







Protecting Ground Nesting Birds, Turtles, and Vernal Pool Species

BY LORI CAPONE, CONSERVATION COORDINATOR

The Municipalities of Sudbury and Marlborough, the Department of Conservation and Recreation, and the General Federation of Women's Clubs of Massachusetts have unified with Sudbury Valley Trustees to protect the fragile ecosystems found within the Desert Natural Area. The Hop Brook Marsh Conservation Land (Sudbury), the Desert

Conservation Land (Marlborough), Memorial Forest (Sudbury Valley Trustees), Marlborough–Sudbury State Forest (Department of Conservation and Recreation), and the adjacent property owned by the General Federation of Women's Clubs of Massachusetts, together, comprise the Desert Natural Area (DNA).

If you have not visited the Desert Natural Area, it is a 900-acre ecologically rare pitch pine-scrub oak barren habitat that is home to rare and endangered species or species in decline, including wild lupine, whip-poor-will, box turtle, and blue-spotted salamander. The City of Marlborough and Sudbury Valley Trustees have worked together to manage and expand this rare habitat through selective tree removal and by reintroducing controlled fires as a management technique, a practice that Native

SPRING 2021 TOWN OF SUDBURY

Americans used in this area. The animal populations are responding favorably.

Eastern Whip-poor-will, named for the song they sing, are often heard but seldom seen. Their numbers have been declining over recent decades. Whip-poor-will nest, and during the day sleep, on the forest floor in shady woods adjacent to open areas. Due to many reasons, including habitat loss, more than 80% of the whip-poor-will range in the US has been lost.

The area is also home to the Ovenbird, who make the "teacher teacher" sound you can hear echoing through the forest. The Ovenbird spend most of their time foraging on the ground and build their domeshaped nests, called ovens, on the ground.

The abundant sand found throughout the Desert is perfect habitat for the many species of turtles, including the Eastern Box Turtle, to lay their eggs. Box turtles traverse the landscape slowly, are extremely long lived, but are slow to mature and have relatively few offspring per year, which has led to their status as a species of Special Concern. Eggs are typically laid in May and June when rain is frequent. Nest site selection is vital to egg development as the sex of the offspring is dependent on nest temperature. Nests are shallow and highly susceptible to predation.

When you think of deserts, the furthest thing from your mind is water, but the Desert Natural Area is also home to a myriad of vernal pools that are home to the threatened Blue Spotted Salamander. These critical and declining seasonal habitats are the breeding grounds for our salamanders, frogs, and other amphibians. Vernal pool species lay many eggs because many do not survive naturally. Protecting not only the vernal pool but also land adjacent thereto is critical to sustaining our ecologically diverse environment.



The DNA is also home to three locally rare Cold Water Fisheries: Hop Brook, Cranberry Brook and Trout Brook. These streams maintain colder temperatures that provide habitat for the native brook trout, which survive only in the coldest and cleanest waters.

You may have seen new signs recently at entrances to this space requiring dogs to be on leash, but why? Everyone loves dogs and we want them to continue to enjoy the great outdoors, but their natural curiosity can inadvertently impact the environment and its inhabitants in a number of ways. Everyone understands the need to pick up dog waste, but that is just one way that dogs impact the environment. We are asking that dogs be kept on leash to keep them on the trails. Dogs naturally scent their territory resulting in reducing the area that wildlife will use to live and breed to protect their young. Their playful nature compels them to jump in vernal pools, dislodging and ultimately killing egg masses that are contained within. They also like to run up and down the steep sandy slopes to the Hop Brook which causes siltation within this wetland system, impacting its water quality and thusly its ability to support cold water species. Their curiosity leads them to find and dig up turtle mounds and chase ground nesting birds. Dogs rarely catch the birds, nor knowingly disturb their nests, but their presence leads the parents to fledge their nests, for up to 30-45 minutes, leaving the eggs or hatchlings susceptible to predation by other species. Simply keeping dogs on trails prevents any of this from occurring.

SPRING 2021 TOWN OF SUDBURY

To allow all species to thrive in this rare and unique mosaic of habitat types, the Town of Sudbury, Department of Conservation and Recreation, and General Federation of Women's Clubs of Massachusetts have joined the City of Marlborough and Sudbury Valley Trustees to enact this dog leash policy. We want your dogs to continue to enjoy this area in a responsible manner and we appreciate your cooperation in this effort. The Desert Natural Area is a special place that we want all species to be able to enjoy for generations.

The mission of the Conservation Commission is to protect the communities' natural resources. Sudbury's natural spaces have been a large part of sustaining our mental health in the time of COVID. The Commission works to ensure the wildlife, plant life, and ecological services these conservation spaces provide help allow species to thrive and continue to exist for the good of, not only Sudbury, but the ecological community as a whole.



SPRING 2021 TOWN OF SUDBURY