

Planting and Managing Scrub-Shrub Habitat

Typically scrub-shrub habitat is only a temporary condition before conversion to forest. In areas near power lines, however, it is necessary to keep vegetation height low in perpetuity. This can be accomplished by planting compatible species and selectively removing saplings of large trees. Removing invasive plants like multiflora rose and honeysuckle will allow native shrubs (see compatible list below), which provide nutritious berries and seeds, to flourish. Habitat that includes a variety of species and heights will produce the best habitat for many bird species, so selective removal of individuals from areas where one species dominates may be considered.



Scrub-shrub habitat at forest edge. Photo ©Laurie Smaglick Johnson

Compatible Plant Species

The following list of native plants are appropriate for planting in Border Zones and provide cover and food to desirable birds and native plants noted above.

Small trees

Flowering dogwood
Redbud
Hawthorn
American Hornbeam
Serviceberry
Eastern Red Cedar
American Chestnut
Dwarf Willow
Winterberry Holly

Small shrubs

Mountain laurel
American Yew
Sweetfern
Trumpet Honeysuckle
Huckleberries
Blueberries
Viburnums
Meadowsweet (Spirea)
Wintergreen
Trailing Arbutus
Blackberry (Allegheny)
Raspberry
Hazelnut
Scrub Oak species

Large shrubs

Alder
Witch-hazel
Spicebush
Common Chokecherry
Elderberry
Rhododendron
Viburnum
Dogwood
Sumac species
Chokeberry

All native grasses, ferns,
herbaceous plants

**For more information, go
to <http://pa.audubon.org/habitat>**

An award-winning program

PPL Electric Utilities is a proud recipient of the Tree Line USA® award from the Arbor Day Foundation and the National Association of State Foresters. The groups seek to promote proper utility arboriculture and public education through annual worker training, quality tree care, tree planting and public education, energy conservation and collaboration with community groups. For information about planting the right tree in the right place, visit www.arborday.org.

PPL Electric Utilities works with state and local conservation, land management and environmental groups to advance common goals of electric reliability and environmental stewardship.



Vegetation management is critical to electric reliability

Our customers depend on reliable power, and vegetation management is a critical part of maintaining the reliability of our delivery system.

PPL Electric Utilities operates thousands of miles of transmission lines. Transmission lines are interconnected regionally, so power can move long distances from power plants to local communities. It is vital that trees are kept well clear of transmission lines. Tree contact with high-voltage lines can result in widespread power outages.

For more information, call 1-877-528-2889, email us at PPLVegetationManagement@pplweb.com or visit www.pplweb.com/vegetation.



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Transmission Line Vegetation Management

Keeping your electric service reliable



High-voltage transmission lines are the backbone of the regional electric grid. They are vital to our economic health and our nation's security.

The Northeast blackout of 2003 demonstrated how important it is to keep trees away from these power lines. About 55 million people in eight U.S. states and Canada were left without power after a tree touched a transmission line.

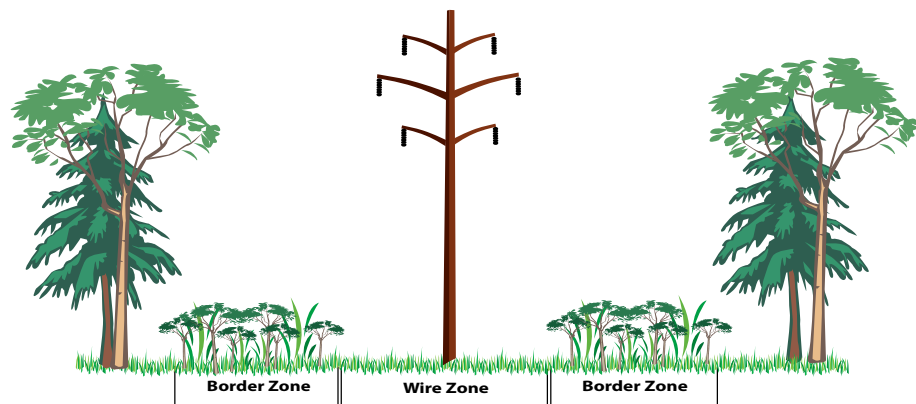
After the blackout, the federal government adopted strict new reliability standards for electric utilities. We are required to meet these standards. And we have an obligation to keep your electric service reliable.

PPL Electric Utilities takes a proactive approach to keeping trees away from power lines. This means that we are now removing trees in areas where in the past we permitted them to grow. We know this isn't always popular with landowners, but it is the right thing to do.

This brochure contains more information about our approach to transmission line vegetation management. Our program is based on industry best practices. It is carried out by trained professionals who are focused on preventing damage to the power grid so that you will have the electricity you need when you need it the most.

Our commitment to you

We have a longstanding respect for the environment. We respect the rights of property owners. We will keep customers informed about any planned work. The work we perform is intended to keep your electric service reliable.



Compliance with federal reliability standards

Under federal reliability standards, certain clearances must be maintained between overhead power lines and any vegetation. To comply with these standards – and to meet our obligation to customers to keep their power supply reliable – PPL Electric Utilities follows an industry best practice referred to as Wire Zone-Border Zone.

What is Wire Zone-Border Zone?

The wire zone is the area directly under the transmission lines and extending out an additional 10 feet on each side. Trees are removed from the wire zone because they are incompatible with high-voltage wires. Low-growing grasses and other compatible species are permitted in this zone.

The border zone extends from the edge of the wire zone to the edge of the right of way. Certain trees and shrubs are allowed in this area if they do not pose a reliability risk.

PPL Electric Utilities does not remove or dispose of any vegetation from transmission rights of way after cutting. These materials belong to the property owner. In some areas, like hillsides, leaving cut vegetation can protect against erosion.

In some areas, we use herbicides to effectively manage undesirable vegetation conditions along our power lines. We only use products that have been approved for use by the U.S. Environmental Protection Agency. Some of the materials our contractors will use are the same as those commonly used by homeowners.

*The **wire zone** is the area beneath the wires plus an additional 10 feet on each side. Vegetation is cleared from this zone. Grasses and other low-growing plants will be permitted to grow back.*

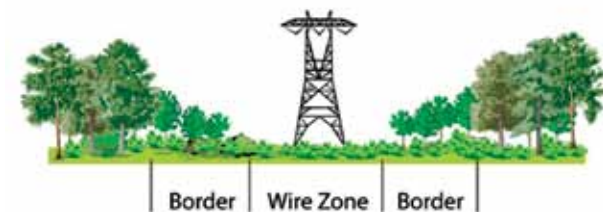
*The **border zone** extends from the edge of the wire zone to the edge of our right of way. Depending on conditions, we will either clear this zone of all vegetation, allowing certain small trees and shrubs to grow back if they do not pose a reliability risk, or we will selectively remove incompatible plant species.*

PPL Rights-of-way as Bird Habitat



Golden-winged Warbler. Photo ©Laurie Smaglick Johnson

To ensure compliance with federal electric reliability standards, many utilities like PPL Electric Utilities are clearing the areas under high-voltage power lines along utility rights-of-way (referred to as the “wire zones”). The area bordering the wire zone extending to the edge of the utility rights-of-way (called the “border zone”) can have low-growing plant species that are consistent with the utility’s program to comply with the federal requirements. Such plant species also can provide critical habitat to birds and other wildlife.



Scrub-Shrub Habitat

When an old field is left unmanaged, woody shrubs become established, which eventually give way to small trees and, ultimately, forest. Scrub-shrub or “successional” habitat refers to the middle time period when shrubs and small trees dominate. A host of bird species, including ruffed grouse, brown thrasher, eastern towhee, field sparrow, and golden-winged warbler, are dependent on these transitional habitats.