Using Native Plants in the Home Landscape

Key Terms & Concepts



Ecology and Ecosystem

Ecology. Ecology is the study of the relationships between living organisms, including humans, and their physical environment; it seeks to understand the vital connections between plants and animals and the world around them.

Ecosystem. An ecosystem consists of all the organisms and the physical environment with which they interact. These biotic (living) and abiotic components (non-living) are linked together through nutrient cycles and energy flows.

Trophic levels - Food chain

Autotrophs. Produce their own food, plants

Heterotrophs. Consume others for food, herbivores/omnivores/carnivores

Habitat. Defined area that has specific features of preferential features that organisms

Biodiversity. Variety of life on earth at all its levels from genes to ecosystems. Not only rare species, but all living things including humans and microbes.

Intraspecific vs Interspecific

Intraspecific: species to species

Enough space within a habitat for more than one mating pair to nest

Interspecific: between different species

Enough food resources for different species utilizing the same food resources

Phenology. The study of periodic events in biological life cycles and how these are influenced by seasonal and interannual variations in climate, as well as habitat factors.

Extirpated. Locally extinct

Pollinators. A pollinator is anything that helps carry pollen from the male part of the flower (stamen) to the female part of the same or another flower (stigma) to allow for fertilization.

Examples: Bees, wasps, Butterflies, Moths, beetles, flies, Birds, Bats.

Some plants can be self-fertilizing, while others can be wind or water pollinated.

Monoecious/dioecious

Monoecious. Plant has both male and female parts: American Hazelnut à However the plant is not self-fertilizing

Dioecious Plants. Male plant (Pistillate flower) and female plant (staminate flower): American Holly

Native plant. USDA : "Native plants are the indigenous terrestrial and aquatic species that have evolved and occur naturally in a particular region, ecosystem, and habitat. Species native to North America are generally recognized as those occurring on the continent prior to European settlement."

Non-native plant. A plant that is not indigenous to a particular region, ecosystem and habitat.

Released from natural controls, can interrupt the phenology of our native plants/animals

Invasive species.

USDA definition is 1) non-native (or alien) to the ecosystem under consideration and, 2) whose introduction causes or is likely to cause economic or environmental harm or harm to human health.

Non-native species are plants and animals living in areas where they do not naturally exist. "Non-native species" and "invasive species" cannot be used interchangeably.

Annual. A plant that completes its entire lifecycle – germination, growth, reproduction in one growing season and then the entire plant dies.

Perennial. A plant that lives for more than one year (biennial, herbaceous perennial, woody perennial)

Herb. Herbaceous, non-woody plants.

Graminoids. Herbaceous plants that are grass-like.

Forbs. Flowering herbaceous plants that are not grass-like.

Shrubs. Perennial woody plant usually multi-stemmed.

Trees. Perennial woody plant usually single stemmed with branches.

Subshrub. Small or low growing shrub.

Vine. a plant having a long, slender stem that trails or creeps on the ground or climbs by winding itself about a support or holding fast with tendrils or claspers

Wetland Indicator Status. The wetland indicator status expresses the estimated probability (likelihood) of a species occurring in wetlands versus non-wetlands.

OBL = Obligate - Almost always occurs in wetlands under natural conditions (estimated probability > 99%).

FACW = Facultative Wetland - usually occurs in wetlands (67 - 99%), but occasionally found in non-wetlands.

FAC = Facultative - equally likely to occur in wetlands or non-wetlands (34 - 66%).

FACU = Facultative Upland - usually occurs in non-wetlands (67 - 99%), but occasionally found in wetlands (1 - 33%).

UPL = Upland - occurs almost always (> 99%) under natural conditions in non-wetlands.

NI = No Indicator.

To help with selecting plants for the landscape, the following wetland indicators are useful:

Moist to poorly drained soils = FAC - FACW - OBL

Moist to well-drained soils = FAC - FACU - UPL