



## Saving Virginia's Wild Quail

Story by Douglas M. Dear  
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The Northern Bobwhite quail, also known as the Virginia quail or more formally as *Colinus virginianus*, has since colonial times been one of the most popular game birds in Virginia, or for that matter the United States. The bird is well known for its distinctive “bob white” call and its explosive flight when flushed. Hunters prize its delicious meat and bird watchers prize its strutting and flushing antics and beautiful plumage. There is no question that the quail is a favorite of many, and there is also no question that the population of quail in the Commonwealth has declined precipitously over the last 30 years.

The reasons for the decline in the quail population, which is a nationwide problem, run the gamut from changes in farming practices and urban sprawl to increases in predators. Many scientists even believe that the widespread increase in fescue grass has had a major effect—it is too dense to allow the chicks to pass

through its blades and it also crowds out the weeds that provide seeds that are an important part of the quail’s diet. Others contend that the decline in the aggressive hunting of the quail’s natural predators such as the fox and the federal protection of hawks and eagles have contributed to the decline. Still others think that pesticides and herbicides or acid rain have caused the problem. The one thing that all the experts do agree on is that the bobwhite is a delicate bird that is affected negatively by many if not all of the above issues.

Marc Plunkett, a Virginia Department of Game and Inland Fisheries (VDGIF) scientist, who specializes in quail and is one of the lead authors of the Virginia Quail Action Plan, puts it in simple terms: “Virginia quail are birds that have always survived on the edges and there are a lot less edges for them today.” At the turn of the century “open agricultural land comprised about 80% of the total land in Virginia, but today it is only about 33%,” notes Plunkett.

It is his belief that this dramatic loss of habitat has led to the decline in quail population. And while the exact number of quail in Virginia is difficult to determine, the number of quail harvested by hunters is not. The harvest figures are tracked through the hunting-license system. In the 1960s and '70s more than a million quail were routinely harvested each season. By the '80s the number had declined to about 300,000. Since the year 2000 we have harvested less than 70,000 quail a year.

VDGIF, in recognition of the serious nature of the quail decline, has formed a quail focus group made up of members of the state game commission board, conservationists, sportsmen and even former Governor Linwood Holton. Bill Wilson, a former member of the House of Delegates and lifelong quail hunter, is a member of this focus group. He sees the problem as more than habitat alone. “We are trying to bring all possible solutions to the table to reverse the decline of quail in the Commonwealth,” Wilson explains. It is his belief that factors such as pesticide combinations and acid rain could be playing a role in the decline.

Wilson is trying to win support for a comprehensive environmental baseline study. This study would attempt to measure factors such as seed type and dispersion (quail food source), chemical makeup of dew (a major water source for quail), quantitative habitat measurement (quail housing) and predator density. It is Wilson’s contention that without a baseline study it is difficult to see where all the changes are taking place and what is at the root of the population decline.

Wilson’s assessment meshes well with some of the work being conducted at the Rolling Plains Quail Research Ranch in Roby, Texas. The ranch is a 4,700-acre quail haven that serves as one of the nation’s premier quail research centers. Rolling Plains is studying a variety of factors affecting quail populations. They are even looking into the correlation of mouse popu-





Male and female Bobwhite Quail



A newly hatched Bob White chick



The author working his dog Enzo in 10 acres of planted quail cover at Rose River Farm. (Photo by Ed Felker)

looking into the correlation of mouse population to quail population. The concept is simple but ingenious. Quail and mice have many of the same predators (fox, hawks and snakes) and also incorporate many of the same seeds as part of their food source. Interestingly, the mouse population has also seen a decline.

Plunkett is intrigued by a comprehensive study and the work that is going on at Rolling Plains. The bulk of the funding for Rolling Plains has come from wealthy sportsmen, and it would certainly be wonderful if funding could be found for a similar center in Virginia. But until that happens, Plunkett is primarily focused on quail habitat improvement. “Even if we determine that there are external factors

such as pesticides, other chemicals or acid rain that are negatively impacting quail populations, the birds will still need habitat to survive,” notes Plunkett. It is hard to argue that improving quail habitat can have anything other than a positive effect on quail, and it also benefits other wildlife.

When asked what the average land owner can do to help quail, Plunkett has some very specific ideas for land owners of all sizes, but particularly those with 30 acres or more as that is the typical amount of land required to hold one covey, typically 10-24 birds.

Convert fescue fields into warm-season native grasses—this provides both better living habitat as well as more food for quail. Bluebirds and finches will also benefit from native grasses.

Hedgerows and fence rows should be left to grow and bush-hogged only every other year. Quail like cover that is no more than a baseball throw from clump to clump for predator evasion. Predator protection is very important for successful quail habitat. Do less bush-hogging of fallow areas in the fall. Fall mowing creates sparse bird cover for the entire winter; instead mow in late February. If possible leave some areas that are not bush-hogged at all.

When possible, use a disk to control undesirable weed and vegetation growth instead of a bush hog, as open dirt promotes desirable weeds and warm-season

grass growth. Even better, use these areas to plant food-plot seed mixtures designed for quail.

Use controlled burning as a measure to increase the diversity of warm-season species and as a way to control the growth of undesirable non-native plants such as kudzu and tree of heaven.

As a quail-hunting guide once told me, “Quail are nature’s cheeseburger—a perfect fast food that almost every predator likes to eat.” When you combine increased predator populations, shrinking ideal habitat and changing farm practices with a variety of pesticides and acid rain, a difficult, complex equation is created that is impossible to resolve with just one simple solution. Certainly more research is needed, and ideally more funding, to create a major Virginia-based quail research center like Rolling Plains. For more information on what you can do to support quail in Virginia and around the country please go to [www.dgif.virginia.gov/quail/](http://www.dgif.virginia.gov/quail/), [www.quail-research.org](http://www.quail-research.org) and [www.quailunlimited.org](http://www.quailunlimited.org).

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