

through the vegetation to facilitate speed of play. These areas have been revegetated with native material.

All noxious vegetation is currently removed by two full-time and two part-time crew members. The noxious material is removed very selectively by hand so we do not disturb any nesting sites or food sources. We have begun a major revamping of the irrigation system around the greens to reduce or eliminate the radium of water thrown into the woods to lessen the growth of noxious vegetation. After the work around the greens is completed, the irrigation project will move to the tees, then fairways.

The course is home or a food source to many threatened species of wildlife. A bald eagle regularly fishes the pond at #18. The eagle's nest is on property adjacent to the course that is owned by John's Island but has been turned over to the county for a wildlife habitat.

Another threatened species is the scrub jay, which is very popular among members and crew. The major spot for locating them is along holes 3 and 4.

We protect the scrub jay by protecting their habitat. They prefer isolated sandy areas with low vegetation, preferably scrub oak and saw palmettos, which is the primary vegetation of John's Island West.

They are very popular due to their unique nesting habits. A breeding pair's nest is attended not only by the pair, but by other jays as well. They help feed the young, keep the nest clean and guard against other jays and predators. The same helpers tend to stay with the nest at least one to two years.

The popularity of the scrub jay has increased due to the helpers' inquisitiveness. A cart with golfers sitting fairly still will attract them to land very close. They will stand on the roof and peer under to get a good look and slowly inch right up to you.

Our membership takes great pride not only in the golf course condition, but in trying to do our best to cooperate with nature and protect the habitat, both for golf and nature.

AN OUTSTANDING PERFORMANCE REVIEW




The reviews are in... and Kubota's compact and dependable turf tractors deliver a powerful and clean-cut performance. The 18 HP Kubota GF1800 diesel front mower is extremely versatile, equipped with a variety of performance features that increase your productivity while minimizing cost and downtime. Features include 2WD and 4WD, hydrostatic transmission, a 'no-clutch' forward/reverse pedal, optional grass catcher and choice of mower decks. Large roomy deck and operator comfort and safety features are built in to ensure hours of smooth operation.

For the ultimate in maneuverability and versatility, the Kubota F-Series diesel front mower offers hydrostatic transmission and is available with 24 HP (F2400) and 20 HP (F2100) with four-wheel drive and front differential lock. A fuel-efficient 2WD 20 HP (F2100E) front mower is also available.



For an outstanding performance every time you mow, review Kubota's turf mowers today.

Kubota Tractor Corporation markets a full line of tractors through a nationwide network of over 1,000 dealers.

Kubota 

BRADENTON

Franz Tractor
5504 15th Street East
(813) 758-2020

NAPLES

Naples Tractor Co.
2600 Davis Boulevard
(813) 774-7117

BOYNTON BEACH

Florida Coast Equipment
9775 W. Boynton Beach Boulevard
(407) 369-0414
(800) 343-7594

WINTER HAVEN

Polk Tractor Co.
3450 Havendale Boulevard
(813) 967-0651
(800) 532-8783

FORT MYERS

Sandland Equipment
9501 SR 82
(813) 332-5045

Wildlife Cover Enhancement



Creating a feeding station to attract wildlife is easy and rewarding at Tampa Palms G&CC.

BY GREG PLOTNER, CGCS

TAMPA PALMS GOLF & COUNTRY CLUB

Consistent with Tampa Palms Golf & Country Club's goal to preserve and protect the natural beauty of the forested wetland environment found on and around the golf course, it is our commitment to use native materials as much as possible in helping to aid the abundant wildlife on our course to seek shelter, food and nesting sites.

The use of native plants is encouraged, as they blend in with the beauty of the course and require less maintenance than manmade landscape settings. Some of the native vegetation communities at Tampa Palms that provide valuable cover and food sources for the variety of wildlife on the course are as follows:

Saw Palmetto (*Serenoa repens*)

Provides an abundance of cover for many species of wildlife. Spring flowers provide nectar for honeybees and the fruit is eaten by several bird species.

Sawgrass (*Cladium jamaicense*)

Provides cover for wading birds looking for food, and its seeds are eaten by some birds.

We also have an abundance of pickerelweed, bulrush and cordgrass (listed previously under aquatic plants).

These are a few of the valuable native plant communities that are present on the course at

Tampa Palms. Try experimenting with some of these plants in your next landscaping effort. The results will speak for themselves.

Why Use Native Plants?

They have been around a long time and are well adapted to the Florida environment. This means less water and maintenance is required relative to ornamentals. Native plants also offer the best food sources for wildlife as well as help preserve Florida's natural heritage.

Anytime you are planting material on your golf course, consider its value to wildlife. Does it provide a food source or cover? Try to provide a diversity (plant form, size & fruiting time) and stagger plantings so that food is provided year round.

A Note About Exotics

Exotics are foreign plants and animals imported and introduced into a new environment. The bad thing about exotics is that they have no natural enemies and they can quickly crowd out native species. Three exotics that cause problems, particularly in South Florida, are Brazilian peppers, Australian pines and Melaleucas. Melaleucas are a particular threat because they invade and overtake wetlands. In North Florida, Kudzu can overtake a small pine forest in only a few years.

The Answer? **Get Rid of Them!**

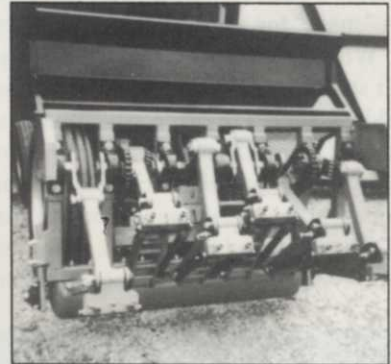


Using native plants provides food and cover for wildlife at Colliers Reserve CC

"THE SOIL RELIEVER"



Concept for
Deep Tine
Aerification



- ★ Built to fit on your tractor
- ★ Creeper gear not required!
- ★ A smooth operating deep tine aerator
- ★ Very High Production Rate

Smooth ripple free finish on green.

Outstanding fairway aerator.

Athletic Fields.

60" & 80" models, both 3 point lift,
4"-12" depth.

Aeration and core removal in one pass.

Priced comparable to other fairway aerators.

Built to last and made entirely in the U.S.A.

Contract service also available.

Please allow us to demonstrate this machine for you before making a decision on an aerator purchase or on some type of deep aeration contract service. We guarantee that you will be completely satisfied with all aspects of this machine. References available.

Florida Distributor

Thomas St. Romain



TURF

SPECIALTIES, INC.

Golf Course Service Co.

1-800-752-5189

Please phone for info
and free demonstration



NEW PUTTING GREENS!

PLAYABLE IN THREE WEEKS!

HAVERLAND BLACKROCK CORP.

The innovators in Golf Course Construction can rebuild and recontour your greens and have them back in play immediately!

THE

BIG ROLL

SOD PEOPLE



INSTALLATION:

Tees, Greens, Fairways, and Athletic Facilities

- USGA PUTTING GREEN RENOVATION ■



9819 STATE ROAD 7 ■ BOYNTON BEACH, FL 33437
(407) 369-7994 ■ FAX (407) 364-1118

Tree Snags: Birds Love Them

"You're going to leave that dead tree standing by the green on No. 15! Are you crazy?"

No, you are not crazy. You are providing a source for over 22 Florida birds, not to mention other wildlife species who depend on "snags" for a place to nest, eat, sleep and raise a family.

What is a snag? A snag is a dead or partially dead tree that is left standing. Snags are valuable resources to many species of wildlife. Something for you to think about, is that more than one third of forest dwelling birds and mammals require a hole or cavity for nesting and shelter. Insects are attracted to the dying wood and lay their eggs, which in turn attract such birds as woodpeckers and nuthatches. A plus for golfers is that many of the bird species that call snags home are insect eaters.



Ospreys often build their nests in snags, such as these at Tampa Palms G&CC.



Snag heaven at Summerfield GC!

Unless a snag is a threat to safety, such as adjacent to the cart path, or in danger of limbs being blown off and falling on someone, let it be. You might receive a complaint or two. If so, take the opportunity to educate your members or golfers about the value of snags. Try reprinting a snag article in your club newsletter or posting information in the clubhouse or pro shop.

The next time you are having a shade problem and need to do some selective thinning, have root invasion problems, wind or lightning damages a tree, try a little something called "girdling".

Simply remove a 4-inch-wide band of outer and inner barks around the trunk of a tree 6 to 20 inches in diameter. Make sure the cut goes at least one inch below the bark to cut off flow of food and water between the roots and leaves. The tree will eventually die, leaving a snag to help increase the population of cavity nesting birds and mammals.

What makes a good or a bad snag?

Good snags should have decayed heartwood at the right height for a cavity. Obviously, diseased trees or trees infested with pine bark beetles should be removed and taken from the property. Outer sapwood rot with healthy interior heartwood is also bad, it's hard to excavate and shallow nests are more at risk to predators.

If you have a snag and want to help create a cavity, drill a 2-inch-diameter hole into the heartwood about 3 inches below stout limbs so that the openings point downward to provide protection from rain as well as predators.

Once a snag falls to the ground and it's not in the way, leave it there because it continues to be beneficial to wildlife as well as returns important nutrients to the soil.



Cavity-dwelling birds are attracted to snags at Colliers Reserve.

Other Florida Plants and Their Value To Wildlife

Trees

AMERICAN BEECH (*Fagus grandifolia*) grows in North Florida, fruiting season is the fall, nuts eaten by variety of birds and mammals, deciduous

BUTTONWOOD (*Conocarpus erectus*) evergreen, good cover and nesting plant, fruits from spring through winter, salt tolerant

SOUTHERN RED CEDAR (*Juniperus silicicola*) evergreen, good cover and nesting sites, blue fruit from fall through winter, grows statewide

BALD CYPRESS (*Taxodium distichum*) pest free, produces seed cones eaten by squirrels and Sandhill Cranes

FLOWERING DOGWOOD (*Cornus florida*) bright red fruit eaten by many birds, grows in North and Central Fl

HACKBERRY OR SUGARBERRY (*Celtis laevigata*) grows throughout Florida, dark fruit eaten by many birds

HAWTHORN (*Crataegus spp.*) North and Central Fla., deciduous, fruits in spring -summer, fruit eaten by birds, good cover & nesting

HOLLIES (*Ilex spp.*) fruit eaten by many species of birds, good cover, evergreen, need male and female for berries

RED MAPLE (*Acer rubrum*) seeds eaten by birds

OAK SPECIES (*Quercus spp.*) several oak varieties in Florida, acorns are a primary food source with high energy levels, provides good cover and nesting sites

SABAL OR CABBAGE PALM (*Sabal palmetto*) state tree, honeybee attractor, fruit eaten by birds, palm thatch used as nest building material

PINES (*Pinus spp.*) pine seeds have high wildlife value, provides good nesting cavities

Shrubs

BEAUTYBERRY (*Callicarpa americana*) purple fruit in the fall eaten by birds, grows in all areas of Fl.

BLACKBERRY (*Rubus spp.*) summer berries very valuable to wildlife, good cover

WILD COFFEE (*Psychotria nervosa*) red berries in summer used by a lot of wildlife species, evergreen

CORAL BEAN (*Erythrina herbacea*) valuable hummingbird nectar plant, grows in all areas of Fl.

ELDERBERRY (*Sambucus canadensis*) excellent food source, fruits year round, good cover

FIREBUSH (*Hamelia patens*) blooms spring through winter, excellent plant for hummingbirds and butterflies

NECKLACE POD (*Sophora tomentosa*) nectar plant for hummingbirds, attracts insects and in turn birds

FLORIDA PRIVET (*Forestiera segregata*) spring flowers attract insects and in turn many birds, small dark fruit spring through summer

SASSAFRAS (*Sassafras albidum*) excellent food source for songbirds, grows in North and Central Fl., dark blue fruit

WAX MYRTLE (*Myrica cerifera*) fall through winter berries attract many birds, salt tolerant, grows throughout the state

Parkway's...



52 PICKUP™ FLOWABLE CHARCOAL/ DEACTIVATOR

Why Worry?
Every
Pesticide/Herbicide
Applicator Needs
52 Pickup™!

- DEACTIVATES HERBICIDES
- DEACTIVATES HYDRAULIC FLUID SPILLS
- ENHANCES SEED GERMINATION
- NEUTRALIZES SPRAY TANKS

52 Pickup™ may be used in conjunction with Parkway's Neutra Clean Spray Tank Cleaner, as well as Parkway's Hydraulic Oil Spill Emulsifier.



**PARKWAY
RESEARCH
CORPORATION**

1-800-442-9821
FAX 1-800-256-9821

Nestboxes



Purple martin house at CC of Florida. Each purple martin can eat up to 2,000 mosquitoes per day.

If your golf course does not have tree snags, putting up nestboxes is an alternative to helping balance the loss of natural habitat.

Development and loss of tree snags has resulted in a reduction of nesting sites for many bird species. Some cavity nesters, like the woodpecker, prefer to excavate their own holes, and most others depend on the cavities abandoned by those woodpeckers. If your golf course does not have tree snags, putting up nestboxes is an alternative to helping balance the loss of natural habitat.

Your first step should be to find out what birds you want to attract. Study your golf course and the birds that are already present. Identify areas of your site that match the preferred habitat of the birds you are trying to attract.

This is where a detailed map of your property would come in handy. Next, make sure you choose the correct nestbox. Whether you buy your boxes or make them, each species has different box requirements. Check the chart below for some of the most common cavity nesters found in Florida and their specific box requirements.

Some golf courses use birdboxes as 150-yard markers. Be sure to place them close to the rough and out of play as much as possible.

Nest boxes on golf courses can help educate

and entertain, but much more importantly than that, they can help increase bird populations.

NESTBOX TIPS:

- *Put boxes up in the summer to fall to allow them to “season” before the spring mating season
- *Place in a location familiar to you and in areas which allow easy access (for monitoring and cleaning)
- *Place openings to Southeast and angled down slightly to offer protection from rain and predators
- *Boxes that are brown, tan or gray (natural) are the most frequently used
- *Do not treat the inside at all, leave natural
- *Boxes should be hinged to allow for easy monitoring and cleaning
- *Boxes should have drainage in the bottom
- *Boxes should have holes in top for ventilation and a light source
- *The roof should overhang 2-3 inches to also help protect from rain and predators
- *During nesting season, check boxes weekly and remove any unwanted guests
- *Remove nests once the young have left (clean box)
- *Be patient! Sometimes it can take a year or two before birds will find the boxes
- *Bluebird boxes are sometimes taken over by



New for 1994

FACTORY DIRECT PRICES



Plastic Putting Cups

Practice Regulation

\$2.75 **\$3.25**

Super White Matte Finish

Solid Fiberglass Flagsticks

1/2" Straight Stick

3/4" Tapered Big Stick

7' **\$9.00**

7' **\$15.00**

8' **\$9.50**

8' **\$16.00**

Rich White or Creamy Yellow

Ask About Our Stripe Options

**PLAIN & CUSTOM
FLAG SPECIALISTS!!**

Nylon Flags



	Practice & Position	Regulation		Regulation
Plain	\$2.25	\$4.00	Sewn Checkered	\$9.50
Custom Screen Printed			Custom Checkered Screen Printed	
1 color	\$4.25	\$6.50	1 color	\$12.00
2 color	\$5.25	\$8.50	2 color	\$14.00
3 color	\$6.25	\$10.50	3 color	\$16.00
4 color	\$7.25	\$12.50	4 color	\$18.00
Custom Embroidered up to 6 colors	\$6.00	\$16.00	Custom Checkered Embroidered up to 6 colors	\$18.00

Grommet and Tubular Flags are the same price.

Compare and Save

PHONE 404-487-8095 800-233-3853 FAX 404-631-3825 800-277-7701
P.O. BOX 2899 297 DIVIDEND DRIVE PEACHTREE CITY GEORGIA 30269

swallows. To solve this problem, place 2 boxes, 12 ft. apart, one for the swallows and one for the bluebirds. Swallows don't mind bluebirds, but will not let other birds near nests.

*If your homeowners have a lot of cats, encourage them to put bells on their collars.

PURPLE MARTIN HOUSE:

Indians took dried gourds and hung them around their homes to keep the insects under control. Since purple martins have been known to eat 2000 mosquitos a day, having them around is not a bad idea! They are also extremely faithful to their nest sites and return each year.

Gourds are still a popular purple martin home today. To make a purple martin house out of gourds:

- *Dry the gourds thoroughly
- *Cut a 2-1/2 inch entrance hole in the middle of the side
- *Scrape out gourd seeds
- *Drill 1/2 inch holes in bottom for drainage and 1/4 inch hole in top for hanging

*Mount on pole 14 ft. high in an open field, 15 ft. from trees, building etc.. and near open water

*Replace used gourds each year

The Audubon Society of New York has plans for various birdboxes and nesting platforms. For more information, call (518) 767-9051.

MONITORING NESTBOXES

Why should you monitor nestboxes? Monitoring allows you to become familiar with the birds as well as help you determine the correct way to deal with predators, parasites or competitors. During the nesting season, check the boxes weekly or bi-weekly and make notes of birds, eggs, the number of young, etc.

The USGA and the Audubon of New York want to develop a nationwide account of wildlife on golf courses. Nestbox monitoring and annual bird counts are two ways of accomplishing this goal. As a member of the Audubon Cooperative Sanctuary System, your golf course will be sent information on nestbox monitoring and annual bird counts.

You may be saying, "I just don't have



A simple but effective nestbox for bluebirds or wrens.

Chart 3: NestBox Specifications

Species	Ent. above floor (in.)	Ent. diam. (in.)	Floor width (in.)	Cavity depth (in.)	Height above ground (ft.)	Habitat	Nesting/Breeding
Barred Owl Barn Owl	10-16	6	12x12	18-25	10-30	Forest types, hardwoods & swamps	Jan-March Sept.-June
Bluebird	6-10	1-1/2	5x5	8-10	5-6	Dry pinelands (snags)	March-June
Carolina Wren	1-6	1-1/2	5x5	8-10	5-6	Woodlands-dense understory vegetation	Feb.-August
Chickadee	6-8	1-1/8 1-1/4	4x4	8-10	5-15	Woodlands - suburbs	April-May
Crested Flycatcher	6-8	2	6x6	8-10	8-20	Woodlands	April-June
Downy Woodpecker	6-8	1-1/4	4x4	8-10	6-20	Woodlands	April-May
Flicker	14	2-1/2	7x7	16-18	6-20	Open woods & suburbs	March-May
Purple Martin	1-2	2-14 2-1/2	6x6	6	10-20	Close to water	March-July
Red Bellied & Red Headed Woodpeckers	9-12	2	6x6	12-15	8-20	Backyards-forest types Open forest, suburban woodlands	April-June May-August
Screech Owl	10-20	3	8x8	16-24	10-30	Woodlands-suburbs	March-June
Tufted Titmouse	6-8	1-1/4	4x4	8-10	5-15	Woodlands- suburbs	April-June
Wood Duck	18-20	3x4	10x10	24	water 5-25 land 10-25	Wooded wetlands	March-July



Wood duck nestboxes such as the ones at Jupiter Island GC, work best in pairs.

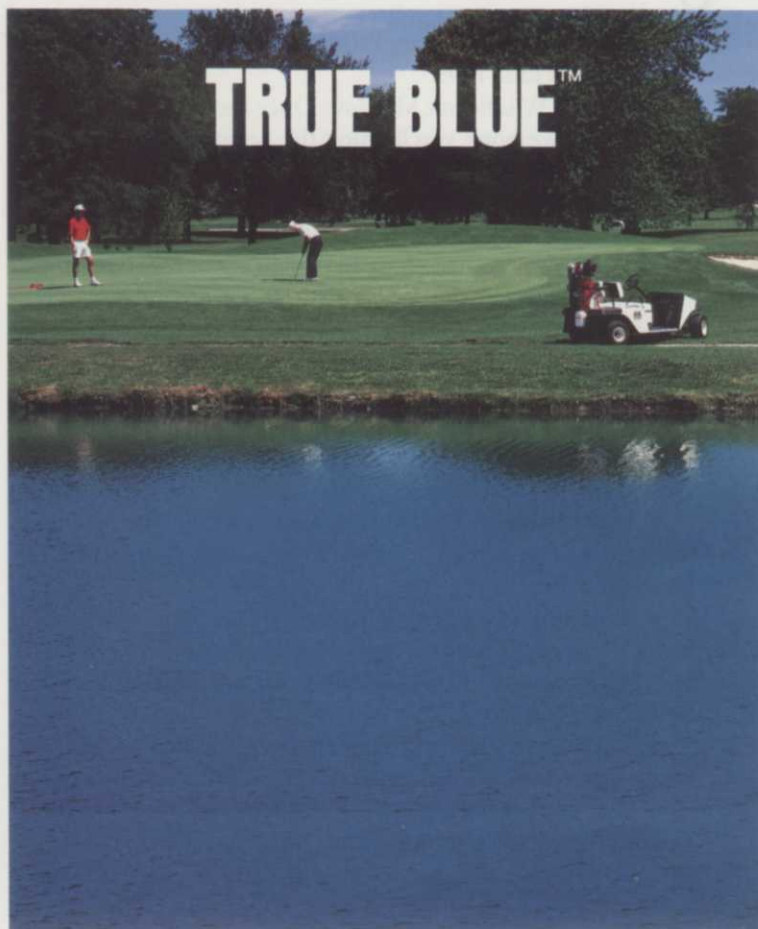
time to monitor those boxes every week," and that's okay. Here are some ideas focused around not doing all the work yourself or taking time away from a busy staff.

1) Ask golfers to participate by noting any activity they may see on a conveniently placed journal in the clubhouse or proshop.

2) Invite local bird groups or schools to help during the nesting season.

3) Start an "Adopt A Box" program, where your members or golfers can adopt one box for a year. They can donate, and/or maintain and monitor one box for a year.

4) Have your staff or crew members check the boxes on their daily trips around the course. (give them each 1 or 2 to check daily)



The better, more natural looking lake and pond dye

Why settle for artificial looking dye when TRUE BLUE™ will give your lake or pond a natural, living color appearance. The secret's in our tried and true blue formula that makes the other brand look unnatural by comparison.

Try it and see for yourself why TRUE BLUE is fast becoming the preferred lake and pond dye. The one that's a natural. For more information and a technical bulletin, call or write today.



No Blue

TRUE BLUE



PRECISION LABORATORIES, INC.

Distributed by:
Gold Kist, Inc.
P.O. BOX 2210
Atlanta, GA 30301
800-241-4966

Harrell's, Inc.
P.O. Box 607
Lakeland, FL 33802
800-282-8007

TRUEBLUE is a trademark of Precision Laboratories, Inc.



Wildlife and Habitat Signs on Golf Courses

Are you having trouble getting members and golfers to realize the value of wildlife and habitat enhancement? Try a little educational tool called a sign. It's amazing how a few appropriate words can change the opinion of what someone is looking at.

Is the area by No. 12 an eyesore that needs to be mowed, or is it a "Naturalization Project Under way!"? Is the area by No. 2 fairway in need of clearing, or is it a "Critical Nesting Habitat!"?

By letting golfers know about habitat enhancement projects, they will be more supportive of changes and you will be educating them and letting them know your golf course cares about the environment.

Here are several samples of signs on golf courses around the state. If your golf course uses signs and you don't mind sharing, please send a picture or slide, or write it down on a piece of paper and send to: USGA, P.O. Box 1087, Hobe Sound, Florida 33475.

Sign ideas from the Audubon Society of New York State:

◆ "This area is being (has been) naturalized to improve wildlife habitat and environmental quality at XYZ Golf Course. The Grassy Field Habitat that you see is particularly attractive to red-tailed hawks, bluebirds and fox."

◆ "Edge Vegetation is especially valuable for wildlife. Note the variation in height of the trees, shrubs and grasses. This creates excellent opportunities for songbird nesting, feeding and protection."

◆ "As a member of the Audubon Cooperative Sanctuary System, XYZ Golf Course is undertaking naturalization projects

to enhance the environment. Estimated date of completion for this project is June 1995."

◆ "Future Wildflower Meadow: Once meadow flowers are established, we hope you'll enjoy the beauty and variety of native flowers and grasses in this area."

◆ "XYZ Golf Course is committed to providing a high degree of environmental quality while maintaining the playability and challenge of a golf course. (Mowing height of this rough is being raised to promote strong turf growth. This out-of-play area is being maintained in a natural state. Native trees in this area provide excellent wildlife food sources).

◆ "Shorebirds, like herons, egrets, ducks and geese need shoreline vegetation for food and cover. In order to provide habitat for these birds, we will be allowing taller vegetation to grow along this pond margin."

◆ "Lake buffers enhance both water quality and wildlife habitat. Please support our efforts to grow native plants/wildflowers/shrubs."

◆ "Throughout the golf course you will see a variety of bird houses. These have been specially designed to provide nest sites for "cavity nesting" birds including Eastern bluebirds, tree swallows and wrens".

◆ "These boxes help to provide roosting sites for bats. These small, insect-eating mammals are an important part of our integrated pest management program. A single brown bat can consume up to 600 mosquitos in an hour!"