

How to enhance wildlife habitat on a golf course

Golf courses are sometimes criticized for reducing natural habitat and frowned upon for their high-water usage. It might surprise you to learn just how easy and affordable it can be to make that image “greener.” A bonus is that a habitat-enhanced golf course may qualify for the [Audubon International’s Sanctuary Program for Golf Courses](#) and that certification is one you can proudly display. Here are things to consider.

Know your local wildlife



Figure 1 Bobcats help to reduce rodents and coots. Photo by Sandrine Biziaux Scherson

Your nearest Audubon Chapter is an excellent source of information about what species may be expected to use your golf course at different times of the year. They will also be able to tell you which have additional legal protections. This website will help you find your nearest Audubon Chapter: <http://www.audubon.org/about/audubon-near-you>. A good first step is to request a volunteer to do two bird surveys, one during the nesting season (between February and August) and another in the fall or winter when some birds are there temporarily. Welcome photos of wildlife observed during the survey.

Top mammal predators such as coyotes, foxes and bobcats are an important part of food chains and they are highly beneficial rodent managers. Undisturbed areas with patches of dense vegetation, and vegetation “corridors” (to be further explained) are all that is usually necessary to support them.

Snakes access great quantities of rodents in places mammals cannot. If you lay down an old wood pallet

or similar-size section of board in an obscure, natural location you have added a safe place for them and their kin. Californiaherps.com is a good site to help you identify local snakes and lizards. Only rarely is snake venom dangerous to humans, so convey this to your crew to ramp down any fears. The message is, just keep your distance. They will not harm you.

Hard to spot but easy to help species



Figure 3 Look for the ground-nesting Killdeer and its cryptic eggs. Photo by Bogomaz

A delightful and highly beneficial aquatic and terrestrial insect consumer is the Killdeer. Unfortunately, it chooses to nest in a mere scrape on bare ground with little or no cover. If the species is already present on your property it is important to keep an eye for their speckled eggs in the spring. If



Figure 2 Orioles and other birds nest in palms. Photo by Wikimedia Commons

necessary, encircle the nest area with orange cones

to avoid disturbing them or destroying their eggs. To encourage Killdeer to nest in a safer and more out of the way location place a shallow layer of gravel among sparse vegetation.

Keep an eye on your palms. They may be nest and roost sites to a number of species. Some birds also consume their fruit. Wait until September-February before removing dead fronds because it is difficult to spot the nesting owls, woodpeckers, orioles and other songbirds that may be concealed behind them. When safe to do so, leave dead fronds on some palms all year.

One steadily disappearing species with special legal protection is the Burrowing Owl. It nests in burrows made by rodents and the desert tortoise. An old tire is a good way to mark the nest entrance to avoid accidentally placing poison or traps into their burrows. For more information on how to help this owl go to: <http://burrowingowlconservation.org/>



Figure 4 Protect the nest hole of the Burrowing Owl with a marker. Photo by Sandrine Biziaux Scherson

Create access to water

Stack and stagger rocks at the perimeter of bodies of water, or position a long log partially in water. These elements facilitate transition to deeper water and serve as a platform for shore birds to hunt for aquatic organisms. When possible, install these access points adjacent to shade-providing trees or over-reaching vegetation. By doing so you provide waterfowl, herons and egrets shelter from intense heat and places for them to rest out of the water.

A naturalized shoreline with emergent vegetation in shallow water is helpful to wildlife so if you leave or plant such vegetation in about 50% of the out-of-play shoreline you will have created invaluable habitat.



Figure 5 A naturalized shoreline adds habitat value

Riparian areas such as creeks with associated riparian vegetation generally have the highest value of all habitat types. Never allow chemicals or otherwise harmful runoff to contaminate them. A sign can showcase the value of this habitat.



Figure 6 Use signage to showcase habitat elements.

Create corridors

When riparian or highly vegetated natural areas are connected they serve as a corridor for wildlife. These corridors allow species to remain undercover while moving through the property. Corridors do not have to be completely free of gaps, but by identifying the largest and filling them as much as possible with

vegetation, a corridor can be created or simply extended.



Figure 7 A corridor offers safe movement for wildlife

Choose diverse and appropriate vegetation

Different portions of the landscape have different habitat values and appeal to different species. Include diverse tree and shrub species. Incorporate them singularly as well as in groups, and aim for layering so that you create “habitat pockets” with vegetation of different heights. Local growers, nurseries and arborists can assist in selecting suitable plant species for specific locations. Choose plants that provide food and attract pollinators. This source provides a list of plants for pollinators by State: <https://xerces.org/pollinator-conservation/plant-lists/>



Figure 8 Attract wildlife with the right plants

Photo by Sandrine Biziaux Scherson

Trees are a valuable asset so placing their care in the hands of a certified arborist is best and helps to

ensure that not too much is removed when they are pruned. Canopy thinning practices often remove as much as 30% thereby exposing birds and nests to the elements and predators. Over-pruning also harms trees.

Save standing and downed wood.

Dead trees or dead limbs in live trees are essential for cavity nesting birds such as woodpeckers, bluebirds, chickadees and swallows. Consider safely maintaining dead trees in locations where they do not pose a hazard. Keep in mind that a dead trunk with a 12” diameter at breast height (or smaller), absent every limb, and only about five or six feet in height is still valuable habitat. First consult an arborist certified in risk assessment. If the tree is aesthetically acceptable in its location, always consider leaving as much standing dead wood as is safe to do so. To learn more about the value of dead trees and to purchase an educational sign for the tree go to: <http://cavityconservation.com/>. Naturally, if the tree is dying from infestation of a non-native pest then management for that pest takes priority over creating habitat.



Figure 9 Retain dead trees in safe locations.

Before you haul away dead wood consider re-purposing some. Select sections of wood of different diameters and in various degrees of decay. Stack them in such a way to allow for one or more entrance points and to allow for shelter within. Out-of-sight locations and those near vegetation are ideal for these wood piles. They attract mammal predators and their prey.

Apply chemicals only when necessary.

Baby birds and other young wildlife are more vulnerable to the impact of pesticides so avoid application between February and August when parents deliver large quantities of insects and rodents. Anti-coagulant rodenticides can cause health and fitness problems as well as fatalities for untargeted wildlife. Snap traps are among the safer alternatives for rodents. A nest box for a Barn Owl may help as well, but be aware that bees and other residents may occupy them.



Figure 10 A good Barn Owl box design has a high entrance hole and no perches or “footing grooves” that can assist predators.

When hiring a pest control contractor always investigate the products they recommend and the appropriate means of application. Use an integrated pest management plan whenever possible.

Know wildlife protection laws.

The primary laws and regulations protecting birds and other wildlife are the Migratory Bird Treaty Act, Endangered Species (MBTA), California Fish and Game Code, and the California Environmental Quality Act. Become familiar with them and know that all native birds (yes, this includes coots and native geese) are protected. Regulations are particularly strong as they relate to birds during the breeding season.

To learn more about these regulations and to avoid impact to nesting birds during tree care go to TreeCareforBirds.com and review the Best Management Practices. The most important points to remember is that a pre-work site visit is strongly recommended whether or not pruning and removal is scheduled during the nesting season. (Some birds nest “out of season.”) The purpose is to look for active nests. If an active nest is found work should stop immediately until the birds have fledged. When safety to humans or structures is an imminent risk, a permit to relocate or destroy an active nest must be obtained from the California Department of Fish and Game. A wildlife biologist can assist in getting a permit.

Brag about your “green” actions.

Be sure to use a blog, Facebook page or newsletter to share your efforts with your membership and your community. In doing so you educate them about good stewardship and provide a new reason to be proud of your industry.

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