

**Project Summary:**

Avalonia Land Conservancy is seeking support to complete the acquisition of approximately 250 acres of property located in Gales Ferry CT. This project was recently awarded a CT Open Space and Watershed Land Acquisition grant, covering approximately 65% of the cost to acquire these vital properties. This acquisition will significantly expand the newly State recognized Great Oak Greenway, contributing over five miles of wide, compacted woods roads and additional single-track trails to create one of the largest trail systems in southeastern Connecticut. Not only that, these properties also contribute significantly to the Great Brook and Long Island Sound watersheds given the large streams that flow directly through the properties into Thompson Brook, onto Great Brook, then Groton Reservoir and beyond into Long Island Sound.



Wide, compact woods roads already existing on the Atkinson property provide a read-made and accessible trail system

The Atkinson parcel (760 Long Cove Rd) abuts Groton Utilities land along Morgan Pond reservoir for approximately 3,600 feet and if preserved would represent the only block of preserved open space next to the Ledyard Reservoir Groton Utilities land. These parcels are part of one of the largest intact coastal forests in Connecticut, contributing a key greenbelt connection to thousands of acres from Bluff Point, to the Copp Family Park, to the Nathan Lester House and Great Oak Park in Ledyard, to Avalonia’s Pine Swamp Wildlife Corridor and up to Poquetanuck Cove. The scenic views, rocky ridgelines, wetlands, vernal pools, streams, evergreen and hardwood forests and powerline corridors on these exceptional properties provide an enormous habitat and add significant interest for passive recreation and education value. It should also be noted that if efforts to preserve this land as open space are not successful, there is a submitted development plan for 73 housing lots.

The acquisition of the Atkinson and Dirlam parcels will significantly expand the Great Oak Greenway in the Town of Ledyard, which includes the historic Nathan Lester House and Great

Oak Park property, the Avalonia Pine Swamp Preserve, and a newly acquired town-owned parcel located at 800 Long Cove Road. The Great Oak Greenway encompasses nearly 400 acres and the addition of the Dirlam and Atkinson parcels will add an additional 250 acres, as well as over five miles of trails, significant watershed protection, and important habitat conservation. The Great Oak Greenway is the first part of a larger emerging greenway which expands from Bluff Point State Park and Coastal Reserve to Groton Utilities land and the Town of Groton Copp Family Park, to the State of Connecticut Gungywamp Preserve (Groton, Conn.), then going north to encompass Thompson Brook and the surrounding area into Ledyard across Long Cove Road to the Great Oak Greenway and continuing northwest to Poquetanuck Cove.



Cardinal flower and swallow tail butterfly on the Atkinson property

The Atkinson and Dirlam properties are home to over nine wetland/vernal pools. Of these, three are Tier 1 vernal pools. Several site surveys were performed this past year. This past spring, these vernal pools held over 30 amphibian egg masses in each. Chorusing wood frogs and spring peepers were spotted throughout the spring and summer. Significant populations of marbled salamander larvae were observed in the early spring and the property supports a large population of spotted salamanders. The pools contained abundant leaf litter and a plentiful population of amphipods, copepods, and planaria which provide an ample food source for the amphibian species. Other species found were pickerel frogs, green frogs, gray tree frogs, eastern American toad, snapping turtles, red-backed salamanders, and bull frogs.



Spring peeper at night found on the Atkinson property (Left) and example of multiple amphibian egg masses found during a spring survey (Right).

In addition to the vernal pool and wetland areas, the property contains a large stream which flows directly into Thompson Brook and into a site of native brook trout that is under an active conservation plan on the directly adjacent Dirlam parcel. Scientists have also found American eel, bluegill, and tessellated darter in Thompson Brook. In their natural state, these properties provide filtration, storage and groundwater recharge of water that flows into Long Island Sound. A clean Long Island Sound is important for economic, wildlife habitat, and recreational purposes including tourism, swimming, fishing, boating and shell fishing.



Stream on the Atkinson property flows into Thompson Brook on the Dirlam property providing habitat for native Brook Trout.

These properties further provide vital habitat for many birds, reptiles and mammals. Indeed, ribbon snakes and hognose snakes, both Connecticut Species of Special Concern have been identified on the properties. The list of observed birds includes over 65 species that have been identified by birders in a brief survey, including sightings of bald eagles and osprey which nest close to the reservoir. The endangered sharp-shinned hawk, the special concern broad-winged hawk and brown thrasher (special concern) have been identified. Other species include pileated woodpecker, great horned owl, barred owl, barn owl (endangered) red-tailed hawk, rough-legged hawk, American woodcock, wood duck, mallard, wild turkey, black-billed cuckoo, and a healthy population of chimney swifts which return every year to feast on abundant flying insects. According to a 2015 Connecticut Wildlife Action Plan, chimney swifts have one of the “highest rates of decline among passerines in the Northeast,” which has placed them on Birdlife International’s Red List. The conservation of these parcels will create a connected greenway of over 650 acres and decrease forest fragmentation threatening the habitats of varied forest birds. The Connecticut Wildlife Action Plan states that forest birds have complex habitat requirements involving both old and young seral stages and varying levels of structural diversity that can only be found in large tracts of undisturbed forest. Furthermore, big brown bats and little brown bats (endangered) have been seen on the property and on an adjacent property. Indeed, the wetlands and forest provide an abundance of invertebrate food sources for these animals. While the big

brown bat has seen significant declines in Connecticut due to white nose syndrome, the little brown bat has experienced one of the most dramatic declines.



A family of young Barred Owls attempting flight on the Atkinson property

These properties lie within the Ledyard-Coast Focus Area for New England cottontail. The NEC is a candidate species for listing under the federal Endangered Species Act. There are 12 focus areas designated within Connecticut as having excellent potential for supporting this species. The Atkinson and Dirlam parcels contain several areas of native shrubland, which provide food, cover, nesting sites, and resting areas. In these areas, the dense vegetation provides extremely favorable conditions for NEC habitat. Rabbits have been observed on the property by adjacent landowners and although the NEC have not been officially verified on the property, a study is underway performing transects and sampling with agreement from Connecticut Wildlife Management to provide genetic testing on rabbit droppings in order to identify the presence of New England cottontails on the property.

All in all, the scenic views, rocky ridgelines, wetlands, vernal pools, streams, evergreen and hardwood forests and powerline corridors on these exceptional properties provide an enormous habitat and add significant interest for passive recreation and education value. The preservation of these parcels will serve the greater Ledyard community and all of the surrounding area to increase access to recreation opportunities through the addition of five miles of woods roads and more single-track trail for passive recreation such as hiking, running, mountain biking, cross-country skiing, etc. The farm roads are wide and compacted, facilitating first-hand viewing

of the many environmental features of the site and acting as a terrific and accessible outdoor classroom for the community. Additionally, the surrounding area is rich in historical significance – from the adjacent Joseph Lewis House (1765) and a nearby pre-Revolutionary cape (1737) to the Nathan Lester House and Tool Museum. The conservation of these parcels will serve to increase access to and visibility of these important community assets.