I first hear them during the night. Mid-September and the first of the Canada geese are arriving. Honk! Honk! Honk!

Family groups of four or five break off from the small flock of a dozen or so and settle onto the 17-acre refuge pond across from the office. By tomorrow a hundred geese will be on the pond, resting after their 1,500-mile flight from the breeding grounds in northern Canada.

Arriving flocks will become larger and more numerous over the next few weeks. By late October there will be 15,000 geese and again as many ducks on this one pond. That is a sight we never tire of seeing. But it hasn't always been like this at Remington Farms.

Remington Farms is located on Maryland's Eastern Shore, across Chesapeake Bay from Baltimore. This is prime farmland: Dairy farms, truck farms, even a few horse-breeding farms, but mostly large cash-grain farms growing corn, soybeans, and small grains. The generally flat fertile landscape is much like the rich agricultural Midwest.

Remington Farms is unique among agricultural operations, in that its prime objective is to demonstrate how farming and wildlife management can coexist in harmony, each complementing the other. But at the same time its farming methods typify those in general use by other cash-grain farms.

Wildlife, like the crops, is a product of the land. Good soils
produce good crops—and good wildlife. It behooves us all therefore, to manage our lands wisely. And wise land use is what we are demonstrating at Remington Farms. It all began 27 years ago with a plan.

Conservation Plan

Working with scientists and technicians at the local office of the U.S. Soil Conservation Service, we developed a conservation plan for Remington Farms. The plan has changed many times over the years to reflect new farming methods, and new knowledge, but our goals remained: Protect the soil, raise good crops, provide a good life for wildlife.

Food, water, shelter and adequate living space are the basic requirements of all living creatures, man and wildlife. Satisfying these basic requirements of wildlife during all seasons on today's modern farm is a challenge. But fortunately most farms have odd areas, varying in

Remington Farms manager Hugh Galbreath (left) reviews the farm conservation plan with Ralph Timmons, district conservationist for USDA's Soil Conservation Service. Remington Farms has had a conservation plan for 27 years.
size and topography, which are unsuited for agricultural crops and can be managed in simple ways to benefit wildlife.

Come along, and we will join the 30,000 people who take the Self-Guided Habitat Tour of Remington Farms each year. We’ll make a few stops and examine how wildlife management can be integrated into the modern farming operation.

First stop, the crop fields. Corn, soybeans, and winter wheat provide the farm income. In spring, the fields are planted using conservation tillage, including “no-till” methods. Crop residue and trash left on the soil surface by these tillage methods reduce soil erosion and help keep the ponds and streams free of silt. The cover provided by last year’s stubble in the “no-till” fields even attracts a few nesting pairs of bobwhite quail and of field sparrows.

Food for Wildlife

In fall and winter, after harvest, the fields are left covered by the stubble and crop residues. A fortuitous byproduct of
today's mechanized farming, the waste corn kernels and soybeans spilled by the modern combine feed huge flocks of wintering Canada geese, snow geese, mallards and pintail ducks.

Deer, doves, rabbits and a host of other wildlife join the ducks and geese in gleaning these waste grains left in the fields.

Ahead, a hedgerow of autumn olive separates the field edge from the county road. Over the years we've planted various kinds of fruiting shrubs to supplement both the wild plant foods and the waste grains.

In fall, songbirds and game birds alike harvest the fruit of amur and tartarian honeysuckle, autumn olive, and silky and gray dogwoods. Planted along farm lanes, field edges and around the farmstead, these shrubby hedgerows provide nesting cover to a dozen species of songbirds, and in the depth of winter, provide invaluable shelter to some 30 kinds of mammals and birds.

For the farmer, the hedgerows reduce soil erosion, and add beauty and privacy to the farm lanes and homesteads.
Grassy Cover

Proceeding to the more hilly upland part of the farm, we see the danger of soil erosion is greater. Gras sed waterways, roadside filterstrips, and diversion terraces collect rainwater from the adjoining cropfields and move the water gently down the slopes.

Planted to cool- or warm-season grasses and lespedeza, these strips produce food for wildlife. Their edges shelter nesting quail, mallards, and several ground-nesting songbirds. The white-tailed doe also finds the dense grassy cover an excellent location to hide her fawns.

We mow every other year, and then only after the nesting season is complete, to control the invasion of unwanted trees into the strips.

The farm pond ahead is just one of several built on Remington Farms over the past 27 years. The Soil Conservation Service provided engineering and design help. Cost-sharing was available from the county office of the U.S. Agricultural Stabilization and Conservation Service.

This pond is a deep, steep-sided pond managed for fishing. Stocked with bass, bluegill and catfish, the pond provides hours of fishing and swimming fun for the farm's employees and their children. Other ponds on the farm are managed for ducks.

Built shallow, 24 inches or less deep, the duck ponds are drained and planted to Japanese millet in late July, and then re-flooded in October to provide a
For the benefit of wildlife, nest boxes are used in many of the watery duck pasture. Thousands of ducks are attracted to the ponds, providing excellent hunting opportunities in the surrounding area.

Farm ponds provide water for livestock, conserve and replenish the ground-water table, and can serve as a source for irrigation water. Located near the farm buildings, they provide fire protection and can result in lower insurance rates.

**Waterfowl Rest Areas**

Besides the pond by the office, we set aside several other ponds on the farm as waterfowl resting areas. Because waterfowl concentrate in such large numbers on their wintering grounds, undisturbed rest areas are essential to good management. Such rest areas hold ducks and geese in the area and result in a more even hunting opportunity over the season.

Pond margins are planted to perennial grasses and legumes.
A shrub border separates the grassy edge from adjacent crop fields. Like the grassed waterways, this margin filters water entering the pond, extending the pond's life. Rabbits, quail, mallards and songbirds use the margin for nesting and escape cover. The variety of fish, insects, amphibians and turtles that make a farm pond home provide an excellent food source for other wildlife that hunt at the ponds—osprey, great blue and little green heron, egret, tree swallow, and raccoon are but a few. What better place to spend a moment or two, binoculars in hand, watching wildlife?

Driving on, we pass a crop field put into the 1983 cropland retirement program, PIK. Planted to a clover and grass mixture to provide protection and nitrogen-fixing for the soil, these fields will be excellent nesting areas. Also, good “bugging” areas for the quail and wild turkey chicks—where they eat insects.

Timber Improvement

Returning to the flatter bottom land, we pass one of the several woodlots on Remington Farms. Most of our trees are young, 5 to 10 inches in diameter. The forests on the farm were cut for timber repeatedly by the previous owners.

The trees are too small to harvest for lumber, and too young to produce many fruits and acorns for wildlife, so we are improving the timber stand in these woodlots with the advice of the State forester. Cutting firewood, we remove poorly shaped trees, freeing better quality trees for faster growth—and greater future income.

This thinning lets in more sunlight to the forest floor. Succulent grasses and herbs, berry bushes and seedling trees grow in the sunlight, providing food and shelter to white-tailed deer, wild turkey, and woodcock.

These young trees lack the cavities, usually found only in more mature woods, that are the homes of squirrels, bluebirds, screech owls and other cavity-nesters. So each winter we build a few nest boxes, and erect them in the woods and on the woodland edges.

Last stop on the tour is my home. The homestead site is the one location where every farmer can fit wildlife into the farming operation. Using a variety of flowering and fruiting shrubs and deciduous and conifer trees, we've made our home more attractive not only to ourselves, but to wildlife. The mockingbird wakes us in the morning and the mourning dove puts us to sleep at night.

Falcons Move In

The nest box I put up in the rafters of the pole barn was intended to attract a barn owl. They are rare here. But a pair of kestrels (falcons) moved in. That's OK. I'll just put another box up this winter for a barn owl.

The spruce and fir tree windbreak on the northwest side of the lot deflects winter winds.
Crop fields are tilled using conservation tillage. Crop residue left on the soil surface reduces erosion and holds moisture for the new crop.

The experts tell me a well placed windbreak can reduce the winter fuel bill as much as 30 percent. I do know the windbreak is the nesting site preferred by mourning doves.

Doesn't integrating wildlife into the modern farming operation take time and generate added costs? Yes.

The question of time is easiest to handle. Plan ahead, and do a little each year. The well-managed farm is a lifetime's work, frequently the lifework of several generations. It is amazing what can be accomplished in just 27 years.

Hunting Offsets Cost

The question of cost is more difficult. Deer damage corn and soybeans, geese graze the winter wheat. And despite my best efforts at fencing, rabbits eat the
green bean plants in my garden each year.

But the damage is not excessive. Allowing hunting on the farm serves to keep the wildlife populations in check, and can generate added income. In portions of the United States, hunting is a major industry.

Here, on Maryland's Eastern Shore, waterfowl hunters pay as much as $100 a day for the privilege to hunt. Farmers commonly earn $10 to $15 an acre per year on leases for hunting rights.

The cost of developing and setting aside wildlife habitat can be kept low. Use the free technical assistance available from the State fish and wildlife agency and the local office of the Soil Conservation Service.

Identify the critical areas on your farm that are subject to excessive soil erosion. Consider growing wildlife, not crops, on these acres.

Take advantage of the cost-sharing available for many conservation activities through the county office of the Agricultural Stabilization and Conservation Service.

Make sure these conservation practices are designed to do double duty. Frequently the benefit derived from a practice that reduces soil erosion is sufficient justification for its cost. The added benefits that accrue to wildlife can be free.

Then every farm will provide a good life for wildlife.
cover for ground-nesting wildlife.