INTRODUCTION

State Game Lands 314, locally known as the former USX property, former U.S. Steel property or former Conneaut Farms, is located in the extreme northwest corner of the state, bordering Ohio and Lake Erie and now often is referred to as the Roderick Wildlife Reserve. This site constitutes the largest undeveloped section of shoreline along Lake Erie's southern boundary. The entire tract is located in Springfield Township, Erie County.

Historically, much of the 3,374 acres was farmland with most of the farms having been abandoned in the 1940s and 1950s. Much of the farmland was abandoned due to the wet conditions of the fields. These fields have reverted, initially to shrubs, then to pole-staged forests dominated by red maple.

The area is traversed by two major drainages. Turkey Creek and its many small branches drain the western portion, while Raccoon Creek flows through the eastern section. Both drainages support anadromous fish that enter the streams from Lake Erie to breed. This area is generally flat with the exception of the area adjacent to Raccoon Creek and the Lake Erie shoreline bluffs. The elevation on the area ranges from about 670 feet at the highest point to around 600 feet at the lakeshore, but generally is 630 to 650 feet.


Jake Dingel/PGC Photo

This area was purchased from the USX Corporation in 1991 with the help of the Western Pennsylvania Conservancy and the Richard King Mellon Foundation. Prior to its purchase by the Game Commission, this area had a varied and interesting past. A modern steel mill was proposed for the area in the 1970s. Prior to this, much of the area was farmed and the lakeshore was lined

with many summer cottages. This area also was used as an iron ore storage area and evidence remains to this day. Two main railroad lines (Conrail and Norfolk & Western) traverse the area from east to west. These rail lines and the land's proximity to the Conneaut Harbor generated interest in this area as a site for a large steel mill. Also, 15 natural gas wells were developed in the area during the 1940s. The remnants of this exploration and development persist throughout SGL 314 in the form of unplugged well casings.


Tracy Graziano/PGC Photo

About 50 percent of this area is considered wetland. Much of the area has the water-table at or near the surface during wet periods of the year. The high percentage of wetland has a dramatic effect on habitat management because it limits the time-frames for accessibility.

Most of the area is forested with much being in the pole-timber stage. Pole-timber generally provides low value wildlife habitat. Many of these stands are reverting fields with pole-timber topping and replacing a shrub understory. Much of the remaining timber area is in large pole-timber or small saw-log stands because of heavy cutting practices by USX in the 1960s. The largest timber on the area is generally on the wettest ground due to the difficulty of logging these areas.

Most of the forested area is in the northern hardwood cover (89 percent); however, red maple is by far the most prominent tree. Another eight percent of the area is in aspen. The remainder is split evenly between the cove hardwoods and the hardwood swamp types. Hemlock occurs as an understory tree in several places but it is not a dominant type anywhere on the game land. Several small plantations also occur; however, coniferous cover is generally in short supply. Additionally, oaks along with other hard mast producers such as hickory and black walnut are represented on the tract.

The area has a good variety of commercial tree species present along with a wide variety of shrubs. Red maple and aspen are the most common commercial tree species, while silky dogwood and arrowwood are the most common shrub species. Grapes and poison ivy are abundant over the entire area. Some introduced species also can be found on the area given the past history of the farmsteads and cottage sites.


Jake Dingel/PGC Photo

Around 1996, Pennsylvania Audubon identified this State Game Land as one of 73 important bird areas in the state. A summary in, A Guide to Critical Bird Habitat in Pennsylvania, by Gary J. Crossley indicates the area's importance to early successional bird species and migrating raptors. Additionally, Game Commission biologists have identified this area as one of the most important areas in Pennsylvania for the American woodcock, which factored heavily into its targeted acquisition. In 1995, James Bissel of the Cleveland Museum of Natural History, collected three plant species of special concern on SGL 314.

The area is a popular hunting location for squirrel, woodcock, ruffed grouse, white-tailed deer, wild turkey, cottontail rabbits, eastern coyotes and crows. It also receives hunting pressure for stocked ring-necked pheasants. Also, the area is popular among non-consumptive users, especially "birders." An area along the shoreline is maintained as a dedication site and is often visited by picnickers and those wishing to view the sunset over the lake.


Jake Dingel/PGC Photo

Throughout the 1990s there was some small-scale management. Several wetland restoration projects were installed under U.S. Fish & Wildlife Service's "Partners for Wildlife Program." The Ruffed Grouse Society has funded several woodcock management projects aimed at retaining early successional habitats vital to this declining species. Additionally, the local Game Commission Food & Cover crew has utilized a Royer Woodsman and chainsaws to improve habitat in several areas. Until 2001, resource and management direction had been limited, although given the tract's importance to early successional birds, there has always been an emphasis placed on shrub habitat.


Quality Shrub-Land
Eric Miller/PGC Photo

In 2001, a group of habitat managers, biologists and foresters developed a plan to address the declining habitat quality for the American woodcock and other shrub associated birds. Woodcock and other shrub-associated birds, including the blue-winged warbler and field sparrow, have experienced population declines since the mid 1960s, primarily from habitat loss and degradation. The habitat degradation on SGL 314 was caused by natural succession, from shrub-lands to pole-stage forests dominated by red maple.

The goal of the plan was to revert much of SGL 314 to shrub-land and early successional forest through a variety of means, including commercial timber sales, treatments with mechanical cutting machines, small scale fruit tree daylighting, border cuts, and aspen regeneration projects conducted the PGC food and cover crew. Changes in commercial timber markets, access to mechanized vegetation cutting equipment, limited personnel and financial resources, and the wet soil conditions coalesced to make the goals largely unobtainable. Although early successional habitat work continued, it was on a very small scale. Grants from NOAA's Coastal Zone Management Program provided funding to pay out-of-work loggers to cut 90 acres of pole-stage timber and mechanically treat 62 acres of rapidly succeeding shrubland to maintain its shrubland character.


Hal Korber/PGC Photo

Regeneration occurred very rapidly and the desired habitat conditions on the treated land were achieved. Unfortunately, because of the timber market conditions at the time, the trees cut in these areas weren't marketable and were left on-site. These trees, as well as their tops and stumps, are problematic now that it's time to again treat these areas to maintain them in their early successional state.

SO NOW WHAT?

The natural process of succession continues. Unfortunately, the wildlife dependent on shrub-land habitats continues to decline. These are the very species for which SGL 314 was acquired. In 2010, PGC personnel – including habitat managers, foresters and biologists – brainstormed to address the ongoing issue of declining shrub-land habitat for these species on SGL 314. Simply cutting trees would help in the short term, but would inhibit long-term maintenance once desired habitat conditions were achieved.

Fortunately, forest management equipment has evolved. Today, the Game Commission uses new equipment that can help it keep forest succession (or growth) in check to maintain ground conditions that will benefit the species SGL 314 was bought for and originally designed to help. Ten years ago, the agency had limited capabilities to do this, because of equipment limitations and cost.

Moreover, timber markets now provide an economically viable means to harvest and utilize the pole-stage red maple forests so common on SGL 314. The process is whole-tree chipping. By utilizing the entire tree, tops included, succession is not only set back, but logs, tops and debris are removed from the site making future maintenance possible with mechanized hydro-axes, brush-cutters, etc.

Of the nearly 3,400 acres, about 700 acres are going to be treated over the next three years (2011-2013) in 17 blocks distributed throughout SGL 314. Additionally, about 90 acres of shrub-land that is advancing past its desired condition are being treated by mechanical vegetation cutters. Ultimately the Game Commission hopes to maintain about 25 percent of SGL 314 in shrub-lands and early-successional forests.

Hal Korber/PGC Photo

SGL 314's resulting appearance will probably take some time to get used to, even for folks who understand and support the alternation. All woody vegetation is being cut, shredded and removed. That's pretty dramatic. But regeneration typically occurs very rapidly and after one growing season, the picture should be very different. We expect to see the species dependent upon this modified habitat to subsequently respond in a positive manner.

Activity is being restricted to dry or frozen ground conditions to minimize adverse soil impacts. Advancements in low ground pressure equipment and techniques also are aiding in meeting this objective.

WHAT ABOUT DEER, TURKEY, AND SENSITIVE SPECIES?

SGL 314 is a popular deer hunting destination. So what will happen to the deer? Deer thrive in shrub-lands and early successional forest habitats. The red maple pole-stage stands common on SGL 314 are not prime deer habitat. They do not produce valuable mast crops, and their tender twigs and leaves are no longer within a deer's reach. The pole-timber forests also tend to be open and provide little cover. Shrubs and early successional forests provide abundant quantities of soft mast (fruits) and accessible browse. They also provide suitable cover. SGL 314 also is blessed with a variety of oaks, hickories and other hard mast-producing species. Areas with these species have been excluded from treatment, protecting the game land's hard mast production.


Joe Kosack/PGC Photo

Turkeys also will benefit from the increased soft mast production provided by the shrub-lands and early successional forests. Nesting habitat will improve as well.

About 75 percent of SLG 314 will remain forested, which is good news for squirrel hunters. With the protection of hard mast-producing trees and soft mast producing species –black gum and cucumber magnolia – SGL 314 should continue providing quality squirrel hunting.


Jake Dingel/PGC Photo

The riparian areas of Turkey Creek, Raccoon Creek and the Lake Erie shore also have been excluded from treatment, thereby protecting these important waterways and their fisheries. Known rare plant species have been buffered and their sites reserved from treatment.

In summary, the value to declining species of shrub-land birds, the original quality that attracted the PGC to acquire the USX property, should be restored. The management will result in a mosaic of fruit-producing shrubs, mature hard mast- and soft mast-producing forests, wetlands, and forest canopied streams. The mosaic should provide prime habitat for deer, turkeys, squirrels and shrub-dependent birds as well as protect streams and rare plant species.

ADVICE TO HUNTERS AND SGL USERS

Tree-stands and trail cameras are legal to use on the game lands when used within regulations. Hunters should be aware that these items are always placed at their own risk. Hunters placing these items on SGL 314 should pay special attention to their location. Placing them within timber harvest locations may result in unintentional damage or loss. Hunters also should scout prior to the season so they're not surprised by dramatic changes on the opening day. They will need to adjust their hunting patterns based on the changes in habitat conditions.

IN CLOSING

The Game Commission would like to thank the individuals and groups who appreciate and support the wildlife and recreational opportunities found on SGL 314. This management action, first and foremost, is intended to improve conditions for targeted wildlife species in need of management assistance. We understand your concern. Please bear with us as we restore parts of SGL 314 into the migratory stopover it was always intended to be. It'll be worth the wait and wildlife will adapt to these important changes quickly.