

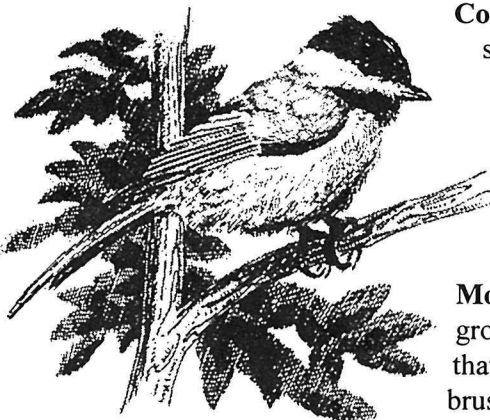
## Hedgerows

### Dirty Fences or Farmers' Best Friends?

Tradition has long led farmers to practice "clean farming," with bare fences and the energetic cutting of weedy and shrubby vegetation along fields. For decades, overgrown fencerows along pasture and roadsides have been called "dirty fences," and farmers have expended great energy in their removal by mowing, cutting, poisoning and burning them. Ironically, these actions have done more harm than good.

Hedgerows have been significant landscape features for a very long time. In England, where hedgerows are protected by law and tradition, there are over 500,000 miles of hedgerows, some of which are over 1,000 years old. Many of these hedgerows function as fences, property lines, important cultural ties with the past, and extremely valuable wildlife habitat. In the reserve, hedgerows define historic cultural land use patterns dating back to early Euro-American settlement in the 1850s. Some of the first Donation Land Claim boundaries can be identified today by these fragile vestiges of early farmscapes.

For more than 100 years, scientists, naturalists and economists in Europe and North America have written about the merits of hedgerows. Here are some of the benefits they provide:



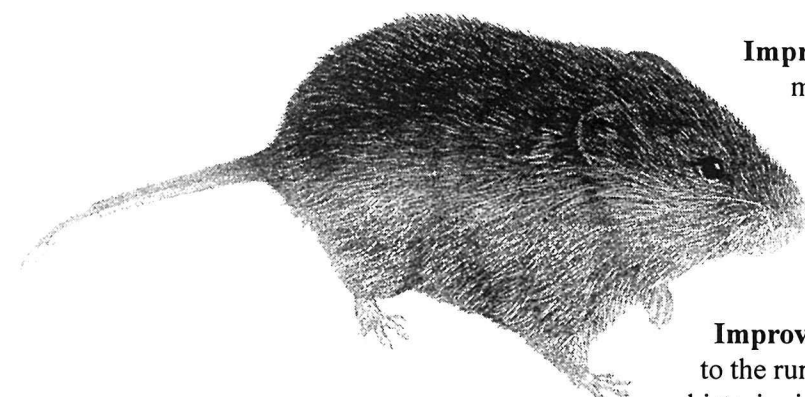
**Control of water runoff.** Hedgerows slow water down, allowing it to filter into the soil and the aquifer. Slow-moving water allows silt to be dropped on the fields where it belongs (and not washed into road ditches, where it goes when hedgerows are not present).

**Reduction of soil loss by wind and water action.** Farmers must make up for lost soil by adding expensive fertilizer; it is seldom as good as the original.

**Moderation of wind and soil moisture loss.** Hedges break up wind motion near the ground and maintain moisture in the soil. Many studies from all over the world indicate that where there is wind protection, crop yields are increased. Hedgerows containing brushy vegetation and taller trees can actually increase precipitation over fields by up to 15 percent.

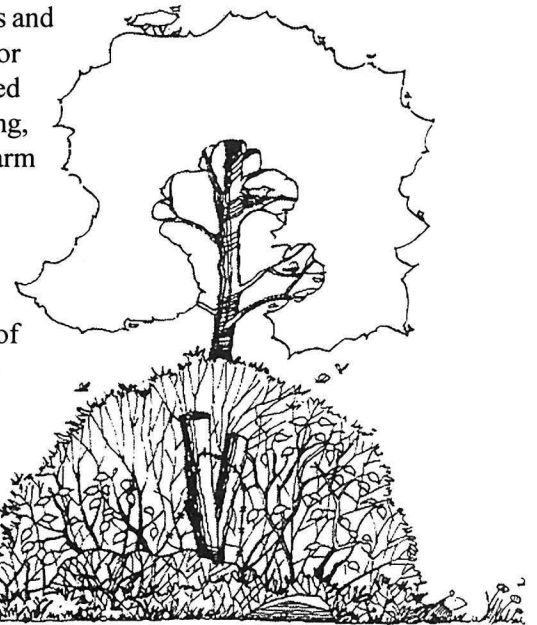
**Assist in pest control.** Hedges are preferred habitat for numerous insect-eating birds, insect-eating insects, insect-eating small mammals and insect-eating amphibians. One report indicates that birds alone eat over 500 pounds of insects per mile of hedgerow per year.

Some year-round resident birds feed almost exclusively on weed seeds. When bird habitat is destroyed, the only insect controls left are poisons, which are expensive, often kill beneficial insects and frequently become ineffective against resistant strains. Birds are the best insecticides available, energetically picking insects off shrubs, lawns, crops and gardens, all day, every day.

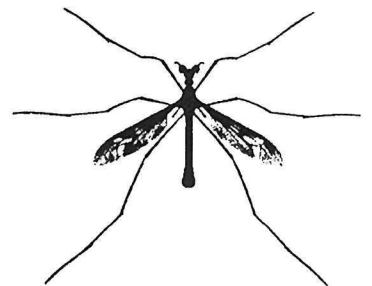


**Improvement of wildlife habitat.** Many mammals and migratory birds are attracted to hedgerows for shelter, feeding and nesting. Hedgerows provide excellent habitat for bumblebees, which are necessary for pollinating clover and other cover crops. The shade of a hedgerow can be of great importance to animals in the heat of summer.

**Improvement of landscape values.** Hedges add aesthetic value to the rural scene. When hedges are protected and preserved, the historic significance of the reserve is maintained.

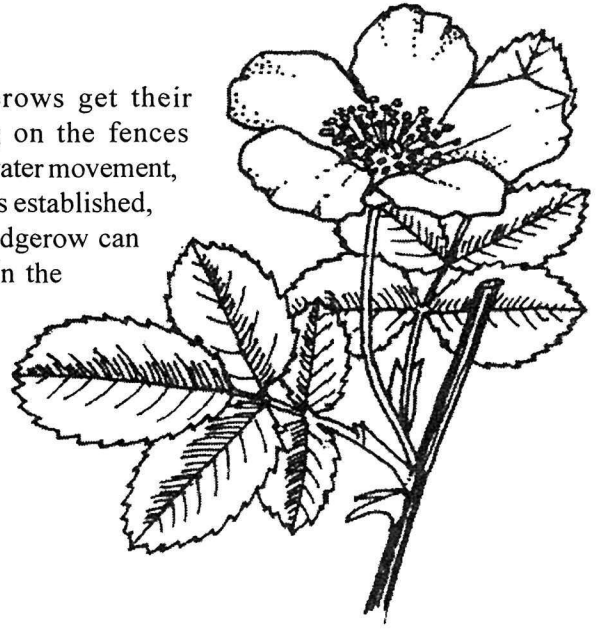


Hedgerow - Cross Section



## Evolution of a hedgerow

In Ebey's Landing National Historical Reserve, most hedgerows get their start as abandoned or unmaintained fencelines. Birds landing on the fences excrete shrub, forb and grass seeds. Seeds are also deposited by wind, water movement, farm machinery, small mammals and automobiles. As the vegetation gets established, the fence becomes obscured. If the tilling machinery avoids it, the hedgerow can commonly become 6-8 feet wide. Occasionally, trees grow up within the hedgerow. As time passes, more plant species emerge, attracting a wider range of wildlife that will work to protect crops.



Nootka Rose

## What's in a hedgerow?

As the land is cleared, small mammals and birds move into hedgerows that only partially compensate for the loss of habitat. In the reserve, at least 22 species of birds depend upon hedgerows for breeding, nesting, feeding or shelter from predators. Most of the hedgerow nesters feed on insects or weed seeds. Brewer's blackbirds and white-crowned sparrows are tireless insect-eaters while raising their young in the hedges. Heavy use is made of the vegetation within two feet of the ground for food and cover by many wild species. Frogs and garter snakes forage for insects and slugs from the shelter of hedgerows. Numerous species of predatory wasps and other predaceous insects live in hedgerows and feed on crop pests. Shrews thrive in hedgerow habitat and devour thousands of insects annually. Bats often live in cracks

or crevices found in larger trees or old wooden fenceposts in hedgerows, and range over the fields at night, eating huge numbers of insects—some bats eat more than 600 insects per night.

Snags left in hedgerows are ideal foraging and nesting sites for woodpeckers, owls and chickadees. They are also excellent perches for predatory hawks, which hunt over the fields and feed on mice and voles. Game birds such as pheasants use hedgerows for cover and nesting. Migratory songbirds use hedgerows for resting, feeding and as cover from predators.

**"Hedges are worth having, and therefore worth maintaining."**

~ Frank Edminster, agriculturist, 1938 ~

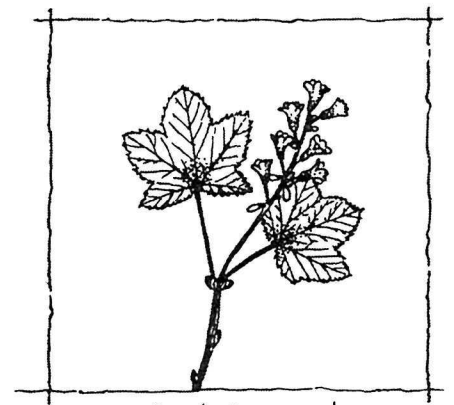


Oregon Grape

## Your own hedgerow

Hedgerows are hardworking landscape features that improve the quality of life for all. They are drought-tolerant and low maintenance. Landowners should consider hedgerows as they plan for their land's future.

You can plant a hedgerow. In the reserve, the following list of plants will thrive and, when a wide variety of shrubs and trees is planted—the wider the row the better—wildlife will soon realize the benefits of your work.



Red Currant

### Trees

Red alder  
Douglas fir  
Western redcedar  
Vine maple  
Bigleaf maple  
Willow  
Oregon white oak

### Shrubs

Oregon grape  
Salal  
Snowberry  
Ceanothus  
Red osier dogwood  
Wild red currant  
Cotoneaster

Pacific dogwood  
Elderberry  
Nootka Rose  
Serviceberry  
Blueberry  
Mountain ash  
Holly

Shrubs should be planted about 3 feet on center. The hedgerow should be at least 6 feet wide, but is much more valuable to wildlife if it is wider. Mixed hardwoods and conifers add significantly to the diversity of species that will use the hedgerow. Try to avoid breaks or openings in the hedgerow—these spaces are hazardous for many of the hedgerow residents due to easier access by larger predators.

## For More Information

Additional materials on the significance, planting and care of hedgerows is available from the Ebey's Landing NHR Trust Board (360/678-6084). Technical and financial assistance may be available through the Natural Resources Conservation Service as described in the 1996 *Federal Agriculture Improvement and Reform Act*.