Field Notes

A Lower Shore Land Trust resource for land managers, farmers, hunters, and naturalists

- Tidal and Non-tidal Wetlands
- Ideas for Soggy Farm Fields
- Restoring Northern Bobwhite Habitat
- Local Farmer Cultivating Native Seed
- Precision Ag and Soil Health

LOWER SHORE LAND

October 2022



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Our Mission: Lower Shore Land Trust protects and restores natural resources, wildlife habitat and working lands to support and connect healthy and vibrant communities.

CURRENT LSLT STATS Protected Acres of: Forest Wildlife Ag. 23,647.952 TOTAL ACRES PROTECTED

Staff Updates

Join the LSLT staff in saying a fond goodbye to Restoration Manager Suzanne Ketcham. Suzanne has been with us for four years and we loved having her as part of our team. We wish her the best in her next endeavor!

Please help us welcome our two newest members, Katerina Whitman and Kacie Larsen, Both are Chesapeake Conservation Corps Members who have been placed with LSLT for their service year. Katerina will serve as the Restoration Coordinator and Kacie as the Outreach Coordinator. We are excited to see all that they accomplish in their year with us!





Salisbury City Park: Treatment & Restoration

LSLT is partnering with the City of Salisbury on a grant to remove invasive species along the waterway within Salisbury City Park. This project includes hands-on training, creating a treatment and restoration plan, community-involved workdays, and the development of educational materials. The work being done under this grant has the potential to greatly improve the health of City Park, reducing the environmental and economic damage invasive species can cause as they take the place of our native species. By supporting the establishment of native plants, the City Park can serve as a demonstration of sustainable management while creating habitat for pollinators and wildlife.

Spotlight: Wetlands

Tidal Wetlands

Tidal marshes buffer stormy seas, slow shoreline erosion, and can absorb excess nutrients as they reach our estuaries. Tidal marshes also provide vital food and habitat for clams, crabs, juvenile fish, as well as offering shelter and nesting sites for several species of migratory birds.

One of the hardest working ecosystems on the planet is wetlands. There are two basic types; Tidal & Non Tidal.

Non-tidal Wetlands

Most prevalent along our Eastern Shore inner creeks and rivers is the Non-tidal Wetland. According to USDA non-tidal wetlands account for 94% of all wetlands in the US.

Wetlands provide a wide array of habitats and protect adjoining uplands during storm and flood events. In addition, they filter excess nutrients and from urban and agricultural runoff. Depending on the characteristics of the soil, wetlands can hold anywhere from 2" to 2-4' of water at any given time.

In agricultural areas, plugging ditches is a common practice which allows water to flow naturally through the restored wetland. Wetlands also provide depressions in the landscape to enhance habitat for migratory waterfowl, shorebirds, and amphibians. If you have wet or unproductive sections of fields, wetlands could be an alternative.



Pickerelweed (Pontederia cordata) by B. Sheppard

Elderberry



Elderberry is a good canopy shelter for Bobwhite Quail. It can tolerate wet and shady growing conditions.

Plant Highlights Mistflower, Wild Argeatum



Wild Argeratum is a fall-blooming herbaceous perennial that is nectar rich and pollinators love it.

Narrow Leaf Mint



Mint is both drought and rain garden tolerant. You can rub the leaves on your skin to serve as mosquito repellent.

The Value of a Wetland -



In early Spring, the Lower Shore Land Trust launched a partnership with Washington College's Natural Lands Project where we work closely with wildlife biologist Dan Small. Funded by a 2-year grant with National Fish and Wildlife Foundation, the goal of the partnership is to promote the restoration of native quail habitat and ag-field wetland creation. Beth Sheppard was hired as the new Agricultural Outreach Specialist to support this effort. Since March, LSLT has visited over 12 sites across three counties.

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One of the issues affecting our low-lying farms is salt water intrusion. An easily overlooked aspect of poor draining fields is previously installed ditches used for agricultural draining may now actually increase the transference of salt and other

nutrients into our farm fields. Doing away with drainage ditches is a hard sell for many long generational farmers. However, the alternative of plugging ditches and installing a healthy wetland gives farmers a fresh approach. Additionally, habitat for quail can be created in and adjacent to wet areas.



Both quail habitat and wetland establishment are popular practices for landowners interested in attracting wildlife to their properties. Other rewarding options include pollinator strips and hedgerows. If you are interested in learning more about how to get started planning habitat or wetland restoration, give Beth a call at 443-234-5587 or email her at bsheppard@lowershorelandtrust.org.



Experimenting with local seed mixes led to a specialized warm season grass mix. Since 2015 Dan Small has successfully installed habitat along the upper shore of Maryland through trial and error, selective burning, and light mowing. He now promotes a locally sourced planting plan for quail. Employing the seeds typical for our geographic region helps avoid the introduction of less desirable plants. For instance, this zone specific mix excludes the use of Panicum Switch grass and Big Bluestem. From his observations, tall grasses compete with valuable lower growing forbs. Currently, his prescribed mix includes "Little Blue Stem" which is easier to maintain and blends well with the site specific native pollinator seeds.



Sounds of the Bobwhite

Challenges to Protect the Nothern Bobwhite

The Bobwhite is an iconic ground dwelling species. They have potential for high reproduction, but can also be easy targets for predators. Both males and females incubate the eggs, and a single covey may have multiple nests. Regardless, studies claim survival beyond 1 year old is only about 20 percent. Bobwhite prefer running to flying and are smaller than a crow but larger than a robin. Bobwhite are readily able to lay multiple clutches of 12-15 eggs in a spring/summer brooding season. A newborn chick is "bumble sized" according to Ben Robinson from Kentucky Fish and Wildlife.

The bobwhite depends on disturbed meadow habitats. More recently, they tend to be found in open forests, hedgerows and scrubby areas that are burned or mowed to maintain the early successional habitat. One reason the Northern Bobwhite was a common part of old tenant farms is the mixed use and messy factor of plowed, planted, brushy, dusty, and shrub covered areas; a common standard for the historic Lower Shore farm.

Bobwhites are primarily seed eaters – over 1000 different



plants have been reported as part of their diet. 75% of their seed diet comes from annual plants such as foxtail, ragweed, legumes, and lespedezas. It's important that seeds can be consumed on exposed soil with overhead shrub cover acting like an umbrella. Pollinator plants quail enjoy for cover and a food source are: Spotted Bee Balm, Narrow Leaf Mountain Mint, Aster and Rudbeckia.

Access to 'bare ground' as well as cover options from predators such as rat snakes, raccoons, and foxes is crucial to counter bobwhite's high mortality rate. An additional concern is the increased predation by feral cats. Forestland raptors such as Cooper's Hawk also take a toll on the ground nesting bird, especially in marginal habitat near mature trees.



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I have seen quail become extirpated in all states north of us (NY, PA, and NJ) during my tenure, so it is up to us to 'hold the line' and make sure this species doesn't disappear from the Northeast region completely. There is no easy fix...but success can be found when dedicated partners and their resources work collaboratively to create suitable habitat across the landscape.

- Bob Long, MD DNR Wild Turkey and Upland Game Bird Project Manager



Restored Quail Habitat Helps Other Species Thrive

With monitoring efforts biologists recognize over 50 other bird species benefiting from restored quail habitat. Restoring native seed and perennial meadows can provide resources for other shrubland nesting species such as the Brown Thrasher, Northern Mockingbird, Northern Cardinal, Orchard Oriole and White-eyed Vireo.







Who is Helping?

Initial discussions about protecting the Bobwhite began decades ago, but early efforts met with limited success. In 2002 the National Bobwhite Conservation Initiative (NBCI) brought 28 states together with clear conservation targets. This single species program is a voluntary collaboration of all states involved. Modified priorities and methods now lead to regions of success. Over 600 biologists were charged with mapping and locating habitat opportunities for restoration. Part of their survival and replenishment requires landowners and volunteer programs to 'think like a quail'.

A Guide to Quail Habitat

Success = PATCHES of Various Structures in our Landscape

GRASSY FORB COMMUNITIES

This cover includes upright annual and perennial grasses and forbs. Grasses such as Little Blue Stem, annuals such as partridge pea, and perennial pollinator plants such as common milkweed and boneset are great options. This layer is also known as "open cover"

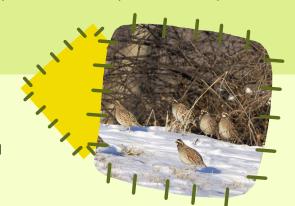


SHRUBBY PROTECTIVE COVER

A brushy thicket should comprise 20-30% of the habitat and patches should be about 50-feet from each other. These areas provide cover and protection from predators.

BARE DISTURBED GROUND

An essential component is bare ground with plenty of dirt for scratching and seed picking. Prescribed/controlled burns allow sunlight to reach the ground improving mobility for young chicks.



"Local Farmer Protecting Native Seed"

by B. Sheppard

We trailed behind the farmer's truck, winding along a parched corn field; the forest edge obstructing our peripheral views. Rounding the corner, we parked and stepped into a secluded patch of pollinator heaven. Despite the lack of summer rain this one-acre plot is thriving. Spotted Bee Balm (Monarda punctata) grows best in dry sandy soil.

Local farmer, Brooks Clayville is not in this for the money and today he shared the results of his 13 years of labor and dedication. It takes two growing seasons to get a first crop. There is no harvest guarantee, and crop return can range from 0-10 lbs. per acre. Today abundant pollinators buzz, dipping in and out of this hidden gem.



LSLT staff with Clayville in Spotted Bee Balm patch

Clayville began sourcing seeds from native patches he discovered throughout the county. It is a patient man's project. He carefully manages the tree saplings and weeds; especially avoiding Pig weed (*Amaranthus retroflexus*) due to the similar small seed size. If the harvest has any contamination, it will be rejected by the large seed company who buys his product. Little Blue Stem grass is acceptable growing with the monarda since the combine harvester can sort the different seed sizes. The fragrant monarda not only attracts bees and butterflies; also on this plot Clayville has seen northern bobwhite quail.

We support and applaud the efforts of local seed sourcing. These efforts are vital for our future pollinator meadows. They will deliver more drought tolerance, seed vigor and sustainable adaptation.

Precision Agriculture: Healthier Soil and Higher Crop Yields

by Frank Deuter

There are many different practices that can be implemented on your farm to improve soil health.

Interseeding is a method that uses a special seeder to plant in-between the rows of your cash crop. Interseeding crops is a great way to increase ground cover in your fields throughout the year, while decreasing the amount of herbicide used during the growing year

With modern technology, the use of variable seeding and spraying has become a staple on farms. Not only do these methods save money, but they are also great for the environment by reducing the amount of nutrients and chemicals used.

Avoiding compaction to your soil is another essential practice. Compaction not only increases water runoff, it also increases wear and tear on equipment and reduces yields. Try using methods that reduce compaction such as cover crops, no-till seeding, using cover crop rollers on seeders, reducing driving on fields when possible.



Interseeder

The use of cover crops is extremely important to soil health. Maximizing ground cover provides multiple benefits: increased yield, reduced compaction, increased nutrients like nitrogen, reduced nutrient runoff, carbon sequestration, and reduced erosion. Popular cover crops on the Eastern Shore are rye, wheat, barley, red clover and oilseed radish.

For more information on soil health and available cost-share programs, call or visit your local Natural Resources Conservation Service (NRCS) office.

NRCS Worcester County 304 Commerce Street Snow Hill, MD 21863 (410)-632-5439 NRCS Wicomico County 2322B Goddard Parkway Salisbury, MD 21801 (410)-546-4777 NRCS Somerset County 30730 Park Dr. Princess Anne, MD 21853 (410)-651-0370

Field Notes

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>> Farmers! Join us for a Wetland Tour

Friday, October 21 from 9:30-11:30am in Wicomico County

More details to follow on our website or email bsheppard@lowershorelandtrust.org

Flannel Formal - Tickets Available Now!

Saturday, November 12th from 3:00-6:00pm at Brooklyn Meadows A benefit for the Lower Shore Land Trust featuring a pig roast, oysters, signature drinks, yard games, a bonfire, and silent auction. The Stephen Parker Conservation Legacy Award will also be presented.

Order tickets now at https://lower-shore-land-trust.networkforgood.com/events/45623-2022-flannel-formal

>> Volunteer Event: Showell Easement Cleanup with MCBP

Saturday, November 19th from 9:00am-12:00pm

Join LSLT and Maryland Coastal Bays Program for a tire and tree tube cleanup and invasive species removal. Additional information and registration link to follow.

