Like a Butterfly in the Wind

Creating wildflower areas at Rockland Country Club is one example of how golf courses can positively impact the environment.

BY ADAM MOELLER



Large out-of-play rough areas can be transformed into wildflower areas.

Blue skies, fresh cut grass, a bird chirping — golf at its finest for many. Being outdoors is part of what makes golf great, and golf courses provide a unique link between golfers and their environment that is shared by few other sports. The course serves as both playing field and home to many forms of wildlife and plants. It is often a key habitat oasis in more urban and suburban settings, and golf course superintendents play an

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important role in conserving and improving that habitat. Matt Ceplo, certified golf course superintendent (CGCS) at Rockland Country Club in Sparkill, N.Y., has been a longtime advocate for enhancing the wildlife habitat on his golf course. The environmental programs and projects that he has implemented have benefited wildlife habitat in many ways while helping to educate golfers and enhance the golf experience. This article highlights



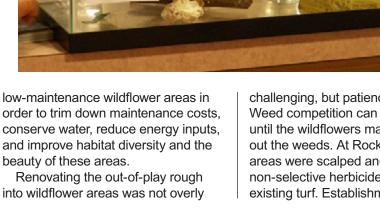
these programs and discusses how they could be implemented at your facility.

CREATING WILDLIFE HABITATS

The 18 holes at Rockland C.C. are located on 130 acres of land in the suburbs of New York City. Several medium-sized corridors can be found between holes of this parkland-style golf course. A decision was made to renovate many of these corridors into

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challenging, but patience was required. Weed competition can be a challenge until the wildflowers mature and shade out the weeds. At Rockland C.C., the areas were scalped and treated with a non-selective herbicide to kill all the existing turf. Establishment of wild-



An interactive display housing caterpillars was placed in the clubhouse to allow golfers to monitor the development of butterflies.

flower areas is ideal in the fall because weed competition is lower compared to spring, but Rockland C.C. has had success seeding during both spring and fall. A Northeast wildflower seed mix containing several species that are native to the area was seeded in two directions. Rockland C.C. reseeds these areas each year to promote diversity of plant species. The seed mix can be combined with a small amount of sand or topsoil to aid in seed-to-soil contact, and automatic irrigation coverage is helpful to aid establishment. The following spring and summer, the wildflowers transformed these out-of-play roughs into a variety of colors and textures.

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Approximately 20 acres of wildflowers and native areas have been created throughout the course at Rockland C.C. Wildflower areas are not mowed regularly (once annually in late fall is common), so the cost for fuel and labor is dramatically lower. Preand post-emergent weed control has been reduced. The non-irrigated areas also help to reduce irrigation expenses. The cost savings from these areas were then reallocated to other maintenance programs.

The wildflower areas have encouraged wildlife habitat and aesthetic interest/diversity on the golf course. These brightly colored areas now provide a natural habitat for small wildlife and birds, butterflies, bees, and other important native pollinators.

The habitat in the wildflower areas was enhanced further with the place-



A sign placed by the wildflower areas provides some quick information on why some plants that would otherwise be categorized as "weeds" are beneficial to the butterfly population.

ment of nest boxes, including two nest boxes for purple martins. Purple martin populations declined significantly in the 20th century due to loss of nesting habitat. The nest boxes soon attracted the purple martins, as was documented in a bird survey conducted on the golf course. The Rockland Audubon Society reports that nesting purple martins have not been found in Rockland County for many decades, and thanks to these bird boxes along with the wildflower and naturalized areas at Rockland C.C., the species will again have a chance to flourish in the community.

The naturalized wildflower areas at Rockland C.C. are just one of many programs that highlight the environmental benefits golf courses can provide. In addition, encouraging the monarch butterfly population on the



Wildflowers are visually attractive and also provide great environmental benefits for golf course wildlife.

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A tagged butterfly can be tracked easily to monitor its migration from Rockland C.C.

golf course became a very popular activity with golfers and employees at Rockland C.C. An interactive display was created in the clubhouse to generate interest in monarch butterflies. The fish tank display houses caterpillars found on the golf course, which can then be monitored by members and employees as they morph into butterflies and moths. Educational materials were provided to further educate members and their children. Once the butterflies appeared, they were tagged with an ID number so they could be tracked as they migrated south. These ID numbers are logged into an online data base (www.monachwatch.org) that allows people to see how far the butterflies migrated.

Further steps were taken to promote butterfly activity on the golf course. Milkweed, a necessary food for monarch butterflies, was allowed to grow in specific areas. Other areas were preserved to provide safe and attractive habitat for migrating butterflies.

WILDFLOWER AREAS AT YOUR FACILITY

Placement of wildflowers or any naturalized rough area is important, and it may be useful to work with a golf

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course architect. If you add wildflowers or native areas too close to high-play areas, they could actually slow the pace of play, so be careful when choosing a location. Plan to make these areas large and then scale them back if necessary. Before you get started with wildflowers, take an inventory of wildlife, birds, and butterflies. Pictures of the areas pre-renovation are also a great idea. This will give your club a baseline of information that can be compared to the finished product.

Establishing naturalized wildflower meadow areas will require some time and patience, especially if you are working with poorer soils or where weed pressure is high. Anticipate a two- to five-year period before the areas really start to look good. There will probably be a need to selectively remove aggressive weeds, and some spot seeding work may also be required as the areas become established.

CONCLUSION

The programs at Rockland C.C. are a great example of how golf and the environment benefit golfers and the community. The introduction of wildflower areas has enhanced the club's environmental and economic sustainability. The attractive flowers have also been very well received by the golfers, and the program is expected to grow further in other out-of-play rough areas.

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Milkweed is allowed to grow in certain areas because it is a good food source for monarch butterflies.



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