The newsletter about restoring, managing and protecting wildlife habitat. Summer 2013



Barn swallows. (Photo courtesy of Bill Hubick)



Habitat Works is published by Chesapeake Wildlife Heritage, a 501(c)(3) nonprofit conservation organization dedicated to restoring, managing, and protecting wildlife habitat and establishing a more sustainable agriculture, through direct action, education and research, in partnership with public and private landowners. We welcome your comments and contributions.

CWH Wetland Restorations are for the Birds...and More!

by Ned Gerber, Director/Wildlife Habitat Ecologist

hesapeake Wildlife Heritage was fortunate to restore 86 acres of shallow emergent wetlands in 2012. Approximately 46 acres of this will be underwater seasonally while I would classify the other 40 acres as wet meadow/buffer, which we planted to native warm-season grass as part of the restoration.

One of the great aspects of the US Department of Agriculture's Conservation Reserve Enhancement Program (CREP) is the "CP-23 Wetland Restoration". (Remember that the Farm Bill programs are paying for almost ALL of the habitat restoration you see going on in the landscape.) It allows the landowner to restore wetlands and enroll an acre of upland buffer for every acre of wetland soil restored. This makes it relatively easy to restore some nice chunks of habitat on farms where the soils are right. In many instances there will be a 15-acre field on a farm with perhaps 10 acres of hydric soils. In these instances we would create a shallow emergent wetland on 10 acres and enroll the five upland acres as buffer.

People are most familiar with the floodable portions of constructed wetlands from sites CWH has restored; such as CWH's Bennett Point Farm and Canterbury Farm or at Pickering Creek Audubon Center (PCAC) where CWH has restored 75 acres of wetlands. Typically most of these areas dry up in the summer and produce a thick growth of moist soil-loving plants like foxtail, wild millet, tickseed sunflowers, smartweed and fall panicum. Then in fall they slowly re-flood, as rainfall permits. At first the vegetation is so thick one can't see that the plants are flooded but over time weather and birds tear them up. By March many of these shallow marshes look like open-water ponds despite being only 2"-18" deep on average. The same thing happens in the natural freshwater marshes, such as in the Tuckahoe River, where the herbaceous vegetation is thick in fall (almost impenetrable, especially where tearthumb grows) but has vanished by February!

The birdlife using these restored, shallow marshes in the fall/winter/spring can be spectacular depending on the amount of human disturbance the site is subjected to.

Typically, eight puddle duck species are seen as well as mergansers and ring-necked ducks. Good diversities of shorebirds occupy the bare mudflats in the spring as the wetlands dry up. Dragonflies, damselflies, butterflies, bats, barn swallows, purple martins, and more

(continued on page 2)



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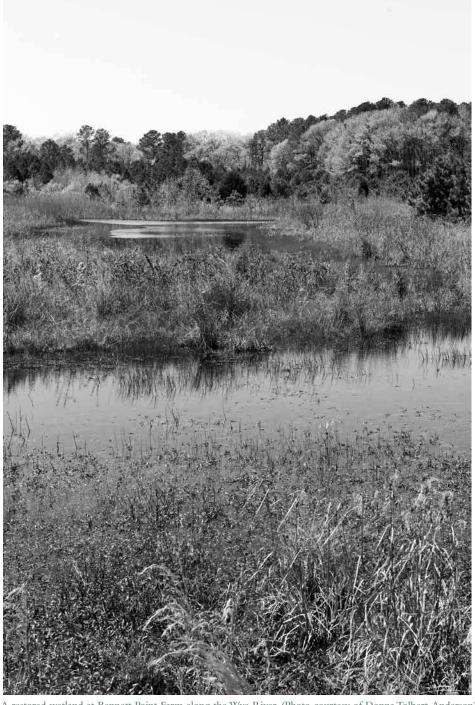
(Wetland Restoration continued from page 1)

also make good summer use of these sites. These restored wetlands are wildlife diversity hotspots in the sea of Delmarva agricultural monocultures (corn, beans, and wheat).

Most of the wildlife research shows that larger wetlands are better for breeding—and wintering—wildlife numbers and diversity. CP-23 allows CWH to take advantage of wet, farm fields to build some larger wetlands that provide good benefits to the wildlife resource. The large wetland effect is evident in terms of holding migratory birds in a sanctuary at places like CWH's

Canterbury Farm, Barnstable Hill Farm, and Bennett Point Farm and at PCAC, as when sensitive waterfowl species are flushed occasionally from one wetland they simply make a short flight into one of the other nearby wetlands.

This past winter I had the good fortune to be walking with my Brittany spaniel in a restored wetland that had been allowed to become shrubby with native Southern wax myrtle, as well as "waterbush" (Baccharis halimifolia), and a mix of native grasses and forbs. The dog went on point and I



A restored wetland at Bennett Point Farm along the Wye River. (Photo courtesy of Donna Tolbert-Anderson)



CWH's Canterbury Farm has 100 acres of restored wetlands. (Photo courtesy of Donna Tolbert-Anderson)

suspected that there was a woodcock there under a shrub as they had been dancing in this field since the end of January. Sure enough as I walked in on the point up fluttered the "mudbat". However, the dog stayed on point and then slowly crept in to the flush site sniffing the ground heavily. To my delight there was a woodcock nest with 4 brownish eggs! The eastern population of woodcock and other early successional wildlife has been declining as this habitat type has faded from our landscape. CP-23 is a cost-effective way to restore and maintain early successional habitat.

One of the best ecological aspects of the CP-23 rules is that the rules are very flexible in regard to allowing natural succession on the site or establishment of habitats from seed or seedlings.

In this way, one can grow and then maintain shallow-emergent wetlands, wooded wetlands, grasslands, and scrub/shrub habitats all on the same site. This makes it relatively easy to manage for waterfowl, shorebirds, grassland sparrows and migratory woodcock in the same 15-acre field.

Almost ALL of the wetlands and buffers you see being installed are being paid for by the USDA with some assistance at times from the MD Department of Agriculture and the MD Department of Natural Resources. In an age when everything is "on the table" in terms of potential budget cuts, we need to realize that the great majority of conservation work in Maryland (and the country) is paid for by the government. Most of the work done on farmland is covered by the USDA through the Conservation Reserve Program, the Conservation Reserve Enhancement Program or the Wetlands Reserve Program.



Monarch on tickseed sunflower.



Tree Swallows using a CWH nesting box. (Photo courtesy of Donna Tolbert-Anderson)

Maryland's wildlife will be impacted by wind energy due to existing turbines as well as the recently approved plans for an offshore system in the ocean. CWH thought it would be interesting to consider the concerns of a well-known bird conservation group on the topic.

The following article is reprinted from the American Bird Conservancy (ABC) website, with their permission.

American Bird Conservancy's Policy Statement on Wind Energy and Bird-Smart Wind Guidelines

"American Bird Conservancy supports wind power when it is bird-smart, and believes that birds and wind power can co-exist if the wind industry is held to mandatory standards that protect birds."

Wind power is the fastest developing source of energy in the United States and can be an important part of the solution to climate change. However, wind farms can kill birds through collisions with turbines and associated structures, and also harm them through the loss of habitat that birds need for survival. A 2008 Department of Energy report calls for the U.S. to generate 20% of its electricity from wind by 2030. By then, wind turbines are expected to be killing at least one million birds each year, and probably significantly more, depending on the final scale of wind build-out. Wind farms are also expected to impact almost 20,000 square miles of terrestrial habitat, and over 4,000 square miles of marine habitat by 2030, some critical to threatened species.

Some of the most iconic and vulnerable American birds are at risk from wind industry expansion unless this expansion is carefully planned and implemented. Onshore, these include Golden Eagles, Whooping Cranes, sage-grouse, prairie-chickens, and many migratory songbirds. Offshore, Brown Pelicans, Northern Gannets, sea ducks, loons, and terns are at risk, among other birds.

American Bird Conservancy supports wind power when it is bird-smart, and believes that birds and wind power can co-exist if the wind industry is held to mandatory standards that protect birds.

Bird-smart wind power employs careful siting, operation and construction mitigation, bird monitoring, and compensation, to reduce and redress any unavoidable bird mortality and habitat loss. These are issues that the federal government should include in mandatory wind standards. For terrestrial wind farms, bird-smart wind should address:

1.Siting: Bird-smart wind power (including wind farms and associated infrastructure) is sited to prevent harm to birds, ideally in already altered habitats such as farmland, and avoids sensitive areas. Examples of such areas may include migratory bottlenecks, wetlands, raptor concentration and key nesting areas, the edges of ridges used by migrants, key habitat or flight paths for endangered or declining species, breeding concentrations of species that avoid tall structures (such as some grouse species), and in or adjacent to Important Bird Areas. Maps with detailed data on wildlife are currently being developed by conservation groups for use by the wind industry. Pre-construction assessments should always be conducted to confirm whether a particular site presents an especially high risk to birds. Some areas are not going to be suitable for wind development.

2.Operation and Construction Mitigation: Bird-smart wind power uses the best technology and management practices to avoid and minimize harm to birds, such as by burying transmission lines in high risk areas, following Avian Power Line Interaction Committee standards for above-ground transmission lines, using lighting that minimizes nighttime migratory bird collision mortality (such as strobe lights), using unguyed rather than guyed meteorological towers, and restoring habitat disturbed by construction, e.g. by replanting native vegetation (or restoring the site if the wind farm is decommissioned).

3.Monitoring: Bird-smart wind power employs effective, federally reviewed and approved, site-specific, pre- and post-

construction studies/assessments to assist with improved siting and operation, and to properly quantify impacts. Pre-construction assessments must provide sufficient data to assist with micro-siting (e.g., by the use of radar to detect local migration patterns), create an annual baseline against which post-construction studies can be evaluated, use all existing available bird study data, and be conducted during months when bird use can be expected to be at its peak at the selected site. Post-construction studies must employ mathematical models that best account for variations in local conditions and the relative difficulty of locating bird carcasses in different habitats, as well as any scavenging by predators that may reduce the number of carcasses found (for example) and run for at least two years (and long enough to determine the efficacy of, and make needed revisions to, operational mitigation measures).

4.Compensation: Bird-smart wind power redresses the loss of any birds or habitat unavoidably harmed by construction and operation, including deaths caused by collisions with turbines and their associated power lines, and lost or degraded habitat (e.g. areas of abandoned habitat) to a net benefit standard. Such compensation could include acquiring additional land for the National Wildlife Refuge system, or other off-site habitat conservation projects.

Although offshore wind power is not yet operational in the U.S., an analogous set of siting, operating, and compensatory measures need to be developed to make it bird-smart.

All wind farms should have an Avian Protection Plan which includes American Bird Conservancy's bird-smart principles, and a means of implementing them and tracking and reporting on this implementation. Wind farms should also comply with relevant state and federal wildlife protection laws such as the Endangered Species Act, Migratory Bird Treaty Act, Bald and Golden Eagle Protection Act, and National Environmental Policy Act.

Property Profile Update: Bailey's Neck Farm

hesapeake Wildlife Heritage's
Bailey's Neck sanctuary is 135
acres located in Talbot County,
Maryland. The property consists of 110
acres of wooded wetlands as well as 25 acres
of restored, shallow-emergent wetlands.
In 2010, CWH donated a conservation
easement on the property to permanently
protect the wildlife habitat on the property
from development and conversion to
agriculture.

Originally, the property was established by the Bailey's Neck Park Association. In the late 1970's a group of residents on Bailey's Neck sought to prevent further development on the neck. The group successfully got some parcels donated while they purchased others. When the Bailey's Neck Park Association closed its doors, they passed the property to the Chesapeake Bay Foundation (CBF). CBF donated the property to CWH. We are appreciative of the commitment of the local residents to save this part of Talbot County and to CBF for their donation of the property to CWH.

During the summer of 2012, a simple viewing blind was constructed on the restored wetlands. The blind allows CWH guests to view the wetland without disturbing the wildlife. It is dedicated in memory of Mrs. Martha Ann Healy. Mrs. Healy was a committed environmentalist and philanthropist who helped CWH create the Canterbury Farm wildlife sanctuary just east of Bailey's Neck Farm. (The blind is only open for scheduled visits.)

When Bailey's Neck was donated to CWH our immediate interest was in converting the wet farm fields into marshy wildlife habitat. As the land is flat, we accomplished this by encircling the field with a low, earthen berm, which prevents rainfall from escaping the site until it floods the entire field area. The water can only exit through a water depth regulating control structure and/or emergency spillway.

Unfortunately, the seed bank of the field contained many invasive pears, which are common in this part of the county and famous for their tire- (and skin-!) puncturing thorns. These hybrid trees have spread successfully because birds love their tiny fruits and spread them around each fall and winter when they feed heavily on the fruit. Oh, and of course, deer don't destroy the pear seedlings as they do with most desirable trees!

Now you might think, as we did, that by flooding these pear seedlings they would wither and perish under the anaerobic soil conditions that drive wetland soil chemistry. Amazingly, they took us to school where we learned firsthand that many of them could not only survive being inundated for 8–9 months of the year but also put on new growth during the brief dry spell they encountered during the summer (when they were no longer in standing water). As a result CWH spray crews had to put in many hours spot spraying these invasive pests, which we now have under control in the wetland.

CWH restored 25 acres of wetlands at our Bailey's Neck Farm near Easton, Maryland. (Photo courtesy of Donna Tolbert-Anderson)

Nesting vultures loafing in tree next to barn at Bailey's Neck Farm. (Photo courtesy of Donna Tolbert-Anderson)



All of the time and energy put into restoring this wetland have been well worth it as migrating and wintering wildfowl make good use of the site; as do other wetland critters. It's great fun to go there in May when the bulk of the woodie broods are active to see them feeding. We have also encountered nesting coots and purple gallinules on the wetland, which are unusual for Talbot County.

Of course, one first must pass the old barn which we preserved, as the upstairs hay loft has long provided nesting habitat for turkey vultures.

By restoring this hydric farm field into a shallow-emergent wetland CWH has added greatly to the wildlife and wetland habitat diversity of the Bailey's Neck area. So while the warblers and wild turkeys use the older wooded wetlands on the majority of our Bailey's Neck preserve, we were able to carve out a small area for the shallowemergent, wetland-loving wildlife, as well. Almost all of the non-tidal freshwater wetlands in the county would have historically been wooded and what we have done at Bailey's Neck is essentially create a large beaver meadow. However, we should point out that our efforts to build wetlands pale in comparison to that of these large rodents who are undoubtedly nature's best wetland creators.

Welcome to New Members

Chesapeake Wildlife Heritage would like to extend our sincere appreciation to the 48 new members who joined CWH in 2012.

William A. Anderson

Dennis M. Baker

Dirck Bartlett

John R. Bowden

Neil W. Brayton

George D. Bruch

Caroline Co. Bird Club

Constellation Energy

Randy Cook

Delaware Community Fdn.

Charles L. Diventi

Bruce Dorries

George R. Drake

Marshall H. Durston

Jay S. Eastman

Mary Fiedler

Michelle Follet

Stephen W. Fye

Ralph Hawkins

Jerome T. Hengemihle

Francis J. Hickman

Robert Wood Johnson Fdn.

Timothy G. Jones

K9 Cart Company

John F. Kevill

Farokh Kheradi

Heather A. Klink

Arthur Lerner

George C. Matisick

Lisa Mayo

David E. Menotti

Larry R. Miller

Heather R. Mizeur

Scott D. Paseltiner

Curt W. Ramsey

Jean L. Risner

Beth H. Saint-Louis

Maria C. Schwartz

John W. Scott

Cynthia Sears

Marc Slavin

Andy Smith

Tom Stevenson

Craig Stout

Hugh Talton

W. David Taylor

John Thacker

William Witowsky

Ask Andi:

Questions and answers about wildlife by Andi Pupke, Education and Outreach Director

Q: There has been a great deal of fox sightings around our neighborhood; people are seeing them out during the day. We are concerned that they may become a nuisance to folks who are walking their dogs or children playing outside.

A: I would not be worried about a red fox if it looks healthy and does not act strangely. The red fox (Vulpes vulpes) is on the rise in suburban areas. It is not unusual to see a fox out during the day as they are commonly active both night and day particularly in the spring when they have young to feed. Like other less sensitive



wildlife (white tail deer for example) red foxes can live in fragmented habitats that have been heavily altered by human activity. They can survive on a wide variety of foods from rodents and birds to insects, fruits, vegetables, nuts and even earthworms. This makes them more adaptable to changes in their environment than many other critters.

Today the red fox is one of the most widely-distributed carnivorous mammals in the world. They prefer fields, hedgerows and woodland edges over dense forest habitat. Many foxes have moved from rural areas to more urbanized places due to loss of open habitats to development. They do move around a great deal and do not stay in one den throughout the season.

If the fox looks unhealthy it does not automatically indicate that it has rabies. Foxes can often be infected with Sarcoptic mange. Mange is caused by a mite (Sarcoptes scabiei) which burrows into the outer layer of skin, causing intense skin irritation. This can cause fur loss and can lead to death in severe cases. Mange can be transferred to pet dogs that have direct contact with the infected fox or other mammal. If you suspect your dog has been in contact with an animal that may have Sarcoptic mange, it is best to contact your veterinarian.

A red fox can also be infected with rabies but most will die too quickly to spread the disease to other animals or humans. They also fall victim to canine distemper and heartworm. Any wild mammal that appears sick or is acting abnormally should be avoided.

A healthy fox poses virtually no threat to pets or people. They live very well in suburban settings and adapt to people rapidly. If you are fortunate you may see a group of them (usually a mother with her kits), which is known as a "skulk". For many of us who live near red foxes the most troubling thing they do is scream bark at night, which tends to wake up people and their pet dogs during the wee hours of the morning.

Wildlife Profile: Effect of June 2012 Derecho on a Local Purple Martin Colony

By Andi Pupke, Education and Outreach Director

hen a damaging storm occurs, people are not the only ones who can be harmed. The derecho that hit Maryland's Eastern Shore on June 29, 2012 also greatly affected the Purple martin colonies that CWH manages.

The derecho was one of the most destructive complexes of thunderstorms in memory. It was packing wind gusts of 60-80 mph and produced extensive damage, most notably to trees.

Also called a line storm because it moves in a straight line, a derecho is a wide-spread, long-lived wind storm that is associated with a band of rapidly moving showers or thunderstorms.

The storm hit CWH's Barnstable Hill Farm near Chester, Maryland around 11:30 at night and caused the pole that held two martin houses to fall over. The timing of the storm was very important because not only did we lose all 55 of the young martins that were in the nesting cavities, but we most likely lost many of the adults, as well. Adults often roost in the nesting cavity with their young at night, and they develop a strong loyalty for the nest site, or "Site Fidelity."

If a colony is well maintained and the martins do not suffer reproductive failure, they will return year after year to the same site. In most cases nesting failure is caused by a predator, such as an owl or snake, but in this case the storm may prevent martins from nesting at this site for many years to come. Even if some of the adult martins

These Purple Martins are dining on dragonflies at a CWH managed colony on Reeds Creek near Centreville, Maryland.



survived the storm they will most likely not return to this site. As a result we will have to wait for new martins to find the new houses on this property.

While some of the colonies CWH manages only lost a few chicks during the storm, the loss of the colony in Chester may not have been preventable. Although CWH uses heavy poles that are securely fastened to all supports, the strength of this storm took us by surprise. If we had known how strong the winds were going to be, we may have lowered the house but that could have increased the likelihood of predation over night. CWH is hopeful that we can build up the martin colony again but fear that it will take more than a few years to achieve the size of the colony that was there before the storm.

AN ADDED NOTE: As of June 12, 2013 there are seven martins at this site—four males and three females with three nests in progress, containing a total of 13 eggs. As we were not expecting any martins there this year, this is a very good surprise!



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DAP and MAP: A Case for More Reasonable Use

by Michael Robin Haggie, Agricultural Wildlife Ecologist

isit a commercial agricultural service provider and you will find that MAP or DAP feature heavily in the fertilizer blends for corn and soybeans, which are the major agronomic field crops grown here on the Eastern Shore and indeed in the United States.

So what are these materials? DAP is an acronym for its chemical name, di-ammonium phosphate, and MAP is mono-ammonium phosphate. Their analyses are DAP 18-46-0 and MAP 11-52-0. Each figure represents the percentage by weight of nitrogen, phosphorous and potash respectively. Thus, there are 360 lbs. of available nitrogen per ton of DAP. Phosphorous is expressed as P_2O_5 and potash as K_2O .

Simply put, both soy beans and corn need nitrogen, but modern corn varieties need high levels of applied artificial nitrogen in order to be productive. They are like the thoroughbreds of the race horse industry compared with their wild cousins on the Mongolian Steppes or more germanely, the native Teosinte grass (*Balsas teosinte*) of Mexico, the ancestors of which were domesticated some 8,700 years ago.

The soy plant (*Glycine soya*) has a similar ancient history. Early domestication occurred in eastern Asia some 5,000 years ago (BCE). The wild soybean ancestor was an annual twining vine with small, narrow, trifoliate-oblate leaves, small purple flowers and small, round, dark-brown seeds; a long call from our modern *Glycine max*.

Soybeans can manufacture and utilize their own nitrogen with the aid of symbiotic bacteria¹ Applied in any form nitrogen (N) must be converted by soil micro-organisms (bacteria and fungi²) to nitrate (the process is called nitrification) in order to be utilized by the plant. According to the University of Maryland's Department of Agronomy, soybeans do not need any additional nitrogen in the form of dry fertilizer. So why are we applying DAP or MAP to both

'Root nodules occur on the roots of plants (primarily Fabaceae) that associate with symbiotic nitrogen-fixing bacteria. Under nitrogen-limiting conditions, capable plants form a symbiotic relationship with a host-specific strain of bacteria known as rhizobia.

http://en.wikipedia.org/wiki/Root_nodule

²**AM fungi** (AMF) help plants to capture nutrients such as phosphorus, sulfur, nitrogen and micronutrients from the soil.

full-season and double-crop (those planted after winter barley or wheat) soybeans and not just phosphorous and potash, when the research tells us it is not needed? And when dry granular fertilizer (MAP and DAP) is spread on soybean fields, what is the fate of the nitrogen component? Furthermore, according to the Fertilizer Brokerage website, DAP (with a higher N content) is an inferior product anyway (**see note at end for a more in-depth explanation).

If the plant doesn't need it, then why apply it? One reason is that fertilizer dealers only have limited storage space so it is easier to stock just one analysis, which can also be used in other blends for corn, rather than have "shelf" space devoted to two or more products. Furthermore, timing of application is all important as to whether the N will be used by the plant or lost to volatilization or runoff. This relates to temperature and moisture.

Much of the DAP on the Eastern Shore may be applied well ahead of the soybean crop; up to four or five weeks. In the Midwest DAP is regularly applied in the fall. Now, if the weather is warm and moist, 70-80% of that N may be lost. That is not conservation; but all the literature I read is about conserving N for the farmer's pocket book. Now where was there any mention of the deleterious environmental effects of unused N in the environment if it is inappropriately applied? One can estimate the full-season soybean acres in Queen Anne's County alone at approximately 30,000 acres, deducting winter-wheat acres from total planted acres (2011 data). Using DAP, a rate of 11-18 lbs. N/ac may be applied (up to 50 lbs. is permitted under current MD Nutrient Management Plans), which translates into 165-270 tons N per year. However, for the critic's sake, let's take a more conservative range of 6-12 lbs. per acre, which is still 90-180 tons N per year; and, to reemphasize, this is just one midshore county. No wonder there is a dead zone in the Chesapeake Bay.

Consequently this does not bode well for water quality in the Bay overall, especially if the material is applied well ahead of planting. Restrictions on the application methods of these fertilizer types should appear in Maryland NMPs, but they do not. There are arguments supporting

that a small amount of N does help a young soybean plant but the research is not there to back it up. Besides, the modern soybean is one tough plant and if there is adequate moisture for germination and early growth this plant actually benefits from stress at certain mid-growth stages. It will put out less vegetative growth and more pods containing beans.

Again, where does the unutilized N go? Down the ditch or through the soil profile and eventually out into our streams and rivers. There it creates algal blooms and clouds the water, eventually smothering the Bay grasses.

If you are a landowner and grow soybeans, talk to your farmer about what he or she is using on the crop. If it is DAP use MAP instead, at least. Better still ask for TSP (triple superphosphate) to be used, which has no nitrogen. As I have said, why put it on in the first place if it is not needed.

- ** Information from the Fertilizer Brokerage website reads:
- "...we find that DAP is decidedly inferior to MAP, first of all because it has a high PH, and it bonds with phosphate more readily than it bonds with the calcium that's in the soil, forming an insoluble tricalcium phosphate. And when that happens, then you lose the solubility of both your phosphorous and your calcium. So you end up being shorter."

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http://www.soyinfocenter.com/HSS/soybean_plant1.php

New Quail Programs in Virginia

By Austin Jamison, Blue Ridge Division Coordinator

or years Chesapeake Wildlife
Heritage has worked in partnership
with USDA conservation programs
including CREP, CRP, WHIP, and EQIP.
These programs have offered a strong
financial incentive for landowners to
take environmentally sensitive land out
of production and create quality wildlife
habitat.

In 2009, Virginia introduced a new Quail Action Plan. One key element of the plan was the establishment of five new private lands biologists located throughout the state to focus on bobwhite quail and early successional habitat. In conjunction, several new state wildlife Best Management Practices (BMPs) focusing on wildlife were funded. These are extremely useful financial incentives for landowners wishing to establish and improve early-successional habitats on their properties.

These BMPs are only available in 15 "target" counties including Augusta, Bland, Culpeper, Essex, Greene, Greensville, King, King Williams, Halifax, Madison, Orange, Queen, Rappahannock, Southampton, Sussex, and Wythe.

Landowners with at least five acres of pasture, hayfields or crop fields may be eligible for the "fescue conversion" practice (WL-3), which will cost-share spraying and planting of native warm-season grasses (NWSG) and wildflowers. The practice can be targeted solely to wildlife or can be hayed and grazed with certain restrictions and involves a five-year contract.

CWH can help select the most appropriate grass and forb species depending on the soils and goals of the project. Grazing is allowed but grasses must not be grazed below 10" and not after August 25. Both of these provisions increase the utility of the grasses for wildlife as compared to traditionally managed cool-season pastures.

CWH recommends that land currently in fescue first be sprayed in the fall and again the following spring before planting. The presence of invasive weeds such as Johnsongrass, bermudagrass or sericea lespedeza may require further sprayings.

The "field border" practice (WL-1) offers a range of options from natural succession to planting NWSG and forbs and adding wildlife-friendly shrubs. Unlike the USDA CP33 field border practice, this

Bobwhite Ouail. (Photo courtesy of Bill Hubick)



state BMP can be utilized on pasture and hayfields, not just crop fields and the practice must be maintained for five years.

The "idle field" option provides a small incentive payment to keep a field in a fallow, early-successional stage for three years. These habitats provide critical brooding and bugging grounds for bobwhite quail. The field must be sprayed, disked or burned initially, but if fescue or other grasses are the dominant cover, than herbicide must be used. Fields coming off of a row crop or small grain do not need any treatment. After the initial disturbance, the field is allowed to

deductible donation. We do the rest.

grow in annual grasses and forbs, which are a preferred food of bobwhite quail.

The Virginia Department of Forestry has also introduced new cost-share programs to benefit bobwhite quail. These programs target pine stands and offer various incentives for thinning, herbicide applications, and shortleaf pine planting—all components that can make pine stands more wildlife friendly by encouraging herbaceous plant growth in the understory. Thinning lets more sunlight reach the pine stand floor resulting in the growth of high energy quail foods such as partridge pea, ragweed, and beggar ticks.

CWH plans to establish more than 40 acres of bobwhite quail habitat utilizing these programs this spring. More than 1500 acres of quail habitat were created last year across Virginia using these programs.

CWH makes it a point to stay up to date with the various state and federal cost-share programs that can help landowners reach their wildlife habitat goals. Please contact one of our wildlife biologists to learn more about what you can do on your land for wildlife.

Yes! I would like to join with Chesapeake W	Wildlife Heritage to help	
build and preserve wildlife habitat.		
Name	\$30 Individual Habitat	

Name	
Address	Guardian
	\$50 Family Habitat Guardian
City State Zip	\$100 Habitat Protector
Phone	\$250 Habitat Sponsor
Email	\$500 Habitat Benefactor
Please send me information on the Planned Giving Pr	sogram. \$1,000 Habitat Conservator
	\$2 500 Habitat Steward
Please make your check payable to Chesapeake Wildlife H or charge to:	Other
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A CWH restored wetland at Talisman Farm near Grasonville, Maryland. (Photo courtesy of Donna Tolbert-Anderson)