

# Bird & Wildlife Sanctuary Certification Workbook for Neighborhoods & Communities



The step-by-step guide for landowners and managers interested in having their landscapes Certified by Audubon Lifestyles and earning the Seal of Sustainability from the International Sustainability Council.





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*A journey of 1000 miles starts with a single step, so the saying goes. That is the same philosophy that our Bird & Wildlife Sanctuary Programs are based on.*

*Over the past couple of decades many programs have been created that all have a focus on getting people to “save the earth” where they live, work and play. While that is certainly a laudable goal, the fact of the matter is that most of these programs are so complicated and so expensive that the vast majority of people do not participate in them.*

*What we are focusing on are the ten most important actions that people can take at home or at their places of business that will truly make a difference. We believe that this approach is more easily understood and that the proposed actions are keys to improving the quality of the environment in cost effective and meaningful ways.*

*It has been said that in many cases it is the first few actions taken that make the biggest difference and the last few are the most expensive and least beneficial. Becoming Certified by Audubon Lifestyles, and earning the Seal of Sustainability from the International Sustainability Council, as demonstrated by taking the ten actions outlined in this program workbook, might just be a single step, but when one thousand individuals take those same measures we truly create a meaningful journey toward improving the quality of the environment, and gain the monetary rewards associated with being more sustainable at the same time.*

*We are trying to save the earth, one person, one place at a time. Please join us in this journey!*

*R. Eric Dodson*



*Executive Director*

## The Bird & Wildlife Sanctuary Program for Neighborhoods & Communities

The Bird Sanctuary Program provides direction, technical assistance, public attention, and national recognition to municipalities, communities, parks, and landscapes of all types interested in providing a safe haven for birds and other forms of wildlife.

Getting designated as a Certified Bird & Wildlife Sanctuary is fun and educational and provides enormous benefits that include: public relations, citizen pride and participation and publicity.

### **Public Image**

A community's public image is very important. Having a Certified Bird & Wildlife Sanctuary helps present the kind of image that most citizens want to have for the place they live or conduct business. The Certified Bird & Wildlife Sanctuary signs at community entrances tell visitors that here is a community that cares about its environment. It is also an indication to prospective businesses that the quality of life may be better here.

### **Citizen Pride**

Pride is sometimes a less tangible benefit. Gaining and retaining Certified Bird & Wildlife Sanctuary recognition is an award to the managers, volunteers, board members, home owners associations, and others who work on behalf of better care of a community. Non-involved citizens, too, often share a sense of pride that theirs is a Certified Bird & Wildlife Sanctuary. This may translate to better care of habitat areas on private property or a willingness to volunteer in the future.

### **Publicity**

Presentation of the Certified Bird & Wildlife Sanctuary award offers excellent publicity opportunities. This results not only in satisfaction for the individuals involved and their families, but also provides one more way to reach large numbers of people with information about birds.

**Getting designated as a Certified Bird & Wildlife Sanctuary is fun and educational, and provides enormous rewards.**



## A Certified Bird & Wildlife Sanctuary Provides Many Things...

Wild bird habitat shrinks every day -- both globally and locally -- and many species of birds have exhibited frightening declines in numbers, even over the past several years. Creating a landscape desirable to birds is not difficult, but requires some understanding of natural habitat. A typical tidy suburban landscape with a closely mowed lawn surrounded by a line of sheared shrubs of all the same species provides little interest to wild birds. A diverse landscape is more naturalistic and provides attractive habitat for a great variety of birds. When creating a bird habitat, certain needs must be provided for:

**Habitat** -- for foraging, nesting sites, and protection from predators. These areas should be dense (they can be thorny) and allowed to grow in their natural form.

Hedging and shearing discourages nesting birds, depletes surplus/leaves needed for nest building, and removes flower and fruit food sources. Cover plants should be located close enough (within 15 to 20 feet) to bird feeders to provide quick protection from predators, yet far enough away so they do not provide "ambush sites" for cats. Dead trees or snags, which provide much needed nesting and food storage sites for many endangered species of birds are in real shortage in our meticulously maintained landscapes. If there is a dead tree in the landscape that is not a hazard or eyesore, why not grow a vine around it and leave it for the birds?

**Water** -- necessary for drinking and bathing, which are essential to a bird's health. We find water, especially moving water, the single most important factor in attracting new species of birds to a site. There are numerous types of birdbaths, from the very basic puddle of water on the ground to elaborate sculptured baths and fountains. The birds don't seem to care about aesthetics, so select something that pleases your own tastes and practicalities. When constructing or purchasing a birdbath, there are a few important features to look for: edges that slope gradually (many birds will not use a bath that drops off sharply on the sides) and surfaces with a rough texture for sure footing (verses slippery surfaces such as plastic and smooth concrete). Add moving water, if at all possible.

**Food** -- there are feeders available to please the most discriminating birds. Different birds forage at different heights, and bird species have individual tastes in seed, suet, fruit, nectar, and home made concoctions. Display and placement of food also affects the types of birds you may attract. Bear in mind that your local ecology and bird migration patterns have the greatest influence on which birds you might entice.

A properly planned landscape provides a wonderful habitat for wild birds and people. It can also be low maintenance, drought tolerant, colorful, self sustaining, and a beautiful place for people, birds, and other wildlife to enjoy and share!





## PLATINUM MEMBER

### Take the first Step!

Only Platinum Members can participate in the Bird & Wildlife Sanctuary Program.

As a non-profit, public interest organization, we rely exclusively on private donations, philanthropic grants, and membership dues. Your membership is put to work immediately to advance the tenets of sustainability and environmental protection, and we are deeply grateful for your support.

In addition, Platinum Membership provides a number of online resources to assist with sustainable living, and was created to help foster sustainability by working with, and providing educational resources to individuals, businesses, organizations, universities, government entities, municipalities, communities, neighborhoods, and virtually anyone seeking assistance in balancing the triple bottom line of people, profit, and planet. Our ability to reach our organization's mission and vision depends on your participation.

#### **Platinum Membership Benefits**

- Listed on the Audubon Network for Sustainability as a Platinum Member with business logo, reciprocated link, contact information, map and address information, and business description.
- Ability to use the Platinum Member Logo on all marketing, sales and promotional and educational materials
- New Member Packet includes: ISC-Audubon Platinum Member vehicle and front door stickers and decals, computer mouse pad, co-written thank you letter from ISC-Audubon and Platinum Member Certificate for framing and display.
- Coauthored Press Release Announcing Platinum Membership distributed worldwide
- Multiple Subscriptions to SustainAbility Newsletter
- Platinum Membership is the first step in gaining Chartered ISC Member Designation and earning additional recognition by the International Sustainability Council.
- The knowledge that you are contributing to helping ISC-Audubon to continue in our mission, and receive the recognition that you are doing just a little bit more!

Please join with us today and make a positive contribution toward being socially, environmentally and economically responsible where you live, work and recreate.

Learn more about the benefits of membership by visiting:  
[www.isc-audubon.org/join.html](http://www.isc-audubon.org/join.html)

## TEN Requirements for a Certified Bird & Wildlife Sanctuary

1. Provide Food Sources for Birds and Wildlife
2. Provide Year Round Fresh Water Sources
3. Provide Nesting and Shelter Opportunities
4. Provide Safety for Birds and Wildlife
5. Provide Habitat Areas for Birds and Wildlife
6. Remove Invasive and Noxious Plant Species
7. Keep the Property Free of Litter
8. Manage Onsite Water Features Responsibly
9. Provide Amenities for Residents, Staff, Guests, and Visitors
10. Provide Outreach and Education Opportunities

### What Are the Benefits?

By Using the Bird & Wildlife Sanctuary Program as a guide, your landscapes will not only become a haven for birds and wildlife to enjoy, but will also reduce natural resource depletion, reduce waste, and pollution problems while also improving the health of the landscape in an aesthetically pleasing and cost-effective manner. Sustainable landscaping practices incorporate beautiful plants, shrubs and trees, and reduce maintenance costs while at the same time protect the environment. Using sustainable landscape maintenance practices also makes good business sense and saves money.

When landscapes require excessive amounts of water, energy, labor, and other resources, environmental and economic costs outweigh many of the natural benefits of urban landscapes. In contrast, sustainable landscapes feature healthier, longer-lived plants that rely less on chemical pesticides and fertilizers, minimize water use, and reduce waste generation and disposal. They also require less maintenance and alleviate groundwater and air pollution problems.

### **Use Sustainable Practices and Gain Certification from Audubon Lifestyles**

Striving for and ultimately achieving the Seal of Sustainability from the International Sustainability Council (ISC), and becoming Certified by Audubon Lifestyles means that a landscape is setting the new standard for excellence. Certification coupled with the Seal of Sustainability indicates that the landscape has adopted and put into place recognized Best Management Practices that equal environmental superiority, social responsibility, and economic vitality.



## Frequently Asked Questions about the Bird & Wildlife Sanctuary Workbook

### **We don't have a landscape feature outlined in the workbook. Do we still qualify for certification?**

Yes. We recognize that each landscape is unique and that not all landscapes will have the 10 Criteria Sections outlined in the workbook. If the landscape seeking Certification does not have a certain feature on their landscape then simply make a note of that for our reviewers, and move on to the next section.

For example, #8 in this workbook states "Manage Onsite Water Features Responsibly." However if no water features (ponds, lakes, streams etc.) are present on the site, then simply skip that section, and you have met the requirements for that section.

### **In each of the Ten Criteria Sections there are sub sections. Are those the requirements? If not, what are those?**

The text listed on each page of the Criteria Section is intended to be educational in nature, and not viewed specially as the requirements for certification. It is not a requirement that a landscape do each and every suggested management practice outlined in the text in this workbook. Under each of the Ten Criteria Sections are methods and management practices upon which a landscape may meet that criteria, and should be viewed as opportunities upon which to meet certification.

For example, on Criteria Section #5 titled "Provide Habitat Areas for Birds and Wildlife," one of the suggested items outlined in that section is to "Leave Snags and Downed Trees," and under which describes the importance of snags as habitat for birds. Specifically, "Leave Snags and Downed Trees" is not the requirement that must be met in order to meet certification requirement for that section, but "Provide Habitat Areas for Birds and Wildlife" is. How you choose to achieve that goal is completely up to you.

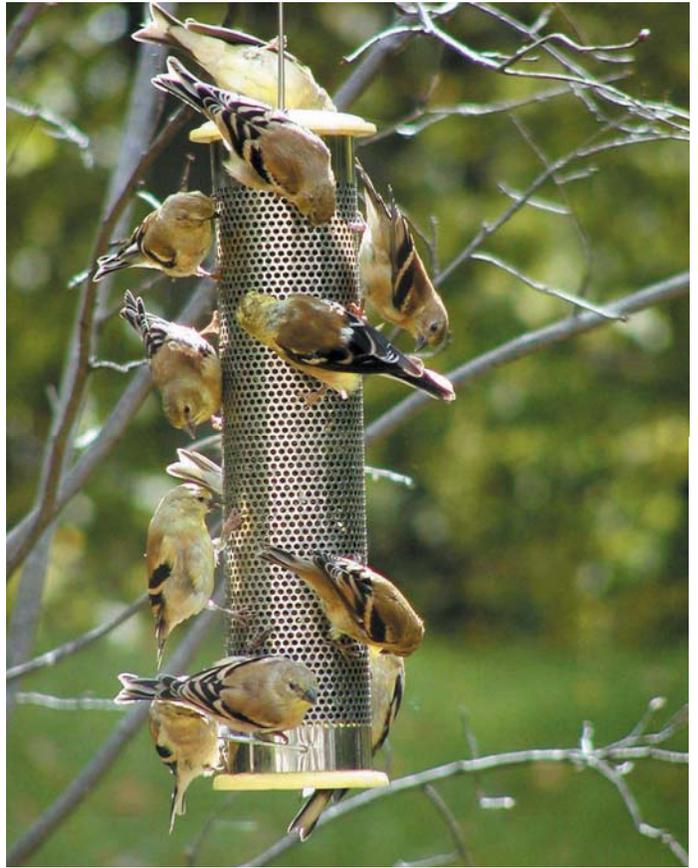
In other words, if you created a native plant garden, or reduced turf and returned that area to natural habitat, or even if there already was existing habitat located onsite, then that would meet the requirements of that section, even though those specific items were not listed in the text for that section.

### **What specifically is required for Certification?**

In order to earn certification, the overall objectives for each section must be met. At the bottom of each section is a list of required verification items under the heading "What is Required for Certification." Each of the items listed under each section must be submitted to us for review.

Additionally, the following items are required for certification:

- The landscape applying for certification is only available to Platinum Members of Audubon Lifestyles. However, a landscape owner can become a Platinum Member, and apply for Certification at the same time.
- A completed Natural Resources and Landscape Survey should be included with the submittals for certification
- All Verification Requirements in this Workbook must be met and submitted
- A map of the site with all of the requested features depicted must be submitted for review. A map can be hand drawn or digitized, or a combination of both.



# Provide Food Sources for Birds and Wildlife

## Best Foods for Migrating Birds

It's an old wives' tale that feeding birds during migration will keep them from completing their journeys – in fact, offering nutritious foods gives birds an edge in surviving migration. Not only will offering the right foods help give birds the energy they need to migrate hundreds or thousands of miles, but by feeding migrating birds you will also enjoy new and unique species at your feeders.

## Migration Feeding: It's All About Variety

The key to successfully feeding migrating birds is to offer a wide variety of foods, both natural and supplemental, to attract a greater range of birds and meet their feeding needs.

## Natural Foods

To create a landscape that provides birds with a guaranteed, year-round food supply, you need to plant an assortment of plant species that provides seeds, berries, nuts or other food throughout the year. Planting a diverse selection helps ensure that a variety of food sources is always available. Choose different plantings that produce food throughout each of the four seasons.



Deciduous plantings, plants whose leaves drop off in winter, generally bear the most fruit, nuts, and seeds for wildlife. In addition, they offer shady, leafy nesting sites in the spring and summer.

Evergreens, which bear leaves throughout the year, offer a good source of berries and seed-filled cones. They also offer year-round shelter, protection, and breeding sites.

Take an inventory of what is already growing in the landscape. Draw a rough map of the property. Make notes about what plants are growing in your yard. Use a field guide or garden book to identify plants you're not familiar with. Also note the sun exposure and shade throughout the day. Then use a plant guide to determine which plants your yard has that are good providers, and which are not.

You may already have a number of trees, flowers, and shrubs attractive to various species of birds. Plan to supplement with native fruiting trees, shrubs, and vines. Reduce the area occupied by the lawn and turf where possible. Wide expanses of turfgrass are relatively sterile habitats attracting less desirable "generalist" species, such as feral pigeons, starlings, cowbirds and grackles, all of which compete with native songbirds for food and nesting spots.

You will want to determine when your plants are providing food for birds, for example, nuts and acorns in winter, flowers and seeds in the summer. You may want to remove some plants that do not provide food in order to make room for ones that do.

Begin with what your landscape already provides, and add to it plants you can grow that will provide more food that season. Concentrate on adding plants that provide food during seasons when nothing much else is available.

Plan to add plants gradually as your budget and time allow. Buy only as many plants as you can care for at one time. Newly added plants take more water and care than older, established ones. Proper soil preparation, watering, and mulching are all essential to getting new plants off to a good start.

Natural food sources are ideal for migrating birds, since newcomers to your yard will instantly recognize these foods even if they're unfamiliar with feeders.

- **Seed Flowers:** If you've planted flowers that provide seeds, such as sunflowers, leave the old flower heads available for foraging birds.
- **Leaf Litter:** The insects found in decomposing leaves are a rich source of food for ground-feeding birds. Leaving fallen leaves in one area of your yard gives these birds a great place to feed.
- **Insects:** Avoid late summer or fall insecticide treatments or opt for gentle organic pest control so birds still have insects to feed on during migration.
- **Nuts:** Trees that provide nuts attract many migrating birds, particularly if the trees are well cared for to produce a bountiful harvest.
- **Berries:** Berry-producing shrubs offer a sweet natural food source for many birds, and fallen berries are a welcome treat for ground-foragers.
- **Fruit:** Whether you have crabapple trees or fruit trees such as apples, pears, or peaches, birds will enjoy feeding on the fruit as it ripens in fall. Overripe fruit is also great for birds, both on trees and on the ground.

### **Supplemental Foods for Migrating Birds**

Bird feeders can add even more nutritious variety to your backyard buffet, and both resident and migrating birds will enjoy the feast.

Offering the best foods for migrating birds means offering a wide variety of foods rich in sugar and fat to give birds plenty of energy for long distance flights. By offering these foods, you're sure to enjoy spectacular migrating flocks at your feeders.

- **Suet:** Suet is a high fat food that helps birds have plenty of energy for their migration flights. Offer suet as cakes, balls, crumbles or shreds for all birds to enjoy.
- **Nectar:** Migrating hummingbirds and orioles will appreciate fresh nectar feeders whenever flowers may not be as abundant.
- **Seed:** Birdseed is the most popular type of food to offer birds, and high fat seeds such as sunflower seeds and Niger seeds are best to offer during migration.
- **Peanut Butter:** Peanut butter is a good alternative to suet and provides fat and protein to birds.
- **Fruit:** Adding fruit to tray feeders gives birds a rich source of sugar even if local fruit sources are already exhausted.

## **What's Required for Certification?**

*please provide the following*

- List of Food Materials Used Onsite
- Two Different Example Photos of Food Materials Onsite
- Feeding Stations depicted on a map

## Provide Year Round Fresh Water Sources

Providing water to attract birds to your yard is as important—perhaps more important—than feeding them. Birds need water to drink and to keep their feathers clean for flying. There are many ways to provide water to birds, but some of the most common include: birdbaths, misters, drippers, and ponds or fountains.

Wild birds need access to clean water all year round, but when winter temperatures dip into the freezing range, water may be harder to find. Birds can quench their thirst by eating snow, but this requires large amounts of energy which they need to keep themselves warm. There is a wide assortment of heated bird baths to suit almost any style, but there are many other low cost alternatives to consider as well.

### Keeping the Water from Freezing

Immersion-style water heaters have improved greatly in the last few years, and they're perfect for keeping the water from freezing in a birdbath. More important, they're safe to operate. The latest immersion heaters turn off if the water in the bath dries up. Put your heater on a ground-fault interrupted circuit (available from any hardware or electrical supply store) to eliminate the danger of electrical shock. These heaters cost pennies a day to operate and they're available at most places where bird feeders are sold.

A homemade solution is to put a light bulb in a flower pot and place the water basin on top. The light bulb will provide more than enough heat to keep the water from freezing.

### Birdbaths

Available in various styles, birdbaths are the most common water sources in the home landscape. A common concern regarding birdbaths is that the standing water can grow algae, encourage mosquito breeding or become dirty. While concrete birdbaths are very stable, they can also be difficult to clean. A plastic or metal birdbath is easier to manage and less likely to freeze and crack in winter. Make sure that the water is no deeper than 2 inches. in at least part of the birdbath. Birds need to be able to stand in the birdbath without being submerged.

Change the water in the birdbath every two to three days, and give the birdbath a good scrubbing once a week. You can insert a bubbler to circulate the water, which will help control algae and mosquitoes, as well as attract more birds to your birdbath. During winter, you can heat the water to keep it from freezing, but if you use a heater, build a framework of sticks above the water to allow the birds to perch to drink, but not to bathe. (Bathing in temperatures below 20 degrees can cause the birds injury when they emerge from their bath.)

### Misters and Drippers

Some birds are attracted to the sound of dripping water or the shininess of wet leaves. Hummingbirds, for example, like to bathe on dripping leaves rather than in a birdbath. Provide water for these birds by installing misters or drippers in your garden. You can create a little microhabitat and moss garden by using these misters. Be sure to place the misters around plants that like moist conditions—otherwise you'll inadvertently kill the plants and create a mud pit!



### **Ponds and Fountains**

Fountains are a great source of water for birds, as long as you put something in the fountain so that parts of it are shallow enough for the birds to stand. Fountains circulate the water, and the sound of running water will lure birds to your yard. Circulated water is also less likely than standing water to have algae or mosquito problems. Ponds with fountains or recirculating streams are ideal for birds, as long as some areas of the pond are shallow enough for the birds to stand in the water.

By providing wild birds with a clean water source, not only will you enjoy seeing far more of them in your garden, but you'll also be helping them survive and thrive at a time when their natural resources are being threatened.

### **Rain Gardens**

Rain gardens are becoming an increasingly popular landscape feature. A rain garden is a natural or dug shallow depression designed to capture and soak up stormwater runoff from roofs and other impervious areas such as driveways, walkways and even compacted lawn areas. They can be used as a buffer to shoreline areas to capture runoff from the landscape before it enters a lake, pond, or river. The rain garden is planted with suitable trees, shrubs, flowers, and other plants, allowing runoff to soak into the ground and protect water quality.

In addition to adding beauty to the landscape, rain gardens also help protect water quality by reducing stormwater runoff.

Stormwater runoff is considered one of the main sources of water pollution on the planet. A rain garden will allow the runoff generated on the landscape to infiltrate into the ground and help to reduce potential water quality problems.

### **Rainwater harvesting**

Rainwater harvesting or “living water” harvesting involves collecting and storing rainwater for future use. It has become a common practice in many parts of the world that receive dry, humid weather and very little rainfall. Now, it is gaining popularity again in North America, particularly in British Columbia. In B.C., residents are using rainwater harvesting as a sustainable water source for household use, organic farmers are using it to grow supposedly healthier plants and crops, and commercial greenhouses and public buildings are recognizing its water-conserving benefits as well.



## **What's Required for Certification?**

*please provide the following*

- One Example Photo of Onsite Water Source
- Description of how water source is maintained in Winter
- Location of Fresh water source depicted on a map

## Provide Nesting and Shelter Opportunities

If they are to become long-term residents, birds require a place of cover or shelter to protect them from inclement weather (sun, heat, wind and rain) and natural predators. This is why birds prefer multi-stem plants that form a dense canopy. The dense canopy also provides an ideal environment for nesting. Since birds require shelter year-round, your yard should have a mix of deciduous and evergreen plants. Evergreen plants include broadleaf evergreens, such as holly, and conifers, such as red cedar. Several references suggest that at least 25 percent of the trees and shrubs should be evergreen.

Loss of suitable breeding habitat and degradation of existing habitat, including the spread of exotic non-native species, are main contributors to bird population declines. While it's easy to simply enjoy watching birds visit bird feeders and constructed nest boxes, we encourage you to help birds on your land by providing native habitat and breeding grounds as well.

### Provide Nesting Sites

Native vegetation provides the best protection for breeding birds. Planting a variety of native shrubs and trees in multi-species clumps provides the most nest sites with the best cover.

- Choose Native Plants  
Find out what habitat type is natural to your area and then choose native plant species that naturally belong there. Keep in mind the characteristics of your land. Note slope, moisture and type of soil, and the presence or absence of a natural water sources, so that your yard's plant community is sustainable.
- Structural Diversity  
A structurally diverse habitat is one that has plants growing at different heights and different assemblages. This provides birds with many places to build nests and find food. It also provides adult and young birds with excellent concealment from predators.
- Plantings that Mimic Natural Configurations  
Planting native species in a mosaic design - where species are overlapped and grown in clumps - mimics natural plant communities and, therefore, provides good nesting habitat for birds. This offers more choices for birds to build nests and find food, while offering sufficient cover for birds traveling to and from nests
- Leave Dead Trees or Dead Limbs  
This provides habitat for cavity (tree hole) nesting species such as woodpeckers, bluebirds, nuthatches, chickadees, American Kestrel, and Titmouse. Overall, natural cavities provide better nest sites than bird boxes.
- Leave Brush Piles and Grass Clippings  
Brush and grass piles provide shelter, nesting material, foraging grounds, and even nesting sites for birds.

### Nesting Boxes

Setting up a nesting box in your yard can provide an essential nesting area for the members of many species of birds. It is also a great way to provide wildlife a place to raise young.

While many species are able to hide their nests in dense foliage or grassy meadow areas, many others require holes for nesting. Some birds, such as woodpeckers, can excavate their own nesting cavities in dead or decaying trees. Others depend on the abandoned nesting holes or natural cavities formed from fallen branches for places to build nests.

Recently, however, an **increase in development and removal of damaged and dead trees has left many cavity-nesting birds with fewer natural places** to raise their young. In addition, invasive birds, such as the European

starling and the house sparrow, compete with native bird species for the use of the remaining cavities.

Adding a nesting box to your habitat will not only benefit native bird species. It will also give you an opportunity to monitor and enjoy birds.

### **Building or Selecting a Nesting Box**

Although most birds prefer natural cavities for nesting, **with the correct design a nesting box can serve as a good replacement.**

There are numerous types of bird nesting boxes available commercially. Each box contains different features and is targeted at a particular bird species. But not all nesting boxes are created equal. There are several features to consider when purchasing or building a nesting box.

Check that the box is well constructed and contains these basic features:

- Constructed of natural untreated wood (pine, cedar or fir)
- Lumber for walls that is at least  $\frac{3}{4}$  of an inch thick to provide insulation
- An entrance hole of the appropriate size to allow desired birds to enter but keep larger birds out
- An entrance that is the correct distance from the floor to accommodate the nest
- An extended and sloped roof to keep the rain out
- A recessed floor and drainage holes to keep the interior dry
- Rough or grooved interior walls to help fledglings exit
- Ventilation holes to allow the interior to remain cool
- A side or top panel that opens to allow easy access for monitoring and cleaning
- No outside perches, which aid predators and other harassing birds

It is also important to **make sure that your box incorporates features preferred by the particular bird species you hope to attract.** These features include the entrance hole size, the height at which the box is posted, and the type of habitat surrounding the box. When purchasing a nesting box, research the physical requirements of the species that you hope to attract and make sure that you are investing in a functional, rather than ornamental, birdhouse.

As important as providing nesting boxes, it is also equally important to place them in appropriate locations within your landscapes, and to regularly monitor and maintain them.



## **What's Required for Certification?**

*please provide the following*

- Two Example Photographs of Nesting and Shelter Opportunities
- All Nesting and Shelter Opportunities depicted on a map

# Provide Safety for Birds and Wildlife

## Providing Cover

Protective cover becomes even more precious as fall turns to winter. As plants defoliate, it's easier for you to spot the birds, but it's also easier for predators such as hawks and cats to see them.

Most birds prefer to feed near cover, so make sure you locate your bird feeders near bushes, trees or other plants that will give them a place to hide should they sense danger. In the wintertime, this means placing feeders near evergreen trees or shrubs.

You'll want to ensure your feeders remain at least 15 feet from bushes, trees or other cover, however. This is close enough to give birds an escape route if attacked from overhead by a predator bird, but it's enough distance to keep squirrels from jumping from branches onto the feeder and prevent cats from hiding in the bushes and pouncing on birds at the feeders.

The common household cat may be the most serious predator of songbirds. Cats kill millions of birds every year. Despite common belief, merely placing a bell on a cat's collar won't prevent it from killing birds. Wildlife experts recommend that you keep cats inside, or at least keep them inside in the mornings, when birds do most of their feeding. Don't feed stray cats, and discourage them from lingering on your property.

## Reduce Predators

The most common neighborhood predator is the domestic cat. Researchers estimate that over 100 million birds are killed daily by domestic cats in the United States. Native predators, such as raccoons, skunks, rats, and jays, can also negatively impact birds. Human activities are responsible for sustaining higher than natural numbers of these predators which negatively affect nesting songbirds. You can help with these simple actions:

- Eliminate outdoor sources of food such as pet food dishes, compost piles and uncovered garbage cans
- Cover compost piles or use covered worm bins
- Use bird feeders that exclude jays and squirrels. Many of these types of feeders can be found at wildlife stores.
- Keep cats indoors!

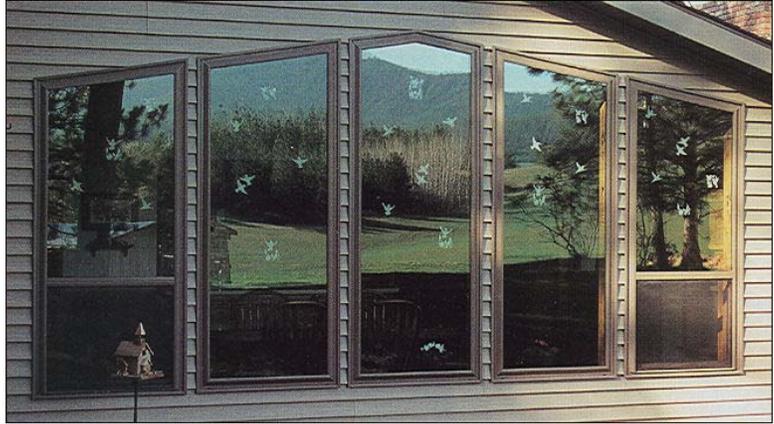


Especially during the breeding season when vulnerable young birds are just out of the nest. Bells on collars are not enough. For more information see the Cats Indoors Program at [www.abcbirds.org/cats/catsindoors.htm](http://www.abcbirds.org/cats/catsindoors.htm).

## Preventing Window Collisions

Despite having exceptional sight, birds have a difficult time seeing glass. Instead, they see the reflection of the sky and plants in the glass, which they think indicates a safe area to fly, particularly if they are startled or threatened. Even at night, when reflections are minimal, lighted windows can be disorienting to migratory birds, causing them to collide with skyscrapers, office buildings and other illuminated windows. Large picture windows and corner windows are the most dangerous, but even small windows can sustain potentially fatal collisions.

While a strong window collision can kill a bird on impact, many times birds are stunned and appear to recover and fly away. Unfortunately, these injured birds may later suffer internal hemorrhaging and brain swelling that leads to death. Stunned birds may also be less agile fliers and more disoriented, making them vulnerable to predators. To prevent these incidents, birders can take many easy steps to make their windows more visible – and avoidable.



To minimize the risk of bird window collisions as much as possible, use several internal and external techniques. While one tactic may reduce the number of birds injured after colliding with windows, several tactics joined together will have the greatest results for preventing these unnecessary injuries and fatalities altogether.

### **Mow Smart**

Many songbirds nest close to the ground in grasses and ‘weedy’ areas. Critical nesting habitat and even nests are often destroyed unknowingly through mowing and other routine yard maintenance.

- Set aside “no-mow” areas of your land. This will provide nest sites and shelter for several bird species, especially goldfinches, buntings, quail, and towhees.
- Do not mow native tree saplings and shrubs. Even poison oak, a native shrub, has high value for birds and other wildlife.

### **Pesticides & Herbicides**

During the nesting season almost all songbirds, no matter what their diet is at other times of the year, feed their young caterpillars and other insects. Therefore, pesticides that kill insects should be used sparingly, if at all, during this time of year. Herbicides might kill plants that are concealing nests and should also be avoided during the nesting season.

### **Declare Your Land a Bird & Wildlife Sanctuary**

Designate areas of your land “bird-friendly” with these actions:

- Minimize human disturbance during the breeding season (mid-March through August). Some common disturbances may include, vegetation clearing, construction, spraying and pet activity.
- Create networks of suitable habitat. Connecting habitat patches is valuable to birds and other wildlife.
- Work with neighbors and local conservancies to create a network of “bird sanctuaries” in your community.

## **What’s Required for Certification?**

*please provide the following*

- One Example Photograph
- Describe how you are Providing Safety for Wildlife

## Provide Habitat Areas for Birds and Wildlife

Wild bird habitat is shrinking every day and many species of birds have exhibited frightening declines in numbers. Creating a landscape desirable to birds is not difficult, but requires some understanding of natural habitat. A typical tidy suburban landscape with a closely mowed lawn surrounded by a line of sheared shrubs of all the same species provides little interest to wild birds. A diverse landscape is more naturalistic and provides attractive habitat for a great variety of birds.

A properly planned landscape provides a wonderful habitat for wild birds and people. It can also be low maintenance, drought tolerant, colorful, and self sustaining.

Birds need protective cover, just like people need the shelter of a house. Cover can be provided in many forms, such as special plantings, hollow logs and brush piles. Plants that bear a fruit for food are the best. The ideal bird habitat would include plants ranging in size and density from small evergreen shrubs to tall, full-grown trees. This variety will provide birds a choice for feeding, hiding, courting and nesting.

### Reduce managed turf area

- High maintenance requirements
- High pollution outputs with public health risks
- Higher water requirements
- Low wildlife value
- Inappropriate placement
- Does not take advantage of opportunities for a varied, diverse, landscape with year-long interest.

### Using Wildflowers and Native Plants

Wildflowers are among the most important wildlife food sources because they are widespread and produce an abundant supply of seeds. They are also of value for nesting materials, nesting cover and protective cover. Wildflowers with silky seed heads or other conspicuous plant down may furnish nest-lining material. Plants with dense branching or thorns offer good protection for nesting and wintering birds. Provide a variety of species of wildflowers as well as variety of plant types, such as tall, short, thin leaves, wide leaves, etc. Generally, a greater variety of wildflowers will attract a greater variety of songbirds.

### Snags and Downed Trees

Dead trees, or snags, are valuable to a wide variety of wildlife. Unfortunately, many people assume snags are of no value and routinely cut them down. In some places, this practice has caused cavity-nesting bird and mammal populations to decline. Though nest boxes may provide alternate nesting sites for some cavity-nesting birds, they are not suitable replacements for dead trees all the time.

Snags provide **homes for woodpeckers**. Woodpeckers use snags for drumming, nesting, roosting, and feeding. Woodpeckers hammer their bills against the resonating surface of dead tree trunks to make a loud drumming sound; this is their courtship and territorial “song.” Snags provide ideal feeding sites for woodpeckers, as many insects live and reproduce in decaying wood. Unlike most other cavity-nesting birds, woodpeckers rarely use birdhouses.

Snags with old woodpecker holes provide homes for swallows, chickadees, nuthatches, bluebirds, owls, and other cavity-



nesting birds that are rarely able to excavate their own nest sites.

Large natural cavities, formed in snags by decay, often provide homes for a variety of mammals including marten, porcupine, bats, bushy-tailed woodrats, northern flying squirrels and other species, and when left to decay and fall over naturally, large hollow snags may provide den sites for larger animals like mink, lynx, red fox, and wolverine.

### **Vines**

If you're looking for ways to attract birds to your home, think about planting vines. Vines are attractive and useful additions to home landscapes. Use vines for ground cover or to provide shade, privacy or protection from wind, dust, glare or reflected heat. In areas too small for shrubs, vines are perfect plants. Birds like vines for several reasons. Vine seeds and fruits are good sources of food, while vine foliage provides an ideal site for nesting and raising young.



### **Brush piles**

Building a wildlife brush shelter is quick, easy, involves little to no cost and is lots of fun. The concept is simple: build a sturdy structure out of logs and branches that provides shelter while still allowing enough spaces for animals to move around. Your goal is to provide a topography of nooks and crannies, a fortress of crevices and interlocking branches to provide hiding places for dozens of animal species.

- Some communities do not allow brush shelters, and some neighbors might not understand their value. Check your local codes and notify your neighbors if the brush pile will be highly visible.
- Place your shelter on the edge between two habitats - these "ecotones" house the most wildlife.
- Make sure at least half of your shelter receives direct sunlight - many animals love to bask.
- Use stone piles in your shelter as part of the base to create hiding places, and along the edges to serve as basking sites.
- Plant native flowering/fruited vines to sprawl over the shelter to attract hummingbirds and songbirds.
- Weave evergreen branches into the roof of your shelter in the Winter to provide cover from snow/ice storms.
- Add old pipes to your shelter's base to serve as tunnels for rodents, reptiles and amphibians.

## **What's Required for Certification?**

*please provide the following*

- List of Vegetation Used in Plant Beds
- One Example Photo of Habitat in Landscape
- Habitat locations depicted on map

# Remove Invasive and Noxious Pests

The word “pest” has been broadly defined to include “injurious” insect species, plant pathogens, noxious or invasive vegetation, vertebrate animals such as rodents, structural pests or any other factor that creates an unhealthy environment for landscapes and structures.

Integrated Pest Management (IPM) is a sustainable approach to managing pests by combining biological, cultural, physical and chemical methods in a way that will minimize the effects on the environment and minimize domestic and health risks, while considering budgetary restrictions. IPM allows for both passive and active modes of maintenance and is vital to maximizing the preservation of any environment.

Effective pest management should include all potential pest control strategies, but focus on non-chemical controls whenever possible, in order to perpetuate a sustainable environment. The following four pest control methods may be employed:

- **Cultural Control:** The use of sound horticultural practices to optimize plant health and to suppress pest insects, disease, and weed growth. Other cultural controls include site-appropriate design and the use of disease or drought-resistant plants.
- **Mechanical Control:** The use of a variety of tools and equipment for the purpose of eliminating pests.
- **Biological Control:** The use of biological control agents that act as predators or parasites of pest species. The use of other beneficial organism that improve plant health by enhancing soil quality.
- **Chemical Control:** The application of various agricultural products such as herbicides, insecticides or fungicides or other chemical compounds as a means of control.

Objectives of an IPM program should include the following:

- To protect the health, safety, and welfare of the community
- To provide efficient cost effective maintenance of natural resources, which includes non-chemical controls whenever possible
- To design new and renovate existing landscape areas that suit site conditions with sustainable maintenance practices, thus providing comprehensive stewardship of natural resources
- To restore, create and protect environmentally valuable areas such as wetlands and riparian areas, aquatic and terrestrial wildlife habitat, forests, and meadow areas.

## Remove Noxious and Invasive Plants

Communities should strive to ensure that public landscapes remain attractive and meet the expectations of residents and preserve natural ecosystems for future generations. These green open spaces offer residents the opportunity to enjoy a natural environment within their community. Trees, shrubs, flower beds, ponds, rivers and lakes make up these open spaces, and require maintenance and protection from damage by both humans as well as biological pests.

If aggressive invaders gain a foothold in your landscape site, they may compete more successfully than the more desirable plants. The best way to deal with aggressive invading species is to recognize them early and remove them as they appear. Use lists of your area’s invasive exotics published by your state native plant society to determine whether a newcomer is an appropriate resident. If it is not, remove and destroy it. Waiting until invaders are well established will require more drastic removal methods.

Remove weeds from plant beds. Weeds need access to light, so be sure to block out the sunlight by mulching the soil with good organic compost.



## Nuisance Wildlife Control

Certain wildlife species can be destructive to natural areas when their activities are excessive. Overall, we should not encourage the interference with wildlife, and have a preference to leave them to their natural behaviors. If control of wildlife is deemed necessary, working with the most appropriate city (Animal Control) or state (Department of Wildlife) agency to formulate a control solution is the best alternative.

## Pest Management Recommendations

- All reasonable, cost effective non-chemical pest control options should be considered first before resorting to the use of pesticides.
- Practicing IPM in all pest management situations should occur while understanding that some situations will require the use of a pesticide product.
- Certain levels of pest problems or populations should be accepted within established thresholds. Those thresholds will vary with the pest and the landscape setting.
- Performing calendar-based pesticide applications should not occur.
- Only pesticides approved for a particular use should be used for the prescribed applications. When pesticides are applied, the smallest effective area should be treated, and the application should be timed to minimize public contact and the effects on the environment.
- Whenever possible, pesticide applications should be carefully timed to control the pest and reduce the need for retreatment.
- Pesticide applicators should strictly observe all pesticide product's label requirements. All chemicals used should have an MSDS on file, and be available to all staff, contractors and the public upon request.
- Pesticides should not be used to control plants with edible fruit during the fruiting season unless the plant being controlled is not of sufficient size to produce fruit. Fruiting plants such as blackberries should be first cut to the ground, allowed to re-sprout and then chemically controlled before the plant can produce fruit.
- All sites where pesticides have been applied must be posted and all applications of pesticides must be recorded.
- All staff who apply pesticides must receive training and maintain appropriate certifications for new pest control techniques as they become available.
- To promote public understanding and support of the benefits of the IPM program, educational assistance and information should be provided to the public regarding the use of pesticides.
- Compliance with all Federal, State and Local regulations pertaining to the application, handling, storage, and disposal of pesticides must *always* take precedence.



## What's Required for Certification?

*please provide the following*

- List of Pests being Managed
- List of Pest Management Products Used
- Describe the Pest Management Practices Used

# Keep the Property Free of Litter

When people think of the factors that influence their health, contribute to crime, and impact their local economy, litter is probably not at the top of their list. Litter is normally considered an eyesore and, for some, also recognized as destructive to our environment. In reality, it affects these factors as well as many other areas of the community.

Few things can be more discouraging than to see the result of extensive littering in your neighborhood, jogging or walking path or work location. When you see the consequences of litter in a beautiful natural environment, like a city, state, or national park it can be down right maddening.

To see trash scattered around the majestic landscape of a park reserve where trash cans are prevalent is heartbreaking. Even in areas that are further into the wilderness where it's not practical to have trash containers, there is no justification for it.

Studies have found that people are more likely to litter when litter is already present than in an area free of trash.

Excessive litter can have damaging effects on wildlife and be harmful to human health. Litter on streets or sidewalks, if not cleaned up, will most likely end up in a river, lake, or ocean. That trash can have a serious impact on the aquatic life in the receiving body of water. For instance, a fish or bird might mistake a piece of plastic for food and choke on it. Certain types of litter contain nutrients that may build up in excess in the water and cause algal blooms which deplete oxygen levels. This in turn creates a lower quality aquatic habitat where fewer delicate species can survive. Litter can also degrade water quality if there are other harmful chemicals associated with it, which can be harmful to humans if, for example, they eat fish from that body of water. Another way that litter can cause health problems is if it builds up and attracts rats or other pests that may carry disease.

Litter is harmful to wildlife as well. Plastic can cause animals such as birds to choke, when they mistake it for food. And, even worse, small bits of plastic can accumulate in the stomach of a bird, never digesting or decomposing, to the point where there is no more room for real food and the bird starves to death with a full stomach.

About 18% of litter, traveling primarily through storm water systems, ends up in local streams, rivers, and waterways. Cigarette litter can also pose a hazard to animals and marine life when they mistake filters for food.

Heavily littered areas are unsuitable for nesting, feeding or shelter, forcing birds to seek out less desirable areas with greater competition for necessary resources. Litter can also contaminate water sources, and polluted ground is less likely to support insects or seed - or fruit-bearing plants for food sources.

Discarded food that is left as litter can attract predators such as rats, feral cats and foxes that will also prey on birds or nests. Rotting litter can also give rise to bacteria that will cause illness in birds, or it may attract ticks or mites that can be detrimental pests.

## Impact of Cigarette Butts

Probably the greatest myth surrounding cigarette butt littering is that because butts are so small, they are relatively harmless. Coupled with the idea that filters are made of cotton and decompose easily, butts are rarely seen as what they really are – a serious environmental hazard.

The composition of cigarette butts is largely misunderstood. Each butt contains remnants of tobacco and paper, as well as the filter. Filters may look like cotton, but they are actually made of plastic filaments. These are made from a type of plastic called cellulose acetate, which degrades very slowly – anywhere between 2 months and 15 years, depending on exposure to air and water.

Cigarette filters are specifically designed to accumulate particulate smoke components, including toxic chemicals such as cadmium, lead, arsenic and zinc. Littered butts leach these chemicals as they decompose, contributing to soil and water pollution and impacting on wildlife habitat. Cigarette filters have been found in the stomachs of fish, birds, whales and other animals who mistake them for food, instead swallowing harmful plastic and toxic chemicals.



It is estimated that around one in ten cigarette butts ends up in our rivers, bays and waterways. Being little and lightweight, they are easily carried into our waterways.

It is also very important to identify who is littering so that group can be targeted in a campaign to reduce littering. Research from the group Keep America Beautiful found that males are twice as likely to litter as females. They also found that young people, under the age of 35, are twice as likely to litter as people between the ages of 35-49, and three times as likely to litter as people over 50. While campaigns targeting young males have been successful in reducing litter, it is more important to create a campaign to target the group that will be using the area. In a more general sense, a relationship exists between littering and a lack of ownership or pride in a community.

#### What can we do?

1. Enforce Anti-Litter Laws. This includes empowering local police and other law enforcement agencies to target cigarette litter.
2. Install Trash and Ash Receptacles. Ash receptacles, especially at transition points, are a key strategy to help smokers change their cigarette littering behavior. Keep America Beautiful research also found that mixed-use receptacles, such as ash/trash receptacles, were not as effective as ash-only receptacles. A well-designed ash receptacle helps send a message about proper disposal of cigarette litter. Small openings indicate the receptacle is for items of trash like cigarettes, butts, matches, lighters, and packaging. The best designs also have side openings which reduce the impact of rain and other inclement weather. Certain public areas such as parks have litter bins which are placed alongside paths frequently walked by visitors. This encourages people to avoid littering, as littering creates an unhealthy and aesthetically unpleasant social environment.
3. Encourage the Use of Pocket Ashtrays. A pocket ashtray is a small, portable ashtray that fits into a pocket, briefcase, or purse. These allow smokers the opportunity to be personally responsible for proper disposal of cigarettes, even when they're not in an area with available ash receptacles. The best pocket ashtrays close securely, hold several butts, and are reusable. While many smokers are unaware of the existence of personal ashtrays, when shown samples they are interested.
4. Change Behavior Through Public Education. Public education is an important component of changing attitudes and behaviors. Most smokers simply do not realize that littering cigarette butts has an environmental impact—and may earn them a fine. Raising awareness is the first step to changing behavior. Because cigarette littering behavior is not consistent with other littering behavior, it requires targeted public education. Focus messages specifically on cigarette litter. Many smokers do not consider themselves litterers, so general anti-littering messages are not effective in educating smokers about proper cigarette disposal. Create clear messages that depict cigarette butts as litter and direct smokers to appropriately dispose of cigarette litter. Target public service messages to adult smokers, business owners, and community leaders.



## What's Required for Certification?

*please provide the following*

- Describe how you are ensuring a litter-free landscape
- Trash and Ash Locations Depicted on a Map

# Manage Onsite Water Features Responsibly

## **Aquatic Plant/Algae Management**

Management of aquatic plants and algae is perhaps the most common issue that pond owners face. There are three types of aquatic plants; submerged, emergent, and floating. The algae is a type of its own, and comes in many forms, from the single cellular to long filamentous strands. There are many species of aquatic plant and, each species requires its own individual management plan.

There are four different management strategies for aquatic plants and algae. The first is physical management. Physical management includes pulling, cutting, burning, freezing, drawing down, or any other method a person can physically manage. The second is mechanical management. Mechanical management is the use of some kind of machinery such as a mower, mechanical harvester, etc., to cut or remove the plant or algae material. The third method is chemical management. Chemical management is the use of a chemical or herbicide to control aquatic plant/algae growth or development. A permit should be obtained before treating water with a chemical control. The fourth method is biological management. This management strategy involves the introduction of a plant, animal, fish, or insect species that feeds or competes with the aquatic plants or algae. A prime example are grass carp. These fish eat certain types of aquatic plants, and thus keep these species of plants from becoming a management problem in the future.

Each management method has positive and negative sides, and no one is always better than the other. The type and species of the plant or algae will determine which method should or can be used for control. It is crucial to correctly identify the species of aquatic plant or algae that you are seeking to control before beginning any type of management.

## **Pond Water Quality**

The quality of the water in a pond is the basis to the success or failure of your pond. Just as the chemical, physical and biological properties of drinking water can create problems, the same properties create management issues in your pond as well. Dissolved Oxygen, pH, Nitrate/Ammonia, phosphorus, alkalinity, turbidity, and temperature are all important to your pond's health.

Testing your pond's water quality can be done yourself, or by a laboratory. Water quality test kits for ponds are available from some specialty landscape/horticulture dealers, scientific catalogs or educational material suppliers.

## **The Benefits of Submerged and Emergent Vegetation**

Aquatic plants are not considered desirable by many pond owners, as they are viewed as a nuisance to such pond activities as swimming and fishing. However not all aquatic plants should be viewed as undesirable, given the benefits that they can provide. Many plants are critical to fish and wildlife communities associated with ponds because they provide cover, nesting areas, and food.

Ultimately, whether a plant provides a benefit or is considered a nuisance rests entirely with the pond owner and his/her goals for the pond. For example, a pond owner who desires a high-quality swimming pond often views any aquatic plant as undesirable and may go to great expense to eliminate all plants. Conversely, a pond successfully managed for wildlife will have a variety of aquatic plants present, with only a few plant species being considered a nuisance.

Submerged and emergent plants are critical to a well-structured fish assemblage. They not only provide protection for small fish from predators, but also produce large numbers of invertebrates for small fish such as bluegill, to eat. Submerged and emergent plants also are an important food source for many species of waterfowl in the form of vegetation-dwelling invertebrates or the plants themselves. Notable duck species associated with submerged plant beds are blue-winged and green-winged teal, wood duck, gadwalls, American widgeon, and northern shoveler, as well as several species of grebes. Many species of herons and egrets hunt the shallow areas of ponds for small fish and frogs where submerged plants occur. A pond managed for wildlife needs submerged plants as a habitat component.

Submerged and emergent plants also have an effect on water quality. Their ability to put oxygen into the water is an obvious contribution, but they also provide for long-term storage of nutrients that might otherwise be used to create nuisance levels of planktonic or filamentous algae. Ponds with beds of submerged plants have fewer problems with algae.

## Wetlands

Wetlands are those sensitive areas that are a transition between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. The plants that inhabit a wetland are hydrophytic, and adapted to living in hydric soils, sometimes under water. Wetlands serve an important function in that they act as a natural reservoir for storm runoff, offer flood control, recharge ground waters, and filter off toxins that would otherwise find their way in to the water table. They also provide necessary habitat for various wildlife species, unique to any other habitat type.

Most wetlands should be treated as sensitive areas and managed with the goal of maintaining the natural environment with the least amount of impact.

- Invasive and noxious weeds should be controlled through mechanical or cultural methods.
- Approved wetland herbicides should be used only when necessary, and never near standing water.
- Native and region-specific plant species should be planted within a wetland area.
- Trails are kept to a minimum and specifically designed to decrease habitat disturbance.



## Riparian Corridors

Riparian corridors are sensitive areas that include an interactive vegetation community integrated with the water course eco-system. Riparian corridors provide food, shelter, breeding and rearing areas for aquatic and terrestrial animals and birds. They encompass the area that runs along both sides of the water body, ranging from 10 -50 feet wide, depending on the sensitivity classification. Included are wetlands and meadows.

- Improper clearing can have serious effects on the ecosystem, allowing for increased runoff, toxin accumulation, oxygen reduction to surrounding plants and water systems, and overall habitat destruction.
- Native vegetation is usually preserved or planted in order to mitigate any negative effects.

## Shoreline and Bank Stability

When reinforcing or protecting a shoreline, one should consider the least impact necessary to achieve reasonable stability. These practices include, but are not limited to:

- Traditional use of riprap should be used only as a last resort. Softer treatments, such as log placement and bioengineering plantings, are preferred, where feasible.
- Treatments should consider seasonal differences and regular seasonal water level changes.

## What's Required for Certification?

*please provide the following*

- One Example Photograph of each type of Water Feature found in the Landscape (i.e., Pond, Stream, Coastline, etc. )
- All water featured Depicted on Map
- Describe management practices used to manage water features

## Provide Amenities for Residents, Staff, and Visitors

Due to urbanization and land development, wild animals are displaced from their habitats and have adapted well to living near humans. It should come as no surprise, and is rather quite common, to encounter wildlife on a regular basis in our communities. Because of diminishing wildlife habitat, conflicts are inevitable and will occasionally arise between humans and wild animals. In the past, many animal control agencies responded to these situations by picking up and relocating or euthanizing trapped wildlife. We now recognize that these past practices simply do not work. Trapping and relocation of healthy wildlife is no longer considered a recommended or viable alternative. Wild animals are commonly territorial and similar species to those removed will simply take over the area vacated by the relocated or deceased animal. Communities and neighborhoods should learn to respectfully co-exist with wildlife.

The processes of urbanization not only destroy, degrade and fragment habitat for wildlife, but also create new habitats that may benefit certain species in unexpected ways. Areas of native vegetation that once supported many species are reduced in size and modified over time by changes to disturbance regimes and invasion by weeds and feral animals. Wildlife populations that persist in these habitat patches are often isolated from each other by a hostile combination of roads, housing and domestic pets, leading to an increased probability of local extinction. Conversely, public and private gardens and planted street trees can support a surprising diversity of native amphibians, reptiles, birds and mammals. Interactions between humans and wildlife in urban areas include observation, provision of food and shelter, and even competition for resources such as fruit and vegetables in backyard gardens. In general, many humans enjoy the presence of native animals until they cause a perceived nuisance or potential danger to human safety. We need to better understand the ecology of wildlife in modified urban habitats, and also consider human behavior and education if we are to successfully conserve a proportion of the biological diversity within our urban environments.

Communities should work to promote habitats that will have the food, cover, water, and living space that all wildlife requires by following these guidelines:

- Maximize open space and make an effort to protect the most valuable wildlife habitat areas of a landscape.
- Provide water and design stormwater control impoundments to benefit wildlife.
- Use native plants that have value for wildlife as well as aesthetic appeal.
- Provide bird-feeding stations and nest boxes for cavity-nesting birds like house wrens and bluebirds.
- Educate residents about wildlife conservation using, for example, information packets or a nature trail through open space.
- Ensure a commitment to managing urban wildlife habitats.



### Trails

Trails play an integral role within any community. Trails provide non-motorized and recreational opportunities for walkers, bicyclists, joggers, hikers and birdwatchers. They are the string that physically connects landscapes, parklands, neighborhoods, schools and businesses. In addition to providing recreation, trails foster an appreciation and respect of nature.

Trails should be designed and constructed in an environmentally-sensitive manner to reduce soil compaction,

erosion, and runoff to protect sensitive areas from degradation. Trails should be developed based on site assessments that consider natural features, aesthetics, and their linkage possibilities, and can be natural or comprised of a covering such as bark, shell, or stone/gravel, or be asphalt or gravel.

### **Use Environmental Signage throughout the Landscape to Promote Environmental Awareness**

Environmental awareness provides people with knowledge, and addresses how their community has integrated environmental values into the fabric of the community. This awareness fosters stewardship activities that can include joining environmental groups, purchasing environmentally-friendly goods and services, or performing specific behaviors, such as recycling household waste, taking used motor oil to collection centers, and using public transportation.

Environmental awareness and values also describes the different ways community members value the environment. They might appreciate the role of wetlands in protecting the quality of their drinking water supply or the role of trees in reducing their home heating bills by providing summertime shade. They might also value the environment for the recreation opportunities it affords, or simply the way it makes them feel.

Mounting environmental education signs is a simple way to educate the public about the environmental attributes of a landscape and the special features of a site. They also can be used to protect areas of special concern or to provide direction or instruction.



### **Park Benches**

There are few things more familiar or welcome than an outdoor park bench. Whether you are accustomed to seeing one in your neighborhood park, or you have your own in your backyard, a park bench is a simply way to allow people to sit, relax, and enjoy the beautiful landscape, the birds and the wildlife. An outdoor park bench serves several purposes. It may be mainly decorative, or highly functional. It often bears inscriptions and serves as a memorial statement, in addition to being a great place to sit and enjoy nature.

### **Picnic Tables**

Traditionally, picnic tables are made of wood, but now they can be made of nearly any durable material, from recycled plastic to thermoplastic-coated metal to concrete. Because they need to be durable to stay outdoors, picnic tables can be, and often are, used for many other purposes.

## **What's Required for Certification?**

*please provide the following*

- Two Example Photographs of a Human Amenities onsite.
- Locations of Human Amenities depicted on map.

## Provide Outreach and Education Opportunities

We must motivate people to recognize the costs and benefits of alternate futures, make behavioral changes, and take conservation actions on every geographic and political scale. Through their actions, humans continue to threaten birds, often unknowingly.

Education, outreach, and communication are vital tools for achieving bird conservation goals. Collaboration between educators and conservationists will enhance strategies to focus on critical conservation actions through appropriate messages and delivery mechanisms. Education objectives need to be tied specifically to conservation objectives, focusing on the highest priority species and habitats. Outreach should take advantage of innovative technologies, such as podcasts and blogs, and advances in social marketing to “sell” bird-related ideas in a way that focuses on what the consumer wants.

### Public Education and Community Outreach

Public education plays an important part in any community. Well-planned education and outreach activities can help generate understanding and support for the environmentally-friendly management strategies taking place within the community .

Human communities, whether clusters of homes, towns, cities, or other collections or networks of people are part of the natural environment. We live, work and play among, and are deeply connected to, the many streams, rivers, lakes, meadows, forests, wetlands, and mountains that compose our natural environment and make it the beautiful and livable place so many of us value. More and more often, human communities realize that the health and vibrancy of the natural environment affects the health and vibrancy of the community and vice versa.

### Engage More People in Citizen Science

Citizen science offers cost-effective tools for bird monitoring, education and outreach among scientists, policy-makers and birders. Besides providing valuable data for bird conservation, volunteer citizen scientists enhance their knowledge of birds, as well as their conservation involvement. The North American

Breeding Bird Survey and the Christmas Bird Count, which rely entirely on volunteer birders, provide some of our best knowledge of long-term bird population trends. The online program [eBird](#) is rapidly improving knowledge of seasonal bird distribution, with more than 100,000 checklists submitted per month.

### Promote the Economic Benefits of Bird Conservation

Conservation solutions that ensure long-term protection of birds and their habitats must also provide economically viable options for people, communities and industry. Successful models in all three countries illustrate the economic benefits of sustainable land-use practices that allows birds to co-exist with people. Providing bird-friendly economic opportunities for local people is particularly critical for reducing threats in and around protected areas for species at greatest risk of extinction. For example, tourism and bird-guide training can help link ecotourism providers with local guides and provide alternate livelihoods. At larger scale birding festivals, such as International Migratory Bird



Day and birding trails allow rural communities to realize income by attracting tourists.

### Engage Citizenry to **Monitor and Clean Bird Boxes**

Once breeding season begins, monitor your bird box for activity. You can enjoy watching adults quickly dart in and out as they build their nests or feed hungry nestlings. If your box is first discovered and used by invasive bird species consider removing the nest. Doing this regularly will likely encourage the bird to move to another location and free the box for use by native species.

Once eggs have been laid you may want to monitor the progress of the nest. Lightly tap on the box before opening the panel to allow the adult bird to leave. So as not to become a nuisance, limit your viewing time to less than a minute once a week. Keep track of the progress of the nestlings. This way once they have fledged and the box is no longer in use it can be cleaned. Some birds will not use cavities with abandoned nests in them, and removing the debris cuts down on ectoparasites for the next set of nestlings. If you remove the nest in a timely fashion you could enjoy two to three broods per season!



### **Organize a trash clean up day**

A well-organized neighborhood group can have powerful influence when addressing the needs and problems of local residents. A group representing the whole neighborhood will have the stability, credibility, and political clout necessary to make a difference. Reach out to people who live around the area that you've targeted for cleaning first. They will probably be the most interested in getting rid of the trash and would make a strong first line of recruits. Then, move out to surrounding homes, blocks, and businesses. Talk to people about the problem and about the idea of a cleanup. Find out whether they might be interested, remembering that you only need a few volunteers to start. Others will join when they see something happening.

### **Get your Municipality to become a Bird City U.S.A**

A community's public image is very important. Being a Bird City U.S.A. helps present the kind of image that most citizens want to have for the places they live, work and play. The Bird City U.S.A. signs at community entrances tell visitors that here is a community that cares about its environment. It is also an indication to prospective businesses that the quality of life may be better here.

To Learn about how to get your municipality to become a Bird City U.S.A visit us online at [www.isc-audubon.org](http://www.isc-audubon.org) or contact us at 727-733-0762 or [info@isc-audubon.org](mailto:info@isc-audubon.org)

### **What's Required for Certification?**

*please provide the following*

- List of Birds witnessed at site
- List of Bird species Nesting at Site
- Describe one Outreach and Education effort taking place



# Certified Bird & Wildlife Sanctuary Application

Contact Name \_\_\_\_\_

Property Name \_\_\_\_\_

Landscape Provider \_\_\_\_\_

Address \_\_\_\_\_

City, State, Zip \_\_\_\_\_

Phone \_\_\_\_\_

Fax \_\_\_\_\_

Email address \_\_\_\_\_

Website Address \_\_\_\_\_

## Documentation Requirements

- Platinum ISC-Audubon Membership
- Completed Natural Resources and Landscapes Survey
- Certification Requirements in this Workbook have been met
- Map of the Site with Requested Features Depicted

**The Bird & Wildlife Program is free for ISC-Audubon Platinum Members.** Platinum Membership fees include a one-time registration fee of \$250 (first year membership included), and then only \$100 annually. Maintaining Platinum Membership is required in order to retain The Certified Bird & Wildlife Sanctuary designation. To begin participation in the program mail, fax or email this application form with Platinum Membership (if applicable) registration fee (check or credit card).

Name on Card \_\_\_\_\_

Credit Card Number \_\_\_\_\_

Exp. Date \_\_\_\_\_

By signing below you indicate that all photographs and documentation are exclusively from the landscapes and locations seeking certification and that all information submitted is accurate to the best of your knowledge.

Signature \_\_\_\_\_

Date \_\_\_\_\_

Print Name \_\_\_\_\_

Please mail this completed registration form, with required verification documentation and photographs to:  
**ISC-Audubon — 35246 US Hwy 19 #299, Palm Harbor, FL 34684**

## Resources and Additional Reading Web Links

1. Landscape-America.com <http://www.landscape-america.com/landscapes/birds/food.html>
2. Agway Best Foods for Migrating Birds: [http://www.agway.com/know\\_how/wild\\_birds/attracting\\_wild\\_birds/best\\_foods\\_for\\_migrating\\_birds.html](http://www.agway.com/know_how/wild_birds/attracting_wild_birds/best_foods_for_migrating_birds.html)
3. Tractor Supply—Attract More Birds with Fresh Water: - [http://www.tractorsupply.com/know-how\\_Bird-Feeders-and-Houses\\_attract-many-more-birds-with-fresh-water](http://www.tractorsupply.com/know-how_Bird-Feeders-and-Houses_attract-many-more-birds-with-fresh-water)
4. Cornell Lab of Ornithology: Providing Water for Birds- [http://wpdev14.allaboutbirds.org/wp-content/uploads/2012/10/Providing-Water-for-Birds\\_BirdNotes\\_CLO.pdf](http://wpdev14.allaboutbirds.org/wp-content/uploads/2012/10/Providing-Water-for-Birds_BirdNotes_CLO.pdf)
5. PRBO Conservation Science—Helping Birds at Home: Improving Bird Habitat in Your Yard—[http://www.prbo.org/cms/docs/edu/Backyard\\_hab.pdf](http://www.prbo.org/cms/docs/edu/Backyard_hab.pdf)
6. National Fish and Wildlife Federation—Garden for Wildlife—<http://www.nwf.org/How-to-Help/Garden-for-Wildlife/Gardening-Tips/Attracting-Nesting-Birds.aspx>
7. Keep America Beautiful—The Impacts of Cigarettes—<http://www.keeppbcbeautiful.org/cigarette.htm>
8. The National Audubon Society— <http://www.audubon.org>
9. eBird— <http://www.ebird.com>
10. BirdLife International— <http://www.birdlife.org>
11. Patuxent Wildlife Research Center—<http://www.pwrc.usgs.gov/birds/>
12. eNature—<http://www.enature.com/home/>
13. Northern Prairie Wildlife Research Center—<http://www.npwrc.usgs.gov/>
14. Ornithology.com— <http://www.ornithology.com/>