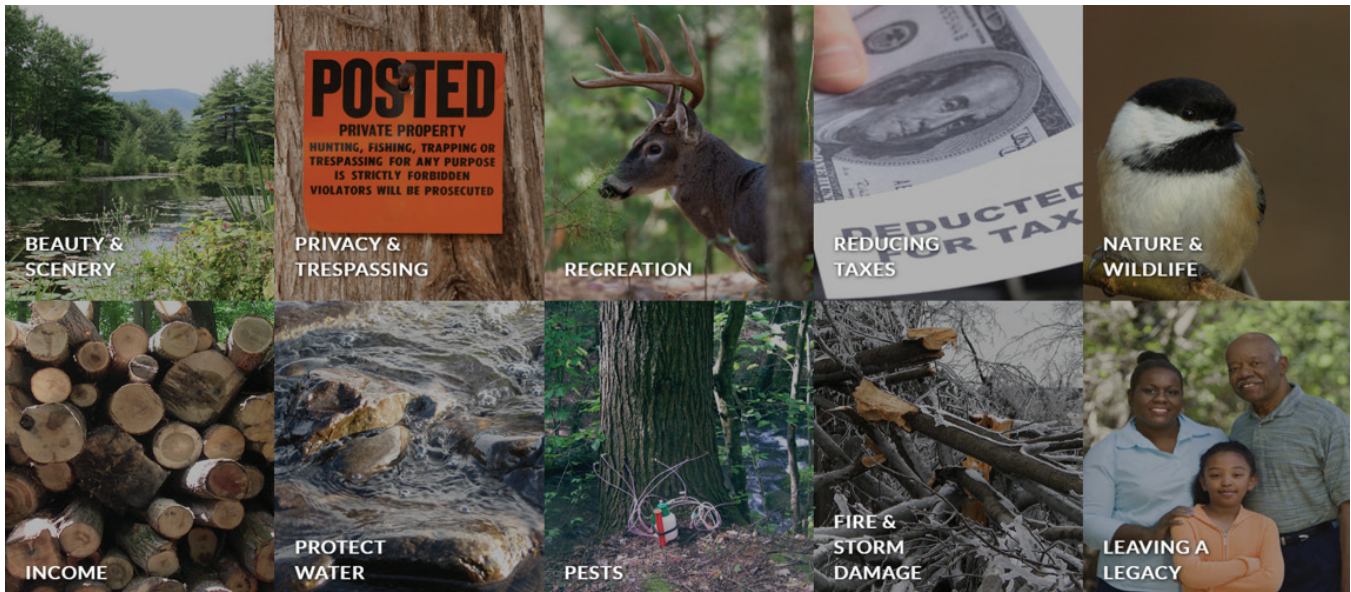
[NY Audubon Society - Managing Forests for Birds: A foresters guide](#)

Wildlife Damage & Invasive Species

[Wildlife Damage Fact Sheets from Cornell University & CCE](#)

[CCE Columbia & Greene Invasive and Nuisance Species](#)

Resource Collections



MyWoodlot

As highlighted above, MyWoodlot offers a wide selection of resources on woodlands. There are activities and blogs from professionals and other landowners that highlight projects and ideas that you can actually implement. The activities broadly include beauty and scenery, privacy and trespassing, recreation, reducing taxes, nature and wildlife, income, protecting water, pest, fire and storm damage, and leaving a legacy.

Create your MyWoodlot profile for free to save and organize activities and resources that match your goals. Follow the link below to begin exploring all these resources and keep up to date with new activities that are added weekly!

[Visit MyWoodlot](#)

ForestConnect

A Cornell University resource to connect woodland users to the knowledge and resource needed to ensure sustainable production and ecological function on private woodlands. The site houses information for woodland stewards, educational resources and offers countless webinars on a wide variety of woodland topics.

[Visit ForestConnect](#)

CCE Columbia & Greene

Visit our site to find resources and more information on upcoming events. Our Natural Resources Team is also ready to support you in all your woodland stewardship goals. Please reach out if you're looking for specific information, have questions about your woods, or need assistance in determining next steps.

Woodland Owner Networks

Women Owning Woods

We are a group of women landowners and natural resource professionals from the Catskills and the Hudson Valley region of New York. We've organized this group of professionals and landowners as a way to foster learning experiences and discussions about forest property. Details about gatherings will be sent out via email in our eNewsletter. To subscribe to that list you can email wow@nycwatershed.org to join.

Follow us on Facebook to stay connected, share your stories, and learn from your peers.

[Find WOW on Facebook](#)

Master Forest Owner Volunteers

The Master Forest Owner (MFO) program provides private woodland owners of New York State with the information and encouragement necessary to manage their forest holdings wisely. Since its inception in 1991, MFOs of Cornell Cooperative Extension have helped over 1,000 landowners. The term "Master" Forest Owner implies education as in "School-Master". Experienced and highly motivated volunteer MFOs are available statewide, ready to assist neighbor woodland owners with the information needed to start managing their woodlands, through free site visits to landowners properties. The training volunteers receive complements their experience as forest owners.

[Learn more about the MFO Program](#)

Catskill Forest Association

The Association was formed for the purpose of promoting knowledge and understanding of forest ecology and economics; to promote long-term forest management; to educate the public and enhance the economy of the Catskill region; to demonstrate economically feasible and environmentally sound forest practices; to serve as a source of information about forest management; to serve private landowner rights; and to identify and manage private forest lands dedicated to the demonstration and practices of high standards of forestry.

[Learn more about the CFA](#)

New York Forest Owners Association (NYFOA)

The mission of the New York Forest Owners Association (NYFOA) is to promote sustainable forestry practices and stewardship on privately owned woodlands in New York State.

[Learn more or join NYFOA](#)


Cornell Cooperative Extension Columbia and Greene Counties

Agroforestry Resource Center
6055 Route 23
Acra, New York 12405

Postage

Connect

Website: ccecolumbiagreene.org
Email: columbiagreene@cornell.edu
Phone: 518-622-9820

 @CCEColumbiaGreene

 @ccecgc

Mission

Cornell Cooperative Extension Columbia and Greene Counties puts knowledge to work in pursuit of economic vitality, ecological sustainability, and social well-being. We bring local experience and research-based solutions together, helping Columbia and Greene County families and communities thrive in our rapidly changing world.

CCE Columbia and Greene Counties is a registered 501(c)(3) nonprofit.

Cornell Cooperative Extension is an employer and educator recognized for valuing AA/EEO, Protected Veterans, and Individuals with Disabilities and provides equal program and employment opportunities.

