

ON COURSE WITH NATURE

GOLF COURSE

WINTER PROJECTS

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WINTER, with its cold temperatures, sharp winds, and lack of deciduous cover, is by far the most difficult season for many birds and mammals of the northern latitudes. Deep snow and ice often completely eliminate available food supplies, and supplemental feeding and brush shelters can be valuable aids for wildlife survival.

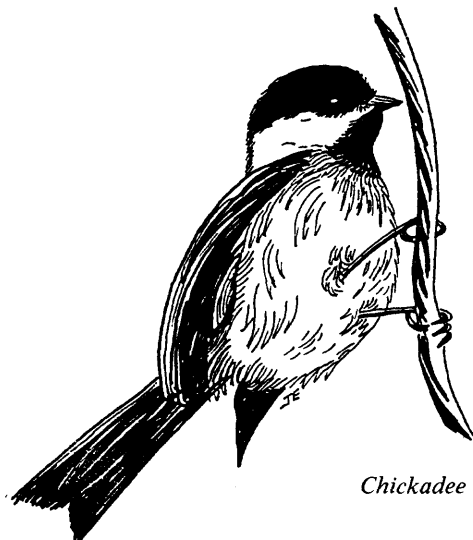
Brush Shelter Project

When it is time to do tree pruning or remove trees from the golf course, refrain from immediately reducing the timbers to woodchips. If there is room on the golf course, consider creating brush shelters or leaving fallen trees in out-of-play areas until early spring, to provide cover for wintering birds and animals.

Construction of a brush pile is easy, but it involves more than throwing an armful of brush or tree limbs into a pile.



Downy Woodpecker



Chickadee

Creating a base with open tunnels under the pile is a key to providing useful wildlife cover. Locate brush piles near feeding areas, or along golf course borders, or intersperse them 10 to 50 yards apart in fields. Avoid piles at a tree base as this creates a perfect opportunity for hawks or owls to ambush prey as it strays from the cover.

Living brush piles offer cover and important food sources. These foods are used by wildlife such as white-tailed deer, cottontail rabbits, ruffed grouse, and wild turkey. Many songbirds benefit from living brush piles by foraging for insects that harbor in the foliage.

Create a living brush pile by partially cutting through the lower conifer limbs, forming a "tepee." Deciduous saplings 5 to 12 feet high can also be used. Partially cut through the trunk 6 to 10 inches above ground and topple over toward one another. Select a tree already scheduled to be removed in the spring, because cutting the tree limbs greatly diminishes vigor and causes tree death. Cut limbs can be considered unsightly and should be removed after winter, prior to the start of the golf season.

Supplemental Feeding Project

Aside from assisting in winter survival, supplemental feeding stations provide educational opportunities. Feeding birds is a great way to introduce golfers and yourself to the joys of bird watching and to inventory bird species that utilize the golf course as a migratory stopover or permanent residence. Without feeding stations, many wild birds are not easily seen due to their highly mobile and elusive nature.

When choosing a feeding station location, consider where golfers and employees spend their time, and choose a location with good visibility. The clubhouse entrance, the ninth hole, or



Nuthatch

the patio area where course patrons can view the feeding stations may be possibilities. Another choice is the maintenance shop in an area that can be seen from the major work areas.

Feeding stations should include a variety of choices such as food variety, several feeder types at different heights above the ground, and feeders at different distances from human activity and varied distances from the nearest cover. According to Cornell University researchers, placement of feeding

stations within 10 to 20 feet of nearby shrubs helps reduce bird mortality from predators.

Greater bird species diversity can be achieved, and competition reduced, by providing different foods (suet, grain, dried and fresh fruit) at different feeders. Another way to reduce con-

gestion is to provide a perch for birds waiting in line to get to the feeder. This can simply mean placing a branch on the feeder or locating the feeder near a sapling.

The most useful winter food sources include suet and seed, which should be available at dawn and dusk. These two

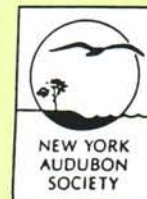
times represent the most important periods of bird foraging. Feeder activity is greatest in the early morning after long, cold nights when energy reserves must be replenished, and again at dusk. Beef kidney suet provides a rich source of fat and is readily eaten by at least 80 species of North American birds, including woodpeckers, chickadees, titmice, wrens, orioles, thrashers, and warblers. Winter is a good time to put out food for fruit-eating songbirds, such as the northern mockingbird and eastern bluebird. Raisins and dried or frozen grapes or cherries will attract robins, mockingbirds, waxwings, and other winter birds that would not normally visit the feeder.

Commercial seed mixes often contain useless fillers such as milo, flax, wheat, red millet, and oats, in addition to some useful seed. They look nice in the bag but are of modest value to the birds. Many birds with a preference for sunflower seeds will discard other seeds, which are lost in snow or ground surface debris. If possible, use separate feeders for different kinds of grain. Multiple feeders allow more selective feeding for preferred species.

Feeding continuity is encouraged, but there is little concern of birds becoming entirely dependent on a feeding station for survival. This concern is valid only in isolated areas where feeding stations are few and feeders provide large amounts of food from fall to winter. Most birds do not depend on single food supplies or feeder stations. Temporary discontinuation of a food source at feeding stations is unlikely to cause death. Loss of the flock to other feeders and difficulty in attracting the variety and numbers back to the feeder are probably the biggest concerns.

Supplemental feeding is valuable in all climates for the educational opportunity it provides. Feeding throughout the seasons is also important. *Spring feeding* helps build migratory energy and entices breeding populations to nest on the property. *Summer feeding* attracts insect-eating birds to help pest-control programs and to entice hummingbirds and nectar-feeding birds to the site. *Fall feeding* is important to build energy for migratory flights and to entice wintering birds to the property.

	Sunflowers											Feeding Location	
	Grey Stripe	Black Stripe	Black Oil Type	Hulled	White Proso Millet	Peanut Hearts & Shelled Peanuts	Fine Cracked Corn	Niger Thistle Seed	Safflower Seed	Suet	Berries & Fruit	Hanging	Ground
Bluejay	•	•	•	•	•	•					•	•	•
Cardinal	•	•	•	•	•	•			•		•		•
Chickadee	•	•	•	•	•	•				•		•	•
Cowbird: Brown-headed					•	•	•						•
Doves: Mourning, Ground		•	•	•	•		•		•				•
Finches: American Goldfinch	•	•	•	•				•				•	•
House	•	•	•	•								•	•
Purple	•	•	•		•			•			•		•
Grackle: Common			•		•		•					•	•
Grosbeak: Evening	•	•	•				•				•		
Red-Breasted												•	
Junco: Dark-Eyed	•	•	•				•				•		
Nuthatches: White-Breasted	•	•	•	•		•							•
Pine Siskin								•				•	
Sparrows: Song Sparrow			•		•								•
Tree Sparrow		•			•		•						•
White Crowned		•	•		•	•							•
White Throated		•	•		•	•	•						•
Titmouse	•	•	•			•				•		•	
Woodpeckers: Downy		•								•		•	
Flicker		•								•		•	
Hairy		•								•		•	
Pileated		•								•		•	
Red-Bellied		•								•		•	



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