

Delaware Bay Estuary Project

Reforesting Delaware

DBEP IS LOOKING FOR LANDOWNERS AND PARTNERS TO HELP INCREASE THE AMOUNT OF FOREST COVER IN DELAWARE



Why we make forest cover a priority

Historically, much of the coastal plain of the Delmarva Peninsula was dominated by forest that provided critical food and cover for migratory birds that nest here or pass through on migration. Bird migration on the Delmarva Peninsula is a spectacular phenomenon consisting of millions of birds each spring and fall. However, many of these birds rely on forest cover that has been converted to residential, commercial, and agriculture uses.

Strategically conserving existing forest and restoring tree cover in Delaware helps migratory birds as well as resident birds, pollinators, herpetofauna, Delmarva fox squirrel, and other wildlife species. In addition to benefiting wildlife directly, forest cover also improves water and air quality and reduces erosion. Therefore, afforestation and reforestation are important for the DBEP and our conservation partners.

DBEP helps landowners increase the amount of forest cover; increase the size of existing forest patches; and increase the connectedness of forest patches by planting trees and shrubs and encouraging natural succession to take place. DBEP can provide design and implementation assistance, plant material, small scale funding, and other help for reforestation projects that result in benefits to wildlife.

The Delaware Bay Estuary Project is part of the Coastal Program, a habitat conservation program of the U.S. Fish and Wildlife Service that focuses on conserving the ecological integrity of beaches, bays, estuaries, and coastal watersheds. We work through voluntary partnerships with a variety of public and private entities, such as private landowners, land trusts, municipalities, states, and other federal agencies, to enhance, restore, conserve, study, and monitor habitat for key federal trust wildlife resources in the Delaware River and Delmarva Peninsula ecosystems.



A 2015 aerial showing land south of the C&D Canal in Delaware. The forested areas (dark green) are now limited, isolated, and irregular in size but were once the dominant cover of the area.



Many of the wildlife species the USFWS is responsible for conserving require large contiguous patches of forest. At least fourteen high conservation priority migratory bird species rely on “forest interior” in Delaware for nesting habitat. For example, black-and-white warbler (left photo) and Kentucky warbler (right photo) are both forest interior species and both very sensitive to forest fragmentation. Black-and-white warbler needs contiguous dry hardwood forest and Kentucky warbler floodplain hardwood forest. Both species require at least 300 acres of contiguous forest for successful breeding.

Diverse species depend on forests. For example, this marbled salamander relies on vernal pools in forests and at least 20 acres of intact forest around each of those pools.



Cotinis



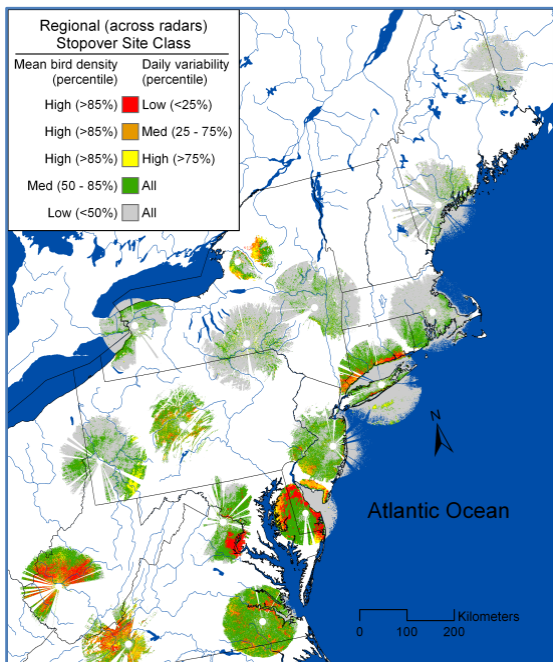
Rick McCorkle

Diverse forest structure vertically and horizontally (e.g., varied tree age class, areas of dense understory, diverse mix of species) generally supports more diverse forest wildlife. For example, adding understory to forest by planting species, such as spicebush, attracts wood thrushes.



Esri 2015

Reforestation fields, such as this one, near other forested land can increase forest interior habitat by reducing the “edge effect.”



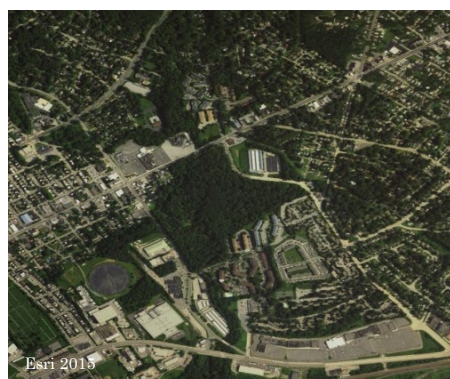
From: Buler and Dawson 2014. Condor 116:357-370

Data highlight the importance of the Delmarva Peninsula and particularly forest cover to migrating songbirds. For example, this map shows concentrations of birds detected over the fall using radar. Research such as this indicates the Delmarva Peninsula’s special importance and that the extensive flocks of songbirds migrating through in the fall prefer forested habitat for resting during the day before resuming nocturnal migrations. The location, shape, and orientation of the Delmarva are what together cause migratory songbirds and raptors to become so concentrated along the coast and the peninsula’s twin capes during migration.

Oak trees are great for their wildlife benefits. Acorns from a pin oak provide food to Delmarva fox squirrel, red headed woodpecker, turkey, white footed mice, and many others. The leaves of oak trees support the caterpillars of more butterfly and moth species than any other kind of tree in Delaware.



Bruce Kirchoff



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Migratory wildlife increasingly depend on isolated forest patches in urban neighborhoods during spring and fall migration to rest and feed. Adding to the size of these areas or enhancing their forage value can benefit birds of conservation concern.

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