

Resources for Residents

Learn what residents can do to help wildlife and birding in the District of Columbia.

DOEE Website

Sustainable DC

A 20 year plan to make the District of Columbia the healthiest, greenest, and most livable city in the United States. Visit <http://www.sustainabledc.org/>.

RiverSmart

DOEE's RiverSmart programs help to reduce stormwater runoff that harms the District's waterways and the Chesapeake Bay by providing financial incentives to help District property owners install green infrastructure such as rain barrels, green roofs, rain gardens, permeable pavement, shade trees, and more. Visit <http://doee.dc.gov/riversmart>.

Weed Warriors

The Weed Warrior program works with communities to reduce the negative impact of invasive, noxious weeds in public places, such as parks, trails, and open spaces. The program offers education about invasive weeds and methods for control or eradication of these weeds. Visit <http://doee.dc.gov/page/dc-cwma-weed-warrior-program>.

Climate Change

The District of Columbia is committed to addressing climate change by minimizing carbon pollution and increasing the District's resilience to our changing climate. Visit <http://doee.dc.gov/service/climate-change>.

Wildlife Protection Act

Education and licensing for wildlife control operators. Visit <http://doee.dc.gov/service/fisheries-and-wildlife>.

Citizen Science

DOEE FWD's project for monitoring populations of Eastern Cottontail rabbits in urban and suburban areas in the District. Visit <http://doee.dc.gov/node/702992>.



External Resources

City Wildlife

City Wildlife was created to address the need for wildlife rescue and rehabilitation in Washington, DC. Visit <http://citywildlife.org/>.

National Park Service - Center for Urban Ecology

The Center for Urban Ecology identifies and responds to the natural resource needs of the NPS National Capital Region, located in the Washington, D.C. metropolitan area. Visit <http://www.nps.gov/cue/>.

Audubon Society of the District of Columbia

DC Audubon's goal is to promote the appreciation and conservation of birds and their habitats through the participation of people in the DC area. DC Audubon sponsors field trips, educational lectures, and opportunities to work with other conservation organizations. Visit <http://audubondc.org/>.

Anacostia Watershed Society

The Anacostia Watershed Society's mission is to protect and restore the Anacostia River and its watershed communities by cleaning the water, recovering the shores, and honoring the heritage. Visit <http://www.anacostiaws.org>.

Rock Creek Conservancy

The Rock Creek Conservancy protects the lands and waters of Rock Creek and revitalizes Rock Creek Park for people to treasure and enjoy. Visit <http://www.rockcreekconservancy.org/>.

iNaturalist

iNaturalist is a website and database where individuals can record what they see in nature, meet other nature lovers, and learn about the natural world. Visit <http://www.inaturalist.org/>.

Maryland Native Plant Society - Washington, D.C. Chapter

The Maryland Native Plant Society - Washington, D.C. Chapter works to promote awareness, appreciation, and conservation of Maryland's native plants and their habitats through education, research, advocacy, and service activities. Visit <http://www.mdflora.org/chapters/washingtondc/dcchapter.html>.

The Botanical Society of Washington (visit <http://www.botsoc.org/>) and the Entomological Society of Washington (visit <http://entsocwash.org/>) are long-established scientific organizations that promote the study of botany and entomology for scientific and educational purposes.



Birdhouses

North Carolina Cooperative Extension Service

Building Songbird Boxes: <http://content.ces.ncsu.edu/building-songbird-boxes>

USDA Natural Resource Conservation Service

Building various nest boxes:

http://www.nrcs.usda.gov/wps/portal/nrcs/detail/ia/homeowner/?cid=nrcs142p2_008674

Amphibians

Northeast Partners in Amphibian and Reptile Conservation

Your Backyard Guide to Helping Reptiles and Amphibians:

http://www.northeastparc.org/products/pdfs/NEPARC_backyard.pdf

Bats

Bat Conservation International

Bats in buildings: <http://www.batcon.org/resources/for-specific-issues/bats-in-buildings>

Bat Houses: <http://www.batcon.org/resources/getting-involved/bat-houses>

Bat Conservation and Management

Bat house general information:

<http://www.batmanagement.com/Batcentral/batboxes/bathouse.html>

How to build a bat house:

<http://www.batmanagement.com/Batcentral/boxbuild/build1.html>

How to install a bat house:

<http://www.batmanagement.com/Batcentral/boxinstall/install1.html>



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Abbreviations

ACoE	U.S. Army Corps of Engineers
AFWA	Association of Fish and Wildlife Agencies
AWS	Anacostia Watershed Society
<i>Bd</i>	<i>Bathrachytrium dendrobatidis</i>
Bsal	<i>Bathrachytrium salamandrivorans</i>
C&O Canal	Chesapeake and Ohio Canal Historical Park
CCVI	Climate Change Vulnerability Index
COAs	Conservation Opportunity Areas
CSO	Combined Sewer Overflow
CSS	Combined Sewer System
DC Water	District of Columbia Water and Sewer Authority
DC-CWMA	District of Columbia Cooperative Weed Management Area
DOEE-WQD	Department of Energy and Environment – Water Quality Division
DDOT	District Department of Transportation
DCPS	District of Columbia Public Schools
DGS	District Department of General Services
DPR	District Department of Parks and Recreation
ED/RR	Early Detection/Rapid Response
EPA	U.S. Environmental Protection Agency
EPMT	Exotic Plant Management Team
ESRI	Environmental Systems Research Institute
FCAs	Focal Conservation Actions
FWD	Fisheries and Wildlife Division
GIS	Geographical Information System



IUCN	International Union for the Conservation of Nature
LID	Low Impact Development
MD DNR	Maryland Department of Natural Resources
MS4	Municipal Separate Stormwater System
NEFWDC	Northeast Fish and Wildlife Diversity Technical Committee
NETHCS	Northeast Terrestrial Habitat Classification System
NOAA	National Oceanic and Atmospheric Administration
NPS	National Park Service
NRMPRF	Northeast Regional Monitoring and Performance Reporting Framework
NWF	National Wildlife Federation
POA	Percent of Occupied Area
RCN	Regional Conservation Needs
SAV	Submerged Aquatic Vegetation
SGCN	Species of Greatest Conservation Need
SLAMM	Sea Level Affecting Marsh Model
SWAP	State Wildlife Action Plan
SWAP2005	2005 State Wildlife Action Plan
SWAP2015	2015 State Wildlife Action Plan
SWG	State Wildlife Grant
TNC	The Nature Conservancy
TNR	Trap-Neuter-Return
TRACS	USFWS Tracking Actions for the Conservation of Species
UDC	University of the District of Columbia
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey



USNVC	United States National Vegetation Classification
VIMS	Virginia Institute of Marine Science
WNS	White-nose Syndrome



Glossary

amphibian — Ectothermic, tetrapod vertebrates of the class Amphibia

amphipod — Of the order of malacostracan crustaceans with no carapace and generally with laterally compressed bodies Amphipods range in size from 1 to 340 millimeters and are mostly detritivores or scavengers

anadromous — A fish that migrates up rivers to spawn

aquatic — Of or relating to water

avifauna — The species of birds of a region, habitat, or environment

bioblitz — An intense period of biological surveying in an attempt to record all the living species within a designated area

biodiversity — The variety of living organisms, and the communities and ecosystems in which they occur

canopy — The layer of foliage formed by the crowns of trees in a forest stand

climate change — Change in global or regional climate patterns, in particular a change apparent from the mid to late 20th century onwards and attributed largely to the increased levels of atmospheric carbon dioxide produced by the use of fossil fuels

connectivity — The degree to which the landscape facilitates or impedes movement among resource patches, influences gene flow, local adaptation, extinction risk, colonization probability, and the potential for organisms to move as they cope with climate change

copepod — A group of small crustaceans found in the sea and nearly every fresh water habitat

crustacean — A large group of arthropods, usually treated as a subphylum, which includes such familiar animals as crabs, lobsters, crayfish, shrimp, krill and barnacles

dissolved oxygen — A measure of how much oxygen is dissolved in the water

distribution (species) — The manner in which a biological taxon is spatially arranged

disturbance — Temporary changes in environmental conditions caused by either natural or humans based actions

early successional — Uplands where the potential natural vegetation is predominantly grasses, grass-like plants, forbs, or shrubs



ecological systems — Reoccurring groups of biological communities that are found in similar physical environments and are influenced by similar dynamic ecological processes

ecosystem — A natural community of organisms interacting with its physical environment

edge habitat — The transition between two types of vegetation and habitats

effluents — Outflowings of waste material discharged into the environment

emergent marsh — The marsh found around shorelines out to relatively shallow water

emerging disease — A disease is one that has appeared in a population for the first time, or that may have existed previously but is rapidly increasing in incidence or geographic range

encroach — To advance beyond the usual or proper limits

endangered species — any species of plant or animal defined through the Federal Endangered Species Act or state Endangered Species Act as being in danger of extinction throughout all or a significant portion of its range

Endangered Species Act (ESA) — Federal legislation that was signed into law in 1973, the ESA protects plant and animal species and is jointly administered by the U.S. Fish and Wildlife Service and NOAA Fisheries, to provide protection for species that are in danger of extinction and to conserve the habitats on which those species depend.

endemic — Native or restricted to a certain country or area

ephemeral (wetland) — Wetland, spring, stream, river, pond or lake that only exists for a short period following precipitation or snowmelt

evapotranspiration — The sum of evaporation and plant transpiration from the Earth's land and ocean surface to the atmosphere

extirpated — Status of a species or population that has completely vanished from a given area or region but that continues to exist in some other location

exurban developments — Low density residential developments, displacing specialist wildlife species with generalists, increasing human-wildlife conflict by intrusion of humans in wildlife habitat caused by expanded roads and driveway networks

fauna — The animals of a particular region, habitat, or geological period

federally listed species — Refers to those species officially listed under the Federal Endangered Species Act as either endangered, threatened, or a species at risk



- floodplain — Flat or nearly flat land that may be submerged by floodwaters; a plain built up or in the presence of being built up by stream deposition
- flora — All the plant associated with a given habitat, country, area, or period
- fragmentation (habitat) — The disruption of extensive habitats into isolated and small patches
- freshwater mussels — Freshwater bivalve mollusk
- freshwater sponges — Genus in the family Spongillidae found in lakes and slow streams
- geographic information system (GIS) — A computerized system to compile, store, analyze and display geographically referenced information
- goatsucker — Common name for nocturnal or crepuscular birds of the order Caprimulgiformes, which includes the frogmouth, the oilbird, potoos, and nightjars
- greenhouse gases — Gases that contribute to the greenhouse effect by absorbing infrared radiation, e.g., carbon dioxide and chlorofluorocarbons
- habitat — An ecological or environmental area that is inhabited by a particular species of animal, plant, or other type of organism
- habitat specialists — Species that can only thrive in a narrow range of environmental conditions or habitats
- herpetofauna — The reptiles and amphibians of a particular region, habitat, or geological period
- hydrology — Study of the movement, distribution, and quality of water on Earth and other planets, including the hydrologic cycle, water resources and environmental watershed sustainability.
- hydroperiod — The period in which a soil area is waterlogged
- impervious surface — Mainly artificial structures, such as pavements, roads, sidewalks, driveways and parking lots, that are covered by impenetrable materials such as asphalt, concrete, brick, and stone. Soils compacted by urban development are also highly impervious
- impoundment — A body of water, such as a pond, confined by a dam, dike, floodgate, or other barrier, which is used to collect and store water for future use
- infiltration — The process by which water on the ground surface enters the soil
- insect — Class of invertebrates within the arthropod phylum that have a chitinous exoskeleton, a three-part body, three pairs of jointed legs, compound eyes and one pair of antennae



intertidal — Of, relating to, or being part of the littoral zone (the shore zone between high and low tide marks) above low-tide mark

invasive species — Introduced species (also called "non-indigenous" or "non-native") that adversely affect the habitats and bioregions they invade economically, environmentally, and/or ecologically. Such invasive species may be either plants or animals and may disrupt by dominating a region, wilderness areas, particular habitats, or wildland-urban interface land from loss of natural controls (such as predators or herbivores). This includes non-native invasive plant species labeled as exotic pest plants and invasive exotics growing in native plant communities

invertebrate — Animal species that do not possess or develop a vertebral column, derived from the notochord

IUCN category of threats — A hierarchical classification of the broadest range of species according to their global extinction risk adopted originally in 1994 and later revised in 2000 by the International Union for Conservation of Nature

mammal — Clade of endothermic amniotes distinguished from reptiles and birds by the possession of hair, three middle ear bones, mammary glands, and a neocortex

meso-mammal — term used to describe mammals of small to intermediate in size

migratory — Moving from one place to another at different times of the year; or relating to migration

mollusk — A large phylum of invertebrate animals known as the Mollusca that have a soft body without a backbone and that usually live in a shell

nutrification — Whereby water bodies such as lakes and estuaries receive excess nutrients from a variety of sources (primarily agriculture, aquaculture and sewage) setting off a cascade of environmental changes

odonata — Order of carnivorous insects, encompassing dragonflies (Anisoptera/Epiprocta) and damselflies (Zygoptera)

perennial (stream or river) — Stream or river that has continuous flow in parts of its stream bed all year round during years of normal rainfall

phenology — A branch of science dealing with the relations between climate and periodic biological phenomena

plant community — A collection of plant species within a designated geographical unit, which forms a relatively uniform patch, distinguishable from neighboring patches of different vegetation types. The components of each plant community are influenced by soil type, topography, climate and human disturbance



population (species) — Summation of all the organisms of the same group or species, which live in a particular geographical area, and have the capability of interbreeding

reptile — A cold-blooded vertebrate of a class that includes snakes, lizards, crocodiles, turtles, and tortoises. They are distinguished by having a dry scaly skin, and typically laying soft-shelled eggs on land

riparian — Related to or living or located on a bank of a natural watercourse

riverine — Of, relating to, or situated on a river or riverbank; riparian

ruderal — Of disturbed land

sea level rise — The change in globally mean sea level due to steric contribution (volume increase due to an increase in average ocean temperature, which reduces average seawater density), mass contribution (volume increase due mainly to melting of land supported ice glaciers, ice caps, and ice sheets), and subsidence

sedimentation — The action or process of forming or depositing material suspended by water, wind, or ice

social trails — Unofficial/informal trails created by erosion due to human foot traffic

species abundance — The number of individuals per species

Species of Greatest Conservation Need (SGCN) — Wildlife species indicative of the state or territory that is deemed most rear, imperiled, and/or requires conservation needs

species richness — The number of different species represented in an ecological community, landscape or region

taxa — Plural of taxonomic groups

taxonomy — Orderly classification of plants and animals according to their presumed natural relationships

terrestrial — Of or relating to land

topography — The configuration of a surface including its relief and the position of its natural and man-made features

Total Maximum Daily Load (TMDL) — EPA required caps on the amounts of pollutants that waterbodies can receive and still meet water quality standards

upland — Of or relating to dry ground



vernal pool — Depressions holding water for a temporary period in the spring, and in which various amphibians lay eggs

vertebrates — Belonging or pertaining to the Vertebrata, a subphylum of chordate animals, comprising those having a brain enclosed in a skull or cranium and a segmented spinal column; a major taxonomic group that includes mammals, birds, reptiles, amphibians, and fishes

vulnerability assessment (climate change) — Tools structured to determine the level of vulnerability (sensitivity, exposure, adaptive capacity) to climate change

zoonotic pathogen — A disease that can be passed between animals and humans

