Wildlife Glossary

-A-

abiotic
Non-living factor in an environment; for example, light, water, temperature, or rocks.

acid rain
Rain, snow, or other forms of water that are made more acid by the waste gases that come mainly from the burning of coal and oil products. The gases (usually sulfur dioxide and oxides of nitrogen) mix with water and other materials in the air. Acid rain falls on the land and water, and can affect wildlife, plants, soil, and building materials.

acorn
The fruit of an oak tree; single seeded; popular wildlife food

adapted, adaptation
The process of making adjustments to the environment. For example, plants grow only where soil types, moisture, and sunlight are balanced to the proper degree. Desert plants have adapted so they live under intense sunlight, on poor quality soils, and with a much reduced water supply.

aerate, aeration
To supply with air or oxygen; to loosen the soil to add air space to it; to supply running water with additional oxygen, as when a stream runs over falls or rapids or when wind creates waves on a lake.

aerobic
Living or occurring only in the presence of oxygen

aesthetic
Sensitivity to or appreciation of beauty through recognition of its unique and varied components or through its orderly appearance.

aggregate
To gather into a group or mass

air quality
A gauge of the concentration of one or more chemicals in the atmosphere that could potentially be harmful to humans, other animals, vegetation, or materials.

allantois
Part of an egg that receives waste from the embryo.

alluvial deposits
Sedimentary deposits (like a delta) in fresh water

amnion
A thin, fluid-like sack that encloses the embryo in an egg

amphibian
Typically, an animal that, when young, lives in an aquatic habit and breathes by gills; as an adult, an amphibian lives primarily in a terrestrial habitat breathing by lungs and through moist glandular skin. For example, frogs and salamanders are amphibians.

amphibole/pyroxenes
Easily weathered group of minerals that provides calcium and magnesium; not as abundant as feldspars.

anadromous
Any species of fish that lives in saltwater and spawns in freshwater. Some examples are salmon, shad, and striped bass.

anaerobic
An organism, like bacteria, that lives without the presence of oxygen

animal community
Animals of various species living within a certain habitat, each occupying a specific position in that particular environment; directly parallel to plant communities.

annual turnover
The rate of replacement of individual animals in a population. Birds, such as quail, may have a 70 percent turnover annually. This means that only 30 percent of the birds alive at the beginning of one year are still alive at the end of the year. The reproductive capabilities of a species will match the mortality, or turnover rate.

anthropomorphism
The attribution of human characteristics to non-humans, especially animals. Biologists recognize that animals may exhibit emotions and behavior patterns resembling those of humans. Anthropomorphism is generally used to refer to a fictionalized portrayal of animals such as those found in children books, cartoons, and so on.

asbestos
A natural fibrous material that was once commonly used for fireproofing and sound or heat insulation. Prolonged inhalation of very fine asbestos particles can cause lung disease.

atmosphere
Consists of the troposphere and the stratosphere, which comprise the whole mass of air surrounding the Earth. The troposphere is the innermost layer of the atmosphere, containing about 95% of the mass of the Earth's air and extending 11 miles above sea level. The stratosphere is the second layer of the atmosphere and extends from about 11 to 30 miles above the Earth's surface.

aquatic
Growing, living in, or frequenting waters.

-B-

BMP
Best Management Practices

bacteria
Single celled microorganisms that lack chlorophyll. Many bacteria break down organic matter in the air, the water, and the soil. Some bacteria are capable of causing diseases in humans, other animals, and plants.

bag limit
The maximum number of animals allowed to be taken by an individual in regulated hunting. For example, a deer hunter may kill one deer per year.

barbel
A whisker-like projection for the jaws of some fish such as a carp or catfish. Barbels help a fish to taste and feel.

behavior
What an animal does.

"big game"
A term designating larger hunted species, such as deer, elk, moose, bear and big horn, as opposed to "small game" (rabbits, woodchucks, squirrels, doves, and quail) or "non-game" (songbird and birds of prey). In many states, species are legally designated as "big game", "small game" or "non-game".

bioaccumulation
The build-up of chemicals in a plant or animal. For example, DDT in bluebirds.

biology
The study of living organisms

biodiversity (biological diversity)
A term used to represent the variety of life forms in a given area.

biogeochemical cycles
Movement of matter within or between ecosystems caused by the interaction of living organisms, geologic forces, or chemical reactions.

biologist
A person who studies living organisms and their relationship to one another.

biological diversity
The variety of life forms in a given area. Diversity can be categorized in the number of species, the variety in the areas of plant and animal communities, the genetic variability of the animals, or a combination of these elements.

biomass
The total weights of all living matter in a particular habitat, at a given moment in time.

biome
A large geographic area with somewhat uniform climatic conditions; a complex of communities characterized by a distinctive type of vegetation and maintained under the climatic conditions of the region.

biotic
The living components of an ecosystem (fauna and flora); a reference to the living components of the biosphere or of an ecosystem as distinguished from the non-living components.

biosphere
The part of the earth's crust (water and atmosphere) where living organisms can exist.

biota
The animal and plant life of a region or period.

biotic community
The living organisms in a given community. It includes all plant and animal life within the community. The non-living parts are considered the abiotic parts of the community.

biotic potential
The capacity of a population of animals or plant to increase in numbers under optimum environmental conditions.

blind
A hiding place for observing.

breeding
A series of complex behavioral interactive patterns from courtship to mating; rearing of young which are necessary for the continuation of a species.

brood
The offspring of a bird or mammal.

browse
A general term, commonly used in wildlife management to signify brushy plants eaten by deer, elk, or cattle; to eat the twigs and leaves or woody plants.

buffer strip
A narrow zone or strip of land, trees, or vegetation bordering an area. Common examples include visual buffers, which screen the view along roads, and streamside buffers, which are used to protect water quality. Buffers may also be used to prevent the spread of forest pests.

burrowing
Digging a hole or tunnel.

-C-

camouflage

Colors, tones, patterns, shapes or behaviors that enable an organism to blend in with its surroundings. Some organisms, for example, have a skin or coat color that lets them hide from predators.

carbohydrates
Sugars, starches, and cellulose that are produced by green plants and are important nutritional sources of energy for many animals.

carbon cycle
The circulation and recycling of carbon atoms, especially through the processes of photosynthesis, respiration, and decomposition.

carnivore
A meat eater.

carrion
The bodies of dead animals, usually found in nature in the process of decay; not “fresh meat”.

carrying capacity
A wildlife management term for the equilibrium expressed by the availability of habitat components and the number of animals in a given area. In general ecological usage, carrying capacity is the dynamic equilibrium established between any life form and its environment. It is frequently expressed as a number indicating the population of any given animal a given area can support. Carrying capacity varies throughout the year. The population number varies from year to year, dependent upon conditions within the habitat such as rainfall, weather, and habitat conditions.

cast
To regurgitate indigestible prey remains.

catadromous
Any species of fish that lives in freshwater and spawns in saltwater, such as the eel.

catfish
A group of fish without scales named for the long barbels around their mouths that look like the whiskers of a cat.

cell
The smallest living unit of an organism.

chorion
The outer membrane enclosing the embryo in reptiles, birds, and mammals

climate
The kind of weather a place has over a period of years, based on conditions of heat and cold, moisture and dryness, clearness and cloudiness, wind and calm.

climatic
The average condition of the weather as defined by temperature, precipitation, and wind velocities; the environmental conditions relating to weather.

climax
The final stage of plant or animal succession; when environmental conditions have been stable long enough for an area to develop a semi-permanent biome.

climax community
The relatively stable association under existing conditions of soil and climate that represents the final stage of succession. Unlike earlier stages of successions, climax communities usually contain a large variety of different species and complex interactions.

coastal plain
Large, nearly level areas of land near ocean shores.

codominate
To be one of two or more of the most characteristic species in a biotic community

coloration
Genetically-controlled patterns or markings that can protect an individual organism.

commensalism
A relationship between two organisms of different species in which one organisms benefits, while the other is generally neither helped nor harmed.

community
An association of organisms—plants and animal—each occupying a certain position or ecological niche, inhabiting a common environment and interacting with each other; all the plants and animals in a particular habitat that are bound together by food chains and other interrelationships.

competition
When two or more organisms compete to use the same resource; may be inter- or intra-specific.

conservation
The use of natural resources in a way that ensures their continuing availability to future generations; the intelligent use of natural resources for long-term benefits.

Conservation Reserve Program (CRP)
A federal program designed to remove highly erodible, marginal farmland from production through a one-time cost-sharing payment to establish trees, grass, or other cover. The landowner receives a 10-year annual rental payment to maintain the cover.

consumer
An organism that obtains energy by feeding on other organisms and their remains.

congregate
When animals group together in an area.

consumptive use
In general terms related to wildlife, any use resulting in the use of wildlife after harvest. Examples may be the death of an individual animal as in hunting, fishing, and trapping.

corridor
A track of land forming a passageway

courtship
A pre-mating behavior where the male tries to woo or court the female in order to mate.

cover
Vegetation and other land features that provide areas for wildlife to hide, sleep, feed, and reproduce.

covey
A small flock or group, often a family group of birds such as quail.

crepuscular
Active at dawn and dusk.

cycle
A periodically repeated sequence of events.

-D-

DDT
A colorless contact insecticide. Banned in the United States for most uses since 1972

dabbling ducks
Ducks which frequent shallow marshes, ponds and rivers and “tip up” to feed. They feed with their body above water and take off vertically when startled.

daphnia
Any of many kinds of water fleas

decadent
Declining in health and/or productivity**.**

decibel
A unit of intensity of sound. A measurement of 50 decibels is considered moderate sound; 80 is loud; sound beyond 100 becomes intolerable.

decomposer
A plant, animal, or fungi which feeds on dead material and causes its mechanical or chemical breakdown.

denitrification
To remove nitrogen or nitrogen-containing gases

dense
Thick, or crowded closely together.

density
Number of organisms per unit of space.

depredation
The act of preying upon, usually in relation to wildlife damage to people’s crops or animals.

desert
An arid habitat with limited amounts of vegetation.

detrimental
Having harmful effects.

dew
Water droplets condensed from the air onto cool surfaces such as grass or leaves. Usually occurs at night.

dissolved oxygen
The oxygen mixed into water and used by fish. Dissolved oxygen is originally put into water by things such as wind, current, plants, and micro-organisms..

display
An observable behavioral pattern that carries a specific message. The message may be inter- or intra-specific.

diurnal
Active by daylight; the opposite of nocturnal.

diversity
Variety.

diving ducks
Ducks that prefer to feed in deep water like lakes and bays.

domesticated
Referring to animals which humans have tamed, kept in captivity, and bred for special purposes.

dominant species
The plant or animal species which exerts major controlling influence on the community. Removal of dominant species results in important changes in the community. Generally, dominants have the greatest total bio-mass represented by total number or weight.

DNR
Department of Natural Resources; abbreviation for the name of the natural resources agency in many states. In North Carolina the name of the agency is DENR—Department of Environment and Natural Resources.

drought
The lack of normal precipitation for an extended period of time. A long period with little or no rain.

-E-

early successional
Describes a species adapted to the beginning or early stages of biotic succession. The first species to invade a cleared area are early successional species.

ecology
The scientific study of the relations of living things to one another and their environment. A scientist who studies these relationships is called an ecologist.

ecological diversity
The variety of forest, desert, grasslands, oceans, stream, and other biological communities interacting with one another and with their nonliving environment.

ecological islands
Small spaces of wildlife and plant habitat remaining when land is cleared for farming or urban development.

ecological niche
The role played by an organism in a biological community: its food preferences, its requirements for shelter; its special behaviors, and the timing of its activities (nocturnal or diurnal). The ecological niche of organism has little to do with where it is found but much more to do with its function or role in the community (for example, predator or decomposer) and how it performs that function.

echosphere
A term for the total of all the regions on the earth capable of supporting life.

ecosystem
All living things and their environment in an area of any size where all are linked together by energy and nutrient flow. Also, the interacting system of a biological community and its nonliving environment; the place where these interactions occur.

ecosystem management
Use of ecosystem concepts to predict the effects of management actions on the ecosystem and to guide management planning and actions.

ecological succession
The changes, over time, in the structure and function of an ecosystem. When no previous vegetation exists on a site, the process is called primary succession. When a site supported vegetation previously but was disturbed, the process is called secondary succession.

ecologist
A scientist who studies the interrelations of living things to one another and their environment.

ecology
The scientific study of the relations of living things to one another and to their environment.

ecotone
A land area where two different succession layers come together; edge. Good wildlife habitat.

edge effect
The tendency of wildlife to use the areas where two different vegetative types come together forming an edge; where rabbits, for example, concentrate in an area where brush land and meadow land meet because of the diversity of food, shelter, and other habitat components provided by the edge.

edge habitat
The transition zone between two different habitat types.

endangered
A species that is in danger of extinction throughout all or a significant portion of its range. (A *threatened* species is one that is likely to become endangered.)

energy flow
The one-way passage or transfer of energy through an ecosystem according to the laws of thermodynamics.

endemic
Pertaining to a population that is restricted to a particular geographic area.

entomology
The study of insects

environment
The sum of all external conditions and influences, living and nonliving, that affect the development and survival of an organism (or group of organisms); includes other plants, animals, climates, and locations.

epidermis
The outermost layer or layers of cells in a plant or animal.

estuary
A partly enclosed body of water where sea water and fresh water meet and mix.

ethics
A personal or social moral code.

evaporation
A physical change of state in which a liquid is transformed into a vapor or gas.

evapotranspiration
The evaporation of water from the soil and the transpiration of water from the plants that live in that soil. Approximately one-quarter of a forest's annual rainfall returns to the air through evapotranspiration.

excavate
To make a cavity or hole; to hollow out.

exotic species
A species that is not native to the ecosystem; also known as an invader species.

exclusion
Keeping something out of an area.

extinction
The condition of having been removed from existence. An animal or plant facing extinction is one in danger of vanishing from our world.

eutrophic
A type of body of water that has high levels of nutrients.

-F-

famine
An extreme shortage of food in a given area.

fauna
Animals, especially the animals of a particular region or period considered as a group.

feed lot
An enclosed area in which animals, such as hogs or cattle, are fed before being sold for meat.

feldspars
The most abundant group of minerals in the earth's crust.

feral
Used in wildlife as referring to domesticated animals gone wild, for example, wild burrows, goats, cats, and dogs.

fiber
A thread-like body or filament many times longer than its diameter. Paper pulps are composed of fibers—usually of vegetable origin, but sometimes animals, minerals, or synthetic—for special types of papers.

field
An area devoid of trees and generally characterized by either grasses or cultivated crops.

filter
Any substance (paper, charcoal, sand, cloth, or fiber) through which air, smoke or liquid passes to remove impurities or recover solids.

fingerling
A young fish, about as long as the length of your finger.

fire scars
Scar tissue that develops when a tree or shrub is burned by fire but is not killed.

fire triangle
The three components necessary for a fire to burn–heat, fuel, and oxygen.

firebreak
Any nonflammable barrier used to slow or stop fires. Several types of firebreaks are mineral soil barriers; barriers of green, slow-burning vegetation; and mechanically cleared areas.

fisheries management
The science of management of fish populations through research, habitat manipulation, stocking, water quality control, and regulations.

flat or straight planting
Planting trees directly into the ground without beds or, in some cases, without first moving logging debris.

flora
A list of the species of plants that make up the vegetation for an area. (See also **vegetation**.)

fluctuate:
To vary; or rise and fall irregularly.

flyway
Fly routes established by migratory birds

food chain
The transfer of food energy from organisms in one nutritional level to those in another.

food web
A complex and interlocking series of food chains.

forage
Refers to the vegetation eaten by animals.

forb(es)
Low growing herbaceous plants, both annuals and perennials.

Forest Development Program (FDP)
A state-and industry-funded cost-sharing program administered by the North Carolina Division of Forest Resources. The program pays landowners for approved tree site preparation and planting activities.

forest
A community of trees, shrubs, herbs, and associated plants and organisms covering a considerable area, that use oxygen, water and soil nutrients as the community attains maturity and reproduces itself.

forest ecosystem
The organisms, soil, water and air, associated with a forest, along with other forest-related areas.

forest floor
The lowest level of the forest, typically composed of small plants, fungi, and decomposing material.

forest management
The practical application of scientific, economic, and social principles to the administration of a forest, for specified objectives.

Forest Management Plan
Written guidelines for current and future management practices recommended to meet an owner's objectives.

forest region
An extensive area of a continent in which the climax forest associations are closely similar. The major forest regions of North America are West Coast Forest, Western Forest, Central Hardwood Forest, Tropical Forest, Northern Forest, and Southern Forest.

Forest Stewardship Program
A technical assistance program to help private landowners manage all their forest resources – soil, water, wildlife, timber, recreation, beauty, and endangered species—for today and for future generations.

Forest Stewardship Plan
A written document listing activities that enhance or improve forest resources (wildlife, timber, soil, water, recreation, and aesthetics) on private land over a 5-year period.

forestry
The principles and practices for managing, using, and enjoying forests. Forestry includes a broad range of activities: managing timber, fish, wildlife, range, and watersheds; protecting forest and timber products from diseases, insects, and fire, harvesting; transporting, manufacturing, marketing, preserving, and protecting wood and other forest products; maintaining water and air quality; and maintaining the well-being of the society as it is influenced by forest and other renewable natural resources and their derived products and values.

Forestry Incentives Program (FIP
A federally funded cost-sharing program of the Agricultural Stabilization and Conservation Service (ASCS). FIP produces payments to landowners who complete certain approved forest management practices, including site preparation, tree planting, and timber stand improvement (TSI).

fossil fuel
Coal, oil, and other energy sources that formed over millions of years from the remains of ancient plants and animals. Fossil-fuel use is a major factor in pollution issues.

freshwater
Water that contains little or no salt.

fruit
The ripened ovary or ovaries of a seed bearing plant along with accessory parts.

fungi
Simple plantlike organisms that lack chlorophyll. Fungi get their nutrition from living on or in other organisms (parasitically), from living with other organisms (symbiotically), or by breaking down dead organic materials (saprophytically). Examples of fungi include: mushrooms, molds, and yeast.

fusiform rust
A disease resulting in a canker or swollen area on the limbs r trunks of pine trees from orange spores produced by infected oak leaves. Fusiform rust degrades stem quality and tree value, often leading to breakage, disfigurement, and eventual death of the tree.

-G-

gaff
A “j” shaped, barbless hook on a long handle used to hook large fish while landing them.

gamate
A reproductive cell having the haploid number of chromosomes capable of fusing with a gamate cell of the opposite sex to produce a fertilized egg.

game animal
Legal designation for animals which may be managed and hunted only under regulation.

gas
The physical state of a compound that characteristically has no fixed shape or size. Gases will fill and take the shape of any container in which they are placed.

generalists
Species that have broad adaptability; more likely to survive changes in habitat

genetic diversity
Variability in genetic or hereditary makeup among individuals within a single species.

geothermal energy
Heat transferred from the earth’s interior to underground concentrations of water trapped in fractured or porous rock to form steam or hot water.

gill
A breathing organ located behind the gill cover on a fish’s head.

girdling
Encircling the stem of a living tree with cuts that completely sever the bark and the cambium and often go further into the outer sapwood for the purpose of killing the tree by preventing the passage of nutrients.

glacial deposits
Sediment left after glaciers recede.

glaciation
The action of huge masses of moving ice formed from compacted snow.

glacier
A flowing body of ice, formed in a region where snowfall exceeds melting.

glean
After the harvest has been completed, gather wasted food in a systematic manner with a minimum of waste and unnecessary effort.

global climate change
The long term changes in temperature, moisture, and air mass movements occurring globally as a result of changes in the earth's atmosphere.

global warming
The observed increase in the average temperature of the Earth's innermost atmosphere; believed to be a result of the greenhouse effect of trapping gases.

granular
Comprised of particles measuring between 2 and 4 millimeters in diameter.

grass
Relatively short plants (less than 4 to 5 feet) typically having long narrow leaves and hollow jointed stems. Flowers for grasses are inconspicuous and often in clusters.

grassland
A vegetation community in which grasses are the dominant plants.

grazer
A herbaceous organism that consumes primarily grasses.

greenhouse effect
The trapping of heat by gasses, such as chlorofluorocarbons and carbon dioxide, in the Earth's atmosphere.

greenhouse gases
Gases in Earth's lower atmosphere (troposphere) that trap heat. Examples are carbon dioxide, chlorlofluorocarbons, ozone, methane, water, vapor, and nitrous oxide.

greenway
A linear park or connected system of recreational trails linking parks to residential and urban areas.

gross national product
Total market value in current dollars of all goods and services produced by a country's economy for final use during a year.

ground litter
Layer of the forest floor consisting of decaying organic matter such as leaves branches, and dead plants.

groundwater
Water that infiltrates the soil and is stored in slowly flowing and slowly renewed underground reservoirs called aquifers.

group selection
The harvest of clusters of two or more trees in a forest stands. The creation of gaps in the canopy promotes the regeneration of seedlings that grow well in direct or partial sunlight.

growth rings
Growth rings represent the annual increases in wood and diameter growth of the tree. Each ring consists of early wood (or springwood) and late wood (or summerwood).

guide
One of the circular rings made of metal or artificial material attached to the shaft of a rod for the fishing line to travel through; someone who is hired to show a customer how and where to fish on a body of water.

gymnosperm
Any class of seed plants, mostly trees such as conifers, that produce naked seeds not enclosed in fruit.

-H-

habitat
The native environment of an animal or plant, or the kind of place that is natural for an animal or plant; an area that provides adequate food, water, shelter and living space.

hardwood
Deciduous or broadleaf trees.

harvest
Removal of forest crops for eventual use in the marketplace.

heartwood
The inner core of a woody stem, wholly composed of nonliving cells and usually differentiated from the outer enveloping layer (called *sapwood*) by its darker color.

herb
Any flowering plant or fern that has a soft, rather than woody, stem.

herb layer
The layer of soft-stemmed plants growing close to the forest floor.

herbaceous
All grasses and forbes having soft rather than woody stems, including plants called weeds and flowers.

herbicide
Chemicals used to control the growth of plants.

herbivore
A plant-eating animal.

hibernate
To pass the winter in a dormant state.

high-grading
A harvesting technique that removes only the biggest and most valuable trees from a forest stand.

home range
The area in which an animal travels in the scope of normal activities; not to be confused with *territory*.

hormones
A substance produced by one tissue and conveyed by the bloodstream to another to affect physiological activity like growth.

horticulture
The science of growing plants.

humus
The dark organic part of soil formed from decaying plant and animal matter; often called *topsoil*.

hunter
A person or animal who searches for wildlife with the intent of catching or killing it.

hunting pressure
The numbers, amount, or concentration of hunters in a specific area and upon a specific animal.

hydric
A descriptive term referring to plants and soils existing in flooded, saturated, or ponded areas. (For example, hydric soils.)

hydrocarbon
An organic compound containing only carbon and hydrogen, often occurring in petroleum, natural gases, and coals.

hydrological cycle
The process where water circulates through the ecosystem; includes precipitation, respiration, evaporation; the water cycle.

hydrophyte
A plant adapted to grow in water.

hydropower
Electric energy produced by falling or flowing water.

hyphae
A threadlike filament forming the mycelium of a fungus.

hypothermia
The rapid and abnormal chilling of the body. Hypothermia can occur even in mild and warm weather. Victims must be warmed by special means to prevent long-term damage or death.

hypsometer
An instrument used to measure the heights of trees, employing geometric or trigonometric principles.

-I-

iceberg
A large floating mass of ice detached from a glacier or polar ice cap.

ichthyology
The branch of zoology that deals with fish, their classification, structure, habits, and life history.

IGFA
Abbreviation for the International Game Fish Association, a group that keeps records on fish catches and supports sport fishing.

igneous rock
Rock formed by the cooling of magma, or molten rock, from within the Earth. Igneous rocks include basalt, lava, and granite.

impoundment
A man-made body of water.

improvement cut
An intermediate cut made to improve the form, quality health, or wildlife potential of the remaining stand.

impervious
Cannot be penetrated

increment borer
An instrument used to take core samples to determine the rate of a tree's radial growth and its age.

indehiscent
Fruit with the seeds on the outside like a strawberry; therefore they don't split open when mature.

indigenous
Pertaining to plants or animals that are native to a particular region or country.

infiltration
The act of permeating a porous area with a liquid or gas.

inorganic
Composed of matter that is not animal or vegetable; not having the organized structure of living things.

insecticide
Chemicals used to kill insects.

innate
Possessed at birth.

instinctive
Actions taken as a result of an inborn pattern of behavior.

interaction
The relationships of one organism to another; the action of one population affecting the growth or death rate of another population. For example, one population may eat members of the other population, compete for food, excrete harmful wastes, or otherwise interfere with the other population. Some interactions are positive; some negative; and some are completely neutral.

interdependencies
The interrelationships of wildlife with one another and with the various elements of their environments

interior basin
Land areas that are generally bowl-shaped and surrounded by hills and mountains. Usually drained by one river system and isolated from ocean influence by mountains and hills.

invade
To enter, to encroach upon, to spread over into. In wildlife usage, this usually describes when an organism is removed from a community and another organism spreads over into this community.

invertebrate
Animals lacking a backbone. Some examples are insects, spiders, mollusks, and crustaceans.

IPM
Integrated pest management; a system that can reduce the amount of pesticides applied to crops.

irrigate
To supply cropland, parks, yards, and so on, with water through the use of diversions, ditches, and pipes.

-K-

key plant species
Those plant species that are used to indicate the general condition of a habitat. For example, when plants show overuse, the animals may have exceeded the carrying capacity of the habitat.

keystone species
A wildlife species whose removal will effect many different plants and animal species. For example, a beaver would be a keystone species in a beaver pond.

kiln (dry kiln)
A structure heated by gas or electricity in which lumber is seasoned artificially or pinecones are dried and opened.

knee
A round or spurlike growth rising from the roots of some swamp trees such as bald cypress and tupelo.

-L-

landfill
A specially engineered site for disposing of solid waste on land, designed to confine the refuse to the smallest practical area and reduce it to the smallest practical volume.

late successional
Describes a species adapted to the later stages (those approaching the climax community) of biotic succession.

lateral line system
A system of sense organs in fish, a series of pores or canals running along a line on each side of the body and on the head; detects pressure changes (including vibrations) in the water.

leaching
The removal of soluble substance from soil by percolating water.

legume
Plants that bear seeds in a pod. Typically have characteristics that allow them to improve the fertility of the soil by adding nitrogen. Some examples are: alfalfa, clover, soybeans, and peas.

lichen
Algae and a fungus growing together in a symbiotic relationship.

life cycle
The phases, changes, or stages through which an organism passes during its lifetime.

limiting factors
Influences in the life of any animal, population of animals, or species such as: food, water, shelter, space, disease, perdition, climatic condition, population, hunting, poaching and accident. When one or more of these exceeds the limit of tolerance of that animal, population of animals, or species, it then becomes a limiting factor and can directly affect the well-being of that animal and may even cause the animal's death. Limiting factors may result from causes in nature as well as human activities

litter
The number of young born per birthing; the leaves or needles that fall from trees and lie on the ground to decompose and form soil.

littoral
Of or on a shore.

loam
A type of soil that consists of a mixture of clay, sand, and silt.

loess
Windblown deposit of fine-grained silt or clay.

log
To cut and deliver tree segments suitable for lumber and other products in segments 8-16 feet in length.

log rule or log scale
A table based on a diagram or mathematical formula used to estimate volume or product yield from logs and trees. Three log rules are used today in North Carolina: Scribner is the common scale for pine; Doyle is the common hardwood scale; and the International ¼" Rule best measures mill output, although it is used less frequently than the other log scales.

lop
To cut the limbs from a felled tree.

lumber
Timber sawed or split into planks.

-M-

macrofauna
Large animals; extremely visible.

management
In general terms related to wildlife, the intentional manipulation or non-manipulation of habitat and/or the organisms within the habitat.

management, forest
The application of business methods and technical forest principles to the operation of a forest stand.

manipulate
Manage or influence to achieve desired results.

map
A drawing of land or physical features. Maps are useful to find streams and access points to rivers and lakes.

marginal land
Land that does not consistently product a profitable crop because of infertility, drought, or other physical limitations such as shallow soils.

marine deposits
Sediment deposited in oceans.

marking
(a) The physical process of selecting trees to be cut or left during a harvest. (b) Delineating a boundary. Marking is usually done by spraying a spot of bright paint on a prominent part of the tree.

marl
A type of bottom under a body of water; a mixture of clay and carbonate of lime.

marsh
A wetland without trees which often has standing water.

mast
Fruits or nuts used as a food source by wildlife. Soft mast includes most fruits with fleshy coverings, such as persimmon, dogwood seed, or black gum seed. Hard mast refers to nuts such as acorns and beech, pecan, and hickory nuts.

mature tree
A tree that has reached a desired size or age for its intended use. Size, age, or economic maturity varies depending on the species and intended use.

MBF
Abbreviation denoting 1,000 board feet. MBF is a typical unit of trade for dimension lumber and sawtimber stumpage. (It takes 11 MBF of wood to build an average 1,900-square-foot house.)

meandering
Curving; often used to describe rivers and streams in lowlands.

merchantable height
The stem length, normally measured from the ground to a 10-, 6-, or 4-inch diameter top, above which no other saleable product can be cut. Diameter, local markets, limbs, knots, and other defects collectively influence merchantable height.

metamorphic rock
Rock formed when a pre-existing rock is exposed to high heat or pressure or when it undergoes a chemical reaction.

methanol
Alcohol made from wood.

microclimate
A "small climate;" the environmental conditions within a restricted area.

microfauna
Very small animals, barely visible to the eye.

microhabitat
A small habitat within a larger one in which environmental conditions differ from those in the surrounding area. A hole in a tree trunk or a decaying log is a mircohabitat within the forest.

microorganism
An organism microscopic in size, observable only through a microscope.

migration
The movement of animals—including fish—from one area to another.

migratory
In wildlife usage, birds or other animals which make annual migrations; that is, travel distances in the course of seasonal movements. Migrations may be great or very short, depending upon the species.

mineral
A naturally occurring inorganic crystalline material found in the Earth's crust.

mitigate
To make up for; to substitute some benefit for losses incurred.

mixed forest
A forest that includes both coniferous and deciduous trees.

mixed stand
A timber stand in which less than 80 percent of the trees in the main canopy are of a single species.

moldboard plow
A type of plow that turns the soil completely upside down, burying all crop remains underneath. Does not leave crop residue on ground surface.

monoculture
The raising of a crop of a single species, generally even-aged.

monoecious
Unisexual flowers of both sexes, produced on the same plant.

Montane zone
The band of vegetation that occurs at intermediate elevations in mountainous regions between foothills and subapine zones.

mortality rate
The death rate—usually expressed in deaths per thousand.

mosses
Small green nonvascular plants.

mottled
A variegated pattern of color.

mucus
In fish, a slimy substance that coats the skin and helps protect fish from infection and disease. Also helps them move through the water.

mulching
To add materials to soil to protect the soil from cold, to reduce evaporation, to control weeds, or to enrich the soil. Common materials for mulching include: sawdust, bark, and leaves.

multiple-use
A term referring to a system of management in which the same lands and waters are used for a variety of purposes. The uses are not necessary simultaneous but are intended to be compatible. For example, a tract of forest land can serve as a home for wildlife, provide clean air and water, be a place for recreation, be used to grow and harvest trees for products, and be aesthetically pleasing—all at the same time. (See also **Stewardship**.)

multiple-use forestry
Any practice of forestry fulfilling two or more objectives of management.

multiple-use management
The practice of managing forest resources for a variety of benefits including water quality and yield, forage, wildlife habitat, wood, recreation, wilderness, and minerals.

mutualism
A close association between two different species whereby each species derives some benefits. For example, the yucca plant and the yucca moth each benefit from their relationship.

mycelium
The mass of interwoven filaments that forms the vegetative portion of a fungus.

mycorrhiza
The symbiotic association between the mycelium of a fungus and the roots of certain plants.

-N-

nares
The nostrils in the snoot of a fish, used for smelling.

naturalist
A specialist who studies and/or teaches about nature.

natural resources
Those raw materials supplied by the Earth and its processes. Natural resources include nutrients, minerals, water, plant animals, and so on.

natural selection
A process in nature resulting in the survival and perpetuation of only those forms of plants and animal life that have certain favorable characteristics that enable them to adapt best to a specific environment.

naval stores
Turpentine and resin derived from the distillation of oleoresins from slash and longleaf pine.

needleleaf
Refers to a trees or shrub with narrow, needle-like leaves.

niche
Refers to specific place where an individual organism can live.

nitrogen-fixation
Conversion of elemental nitrogen from the atmosphere to organic combinations or to forms readily usable in biological processes. Nitrogen-fixation is normally carried out by bacteria living symbiotically in legumes, or by free-living soil bacteria.

nocturnal
Active by night; the opposite of diurnal.

nonconsumptive use
In general terms related to wildlife, any use which does not directly kill wildlife. For example, most forms of birdwatching, photography, hiking and other pursuits involving activity as well as various forms such as movie, television, and gallery viewing of wildlife.

nongame
All wildlife species which are not commonly hunted, or consumed by humans, like songbirds and raptors.

nonrenewable resources
Nonliving resources such as rocks and minerals; resources which do not regenerate themselves; substances, such as petroleum, coal, copper, and gold which, once used, cannot be replaced—at least not in this geological age.

non-point-source pollution
Pollution that enters water through run-off from farmland, forestland, and urban areas. It can not be determined exactly where this pollution comes from.

nuclear fusion
Nuclear change in which two nuclei of isotopes of elements with a low mass number (such as hydrogen-2 and hydrogen-3) are forced together at extremely high temperatures until they fuse to form a heavier nucleus (such as helium-4). This process releases a large amount of energy.

nutrients
Chemicals required for plants and animals to grow and exist; a chemical compound required for the life of an organism.

nymph
A larval phase of an aquatic insect.

-O-

old growth
Describes virgin forests or forests with trees over 100 years of age.

olfactory
Nerves involved in the sense of smell.

oligotrohpic
Lake type used to describe bodies of water characterized by low amounts of nutrients in proportion to their total volume of water.

omnivores
Organisms that eat both animals and plants.

organic
Referring to or derived from living organisms; in chemistry, any compound containing carbon.

organic matter
Chemical compounds of carbon combined with other chemical elements and generally manufactured in the life processes of plant and animals. Most organic compounds are a source of food for bacteria and are usually combustible.

organism
Any form of life (composed of mutually dependent parts) that maintains various vital processes.

owl pellets
Regurgitated, undigested bones, fur, feathers compacted into a pellet.

ozone
A form of oxygen that has three atoms to a molecule.

-P-

pathology
The study of the nature of disease and its causes.

parasite
An organism that lives on or in an organism of another species and derives nutrients from it.

parasitic
To be a parasite on. For example, mistletoe is a parasite growing on trees.

parasitism
Any relationship in which a consumer organism lives on or in and feeds on a living plant or animal, known as the host. The parasite draws nourishment from it and may gradually weaken its host and kill it.

parent material
The earthy materials—both mineral and organic—from which soil is formed. These include: minerals and rocks, glacial deposits, loess deposits, alluvial and marine deposits, and organic deposits. Rocks are generally considered the parent material.

partial cutting
Tree removal other then by clearcutting.

particulate
Small particles of liquid or solid in matter.

passive solar power
A solar energy collection system in which natural materials or large stationary absorptive surfaces absorb and temporally store the heat of the sun. Heat collected during the day is usually released from the absorptive surfaces at night.

peat
Moist, semi-decayed, organic matter.

pectoral fins
Side fins on fish

pedon
A three-dimensional soil body depicting the range of characteristics of a given soil.

pelagic
Relating to or living in deep, open water as opposed to along the banks.

pelvic fins
Fins on each side of a fish's belly. These fins aid in positioning and balance.

percolation
The downward movement of water in soil; leaching.

perennial
A plant that lives for several years and, when mature, usually produces seeds each year.

permeability
The quality of soil that allows air or water to move through it.

perpetual resource
A resource, such as solar energy, that is virtually inexhaustible on a human time scale.

pest
An undesirable, harmful, or noxious organism.

pesticide
An agent to control undesirable organisms. This can be an insecticide for insect control, a herbicide for weed control, a fungicide for control of fungal plant diseases, or a rodenticide for killing rats and mice. Some pesticides can contaminate water, air soil, or accumulate in the tissues of living organisms, and should therefore be used carefully.

pH
The hydrogen-ion activity used in expressing both acidity and alkalinity on a scale whose values range from 0-14, with 7 representing neutrality. Numbers less than 7 represent increasing acidity; numbers greater than 7, represent increasing alkalinity. Also, pH describes the condition represented by such a number.

pheromones
A chemical secreted by an animal or insect that influences the behavior or development of others of the same species.

phloem
The plant tissue that transports dissolved nutrients from the leaves to the other parts of the plant.

phosphate
A chemical compound that aids root growth and is essential in energy transfer. It is commonly incorporated into beds as triple super phosphate (TSP) at time of planting.

photosynthesis
Complex process that takes place in cells of green plants. Radiant energy from the sun is used to combine carbon dioxide and water to produce oxygen and carbohydrates (such as glucose) and other nutrient molecules.

phytoplankton
Microscopic floating and suspended aquatic plants. Phytoplankton are the first step of the food chain in many aquatic systems.

pigment
A chemical substance that reflects and transmits only certain light rays and thus imparts color to an object.

pioneer species
An organism capable of growing on bare sites (such as a newly exposed soil or rock surfaces) and persisting there until supplanted by successor species.

pith
Soft, spongy center of the stem of most flowering plants.

plant communities
An association of plants, each occupying a certain position or ecological niche, inhabiting a common environment and interacting

plankton
Organisms suspended in an aquatic habitat that control their own movements. Plankton are usually microscopic and include bacteria, algae, protozoan, rotifers, larvae, and small crustaceans. Phytoplankton are plant plankton; zooplankton are the animal species of plankton.

plantation
A forest established by planting seeds or seedlings.

plateau
An elevated, relatively level, expanse of land.

platy
Related to or being soil or minerals that occur in flaky layers.

playa
The level area at the bottom of a basin that is often covered with water from rain runoff and snow melt.

plywood
An assembled product constructed of three or more layers of veneer joined with glue and usually laid with the grain of adjoining plies at right angles to one another. Usually an odd number of plies are used to give balanced construction.

point source pollution
Pollution that comes from a specific place such as a drain or pipes.

pollution
Harmful substances deposited in the air, water, or land leading to a state of dirtiness, impurity, or unhealthiness.

pore spaces, pores
The area of the soil through which water and air move. The space between soil particles.

porous
Admitting the passage of gas or liquids through pores.

precipitation
Rain, snow, and other forms of water that fall to earth.

predator
An animal that hunts or captures other animals for food.

prescribed burn
The planned burning of a forest, stand, prairie, or slash pile with the intent to confine the burning to a predetermined area.

presuppression
Step in preventing forest fires, includes weather prediction, detection, and planning.

prey
Animals that are killed and eaten by other animals.

primary producers
Green plants thatare able to manufacture food from simple organic substance.

prismatic
Of, relating to, or being a prism.

producers
Organisms that synthesize organic compounds from inorganic substances by way of *photosynthesis* (green plants) or *chemosynthesis* (anaerobic bacteria).

productivity
The amount of crops or animals that can be harvested from land. It can also mean the general amount of goods made in a given time or in a given area.

profundal
Zone of water at the bottom of deep, open water.

propane
A heavy, flammable, gaseous, paraffin hydrocarbon found in crude petroleum and natural gas; used especially as fuel and in chemical synthesis.

protoplasm
The complex of protein, other organic and inorganic substances, and water that constitutes the living nucleus, cytoplasm, plastids, and mitochondria of a cell.

public land
Land owned by the citizens and administered and managed by the local, state, or federal government agencies.

pulp
Fibrous material prepared from wood, recovered paper, cotton, grasses, etc. by chemical or mechanical processes for use in making paper or cellulose products.

pulpwood
Timber that is cut and made into pulp for paper and other products.

pure stand
A timber stand in which at least 75 percent of the trees in the main crown canopy are of a single species.

-R-

radon
An odorless, colorless gas produced naturally from the radioactive decay of radium-226, Radon breaks down into several radioactive parts which can attach to large particles in the air. When inhaled, these particles settle in the lungs and increase the risk of lung cancer.

rain shadow
The area on the leeward side (as opposed to the windward side) of a mountain barrier that receives little rainfall.

range
The land where animals live; an area grazed by livestock and/or wildlife.

range land
An open region of lands that produce grasses and other forms of vegetation on which organisms can feed. Two common types of range land are pasture (enclosed, managed grazing lands) and open range (unmanaged, open grazing lands).

raptor
Eagles, hawks, owls, and other birds that are predators (preying upon other animals.)

rare
Referring to wildlife species not presently in danger but of concern because of its low numbers.

rare species
Species that populate a site or region infrequently, or in very low numbers. Rare species are not necessary endangered.

recreation
Entertainment, frequently implying activity in the out-of-doors.

recycle
The salvage and reprocessing of used materials (paper, metals, glass, cloth or fiber).

redd
A nest dug on the bottom of a body of water by spawning trout.

reforestation
Reestablishing a forest by planing or seeding an area from which forest vegetation has been removed.

regeneration cut
A cutting strategy in which old trees are removed while favorable environmental conditions are maintained for the establishment of a new stand of seedlings.

reintroduction of species
A wildlife management technique where a species is reintroduced into their historic range; the repopulation of animals in areas where they have become extinct.

regenerate
To replace lost or damaged parts with new tissue.

renewable resource
A resource that has the capacity to be replaced through natural processes. Trees are a renewable resource. (Nonrenewable resources are in limited supply and cannot be replenished by natural processes—at least not for thousands of years. Fossil fuels are a nonrenewable resource.)

rejuvenate
To stimulate and return to youthful health and vigor.

resident wildlife
Animals which are residents to a specific area on a year-round basis as opposed to migratory.

residual stand
Trees left in a stand to grow until the next harvest. This term can refer to crop trees or cull trees.

residium
Rock that is altered either chemically or physically but not moved from its place of origin.

resource
Portions of an environment upon which people have placed or assigned value or see as being available for use.

respiration
An energy-yielding oxidation process that goes on in living plants and animals; an exchange of gasses.

rill
A type of erosion.

ring, annual
Any yearly growth layer as viewed on the cross-section of a stem, branch, or root.

riparian
On or near the bank of water areas. The land area and plants that are influenced by the adjacent water.

rock
A complex mineral aggregate.

root collar
The transition zone between stem and root at the ground line of a tree or seedling.

root hairs
A filamentous outgrowth near the tip of a rootlet that absorbs water and minerals.

rootlet
A small root.

rotation
The planned number of years between the formation of a crop and its final cutting at a specified stage of maturity.

row crops
Agricultural crops, such as corn and soybeans, that are grown in rows.

runoff water
Fresh water from precipitation and melting ice that flows on the ground into nearby streams, lakes, wetlands, and reservoirs.

-S-

salinity
Level of salt in a given substance (like water).

saltwater
Water with salt in it, such as in an ocean or sea.

salvage cut
The harvesting of dead or damaged trees or of trees in danger of being killed by insects, disease, flooding, or other factors in order to save their economic value.

sand
Loose soil made up of small rock particles.

sapling
A young tree, less than 4 inches dbh (diameter at breast height). The minimum size of saplings is usually placed at 2 inches.

sapwood
The younger, softer, living or physiologically active outer portion of a tree's wood that lies between the cambium and the heartwood. The sapwood is more permeable, less durable, and usually lighter in color than the heartwood. The tree's water and nutrient needs are transported within the sapwood.

sawlog or sawtimber
A log or tree that is large enough (usually 10 to 12 inches in diameter) to be sawed into lumber. Minimum log length is typically 8 feet.

scale
One of the small covering plates on the body of many fish.

scarifying
For soil: The removal of the top litter layer of an area (usually in strips) for site preparation. For seed: The abrasion or weakening of the seed coat to encourage germination.

scat
Another name for animal droppings or excrement.

scavenger
An animal that eats the dead remains and wastes of other animals and plants.

scrub
Low, woody vegetation composed principally of shrubs.

school
A number of fish of the same species that are grouped together.

secondary succession
The sequential development of communities in an area in which natural vegetation has been removed or destroyed, but the soil was not destroyed.

secluded
Removed or screened from view of other areas and disturbances.

sedges
Grass-like plants with solid stems and leaves that grow in threes.

sediment
The matter that settles to the bottom of a liquid (such as water).

sedimentary rock
Rock that is formed by the accumulation of sediments that are compacted and solidified by heat, pressure, or chemical reactions.

sedimentation
The deposition or accumulation of sediment.

seedling
A young tree grown from a seed to a small sapling.

seed tree
A tree left behind when a stand is harvested or partially cleared to provide a source of seed for the species desired to be renewed.

seed tree cut
A harvesting method in which a few scattered trees are left behind to provide a source of seed.

selective cutting
The cutting of intermediate-aged, mature, or diseased trees in an uneven-aged forest stand, either singly or in small groups. This encourages the growth of younger trees and maintains an uneven-aged stand.

selective harvesting
The removal of individual or small clusters of trees to manage a forest stand so that it has a mixture of age classes and products.

sere
The series of communities that follow one another in a natural succession, as in the change from a bare field to a mature forest. A serial stage refers to one such community.

serotinous
A pinecone or other seed case that requires heat from a fire to open and release the seed.

shearing
Slicing or cutting trees or stumps at the ground line. Shearing may be done at harvest or with a KG blade during site preparation.

shelterbelt (or windbreak)
A row of trees and shrubs planted along the edge of a cultivated field to limit soil erosion caused by wind.

shelterwood cut
The removal of the understory of a forest so that younger saplings can grow in the shade of older and larger trees.

shrub
Plants with woody stems that are usually less than 12 feet tall. Shrubs often have many main stems rather than one main stem (trunk).

silt
Very fine particles of soil often transported by water and deposited as sediment.

silviculture
The science and art of cultivating forest crops according to a study of the life history and general characteristics of forest trees; *silviculturalist*.

single-tree selection
Harvesting single trees in a forest stand.

site index
A relative measure of forest site quality based on the height (in feet) of the dominant trees at a specific age (usually 25 or 50 years, depending on rotation length). Site index information helps estimate future returns and land productivity for timber and wildlife.

site preparation
Preparing an area of land for planting, direct seeding, or natural reproduction by burning, by chemical vegetation control, or by mechanical operations such as disking, bedding, scarifying, wind-rowing, or raking.

slash
The residue left on the ground after trees are harvested.

slope
The degree to which the land surface is inclined.

sloughs
A swampy place or marshy inlet.

smog
Originally, a combination of smoke and fog, now also applied to the photochemical haze produced by the action of the sun and the atmosphere on automobile and industrial exhausts.

snag
A standing dead tree. Snags frequently provide homes for wildlife.

softwood trees
Usually refers to coniferous trees. Some deciduous trees, such as aspen, also have relatively soft wood.

soil compaction
The compression of soil to a smaller volume.

soil texture
The feel or composition of the soil (sand, silt, or clay) as determined by the size of the soil particles.

soil type
Soils that are alike in all characteristics, including texture of the topsoil. Soil maps and information on site index, erodibility, and other limiting properties are available from the county Soil Conservation Service offices.

solar energy
Heat from the sun that can be used to do work.

solid waste
Discarded solid materials, excluding recovered materials.

spawn
The act of releasing eggs into the water by female fish for fertilization by male fish.

spawning run
The movement of fish to an area for the purpose of spawning.

species
Animals and plants that are the same and successfully reproduce the same kind of plant or animal; a category of biological ranking just below the genus or subgenus category. Members of the same species are closely related organisms that are potentially able to breed with one another.

species diversity
The number of different species and their relative abundance in a given area.

springwood
The less dense, larger-celled, first-formed part of a growth layer.

sport fishing
Fishing for recreation, not for profit or commercial reasons.

stagnant
Sluggish, not producing to potential.

stand
An easily defined area of the forest that is relatively uniform in species composition or age and can be managed as a single unit.

stewardship
The concept of responsible caretaking is based on the premise that we do not own resources but are managers of resources and are responsible to future generations for their condition.

stewardship forest
A privately owned forest tract that exhibits integrated forest management to protect and enhance wildlife, timber, recreation, natural beauty, and soil and water quality.

Stewardship Incentive Program (SIP)
A cost-sharing program available to forest landowners who have a multi-resource forest stewardship plan. Practices include cost-sharing assistance for the enhancement of forest recreation, fisheries, wildlife, and timber production and the protection of soil and water, wetlands, riparian zones, and rare and endangered species.

stoma
A small opening found in the epidermal layer of plants that allows: access for carbon dioxide; the release of water; and the release of oxygen. Stomata are surrounded by guard cells that control the opening size.

stratification, forest
The various layers of trees in a forest from the upper layer (canopy) to saplings, seedlings, and small herbaceous plants.

Streamside Management Zone (SMZ)
An area adjacent to a stream where vegetation is maintained or managed to protect water quality. The width depends on slope, but 50 feet is the normal minimum. Trees may be removed from SMZs as long as the stream bed is not disrupted and sufficient vegetation is left to protect water quality.

subclimax
A stage in succession that is short of the climax stage, but in which further development is inhibited by some factor(s) other than climate.

succession
The natural sequence of plant community replacement: beginning with bare ground and resulting in a final, stable community in which a climax forest is reached. Foresters, wild life biologists, and farmers constantly battle ecological succession to try to maintain a particular vegetative cover.

successional disking or mowing
A wildlife-enhancement practice in which a disk harrow or rotary mower is used to knock down existing vegetation every 1 to 3 years to promote the regrowth of annuals, legumes, forbes, and perennials.

successional stage
A distinguishable stage in the process of succession.

sustainable forestry
Managing forests to meet the needs of the present without compromising the ability of future generations to meet their own needs. This is done by practicing a land stewardship ethic that integrates the reforestation, managing, growing, nurturing and harvesting of trees for useful products with the conservation of soil; air and water quality; wildlife and fish habitat; and aesthetics.

sustained yield
The rate at which a resource may be used without reducing its long-term availability or limiting its ability to renew itself.

summerwood
The denser, smaller-celled, later-formed part of a growth layer.

suppression
Containing a fire by robbing the fire of fuels, lowering temperature, or cutting off the oxygen.

swamp
A wetland dominated by trees.

symbiosis
The living together in close association of two or more dissimilar organisms; includes parasitism, mutualism, and neutralism.

succulent
Having thick fleshy leaves that conserve moisture.

-T-

taproot
The main rot of a tree that strikes downward with or without heavy branching until it either reaches an impenetrable layer or one so lacking in oxygen or moisture that further downward growth is impossible.

temperate forest
A forest with moderate year-round temperatures and district seasons that are characterized by both broadleaf evergreens and conifers. Characteristic trees of a temperate forest include: oaks, magnolias, and royal palms.

terrain
The character or topography of the land.

territory
An area used for breeding, feeding, or both, which is defended by an animal against others of the same species.

thin
To reduce the number of trees in a stand.

threatened species
A species that, in nature, is abundant, but because of a decline in its numbers, may become endangered.

tillage
Cultivation of land.

timber
A forest stand containing trees of commercial size and quality suitable for sawing into lumber.

timber cruise
The process of determining estimates of timber volume, growth, stand density, and other kinds of information on a forest property.

timberland
Forests that are capable of growing 20 cubic feet (.6m) per acre per year of commercial wood.

timberline
The upper limit of tree growth on mountains.

tissue
A group of cells, usually a particular kind of cells, that function together and form the structural material in an organism.

tolerant species
A species of tree that has the ability to grow in the shade of other trees and in competition with them.

transitional
The process of changing from one form to another.

transpiration
Vapor water lost or given off by land plants.

tree
A plant that is usually more than 12 feet tall and has a single main woody stem with a distinct crown of leaves.

tree farm
A privately owned woodland where sustainable forest management is the primary objective. The American Forest Foundation promotes good forest management practices and recognizes accomplishments on private forestlands through its certified management program. When their land is certified as a Tree Farm, landowners formally commit to preserve water quality, to preserve soil quality, to enhance wildlife habitat, and to provide recreation opportunities while still producing wood for products.

turbid
Having sediment or foreign particles stirred up or suspended; muddy.

-U-

understory
The layer formed by the crowns of smaller trees in a forest.

undulating
A regular rising and falling or side-to-side motion.

uneven-aged stand
A forest area composed of intermingling trees of markedly different ages.

urban forestry
A specialized branch of forestry that has as its objective the cultivation and management of trees for their contribution to the physiological, social, and economic well being of urban activity.

-V-

valley
Elongated lowland between mountains, hills, or other upland areas that often has a river or stream running through it.

vegetation
The mass of plants that cover a given area. (*Flora* sometimes used—incorrectly—as a synonym for vegetation is actually a list of the species of plants that compose the vegetation.

vegetative reproduction
An asexual means of propagating new plants through root shoots, bulbs, leaf cutting, or underground stems.

vertical vegetation zones
The belt of distinctive plant cover in mountainous regions resulting from climatic changes related to elevation changes.

vigor
In plants and animals, refers to the capacity for strong growth and high survival.

VOC (Volatile Organic Compound)
A "naturally" derived compound which can cause serious environmental and health threats when found in high concentrations or used in poorly ventilated areas. VOC can be found in several products, including household cleaners, paints, wood finishes, and pesticides.

-W-

waste stream, solid
Discarded solid materials, excluding recovered materials.

waste water
Water that runs off cropland during irrigation.

watershed
The land area where all rain drains into a body of water—delivering both runoff water and sediment to a major river or stream and its tributaries.

wedge prism
A type of angle gauge made of glass that bends light that lets a forester determine which trees should be counted or tabulated in a forest sample and which should not. Prisms may also be used for timber cruising, for locating points at a desired distance from a target, or for determining the basal area of growth.

wetland
An area that is regularly wet or flooded where the water table stands at or above the land surface for a least part of the year. Wetland plant communities are made up of species that require hydric soils.

wilderness
An area that has never been developed by humans.

wilderness area
An area established by the federal government to be managed and preserved in an essentially untouched condition. Wilderness areas are open to some recreational activities. Use of machinery, mining, logging, and many other commercial pursuits are generally not allowed in wilderness areas.

wildfire
Any fire other than a controlled or prescribed burn occurring on wild land.

wildlife
A loose term that includes nondomesticated animals, especially mammals, birds, and fish.

wildlife management
The application of scientific knowledge and technical skills to protect, preserve, conserve, limit, enhance, or extend the value of wildlife and its habitat.

wind energy
Power harnessed from the wind by the use of windmills or turbines.

windrow
A long, narrow row of vegetation, debris, and some soil created during site preparation and clearing operations.

windthrow
Trees uprooted by excessive wind. Shallow-rooted trees are almost always affected.

woodlands (or open forest)
A wooded area in which the crowns of the trees do not form a closed canopy.

-X-

xylem
The complex woody tissue of higher plants that includes systems for transporting water, storing nutrients, and supporting the plant's structure. (See **transpiration**.)

-Y-

yard up
To gather in a sheltered area in winter; used typically in reference to deer, moose, and similar animal populations.

-Z-

zero population growth
Maintaining population numbers at a fixed level resulting in no increase in population.

zone
An area composed of groups of tree species having the same specific moisture and nutrient requirements for growth.

zoologist
A specialist who studies the animal kingdom with respect to the behavior of individual animals, species, or both.

zooplankton
Plankton that consists of animals including coral, sea anemones, and jellyfish.