

Glossary of Terms

Accipiter. A genus of approximately 50 largely forest-dwelling species of diurnal raptors, most of which have short, rounded wings and long tails.

Age-structured population. A population in which birth and death rates vary as functions of the age of the individual.

Apparently secure. Uncommon but not rare; some cause for long-term concern due to declines or other factors.

Atlantic Flyway. Migration flyway along the Atlantic coast of North America, consisting of Canadian provinces New Brunswick, Nova Scotia, Ontario, Quebec and U.S. states Connecticut, Delaware, Florida, Georgia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, North Carolina, Pennsylvania, Rhode Island, South Carolina, Vermont, Virginia, and West Virginia.

BCR species of concern. Species that without additional conservation actions, are likely to become candidates for listing under the Endangered Species Act.

Bird Conservation Region (BCR). Ecologically distinct regions in North America having similar bird communities, habitats, and resource management issues. BCRs were developed by a team comprised of members from United States, Mexico, and Canada at the first international North American Bird Conservation Initiative (NABCI) workshop held in Puebla, Mexico, in 1998 (for details, see www.nabci-us.org).

Breeding Bird Survey (BBS). A monitoring program for bird populations on their breeding grounds developed at the USGS Patuxent Wildlife Research Center in Laurel, Maryland to monitor population trends on a continental scale. The North American Breeding Bird Survey (BBS) was formally launched in 1966 when approximately 600

surveys were conducted in the U.S. and Canada east of the Mississippi River. Today there are approximately 3700 active BBS routes across the continental U.S. and Canada, of which nearly 2900 are surveyed annually. A three-minute point count is conducted at each stop, during which the observer records all birds heard or seen within 0.25 mile of the stop. Routes are randomly located in order to sample habitats that are representative of the entire region. Other requirements such as consistent methodology and observer expertise, visiting the same stops each year, and conducting surveys under suitable weather conditions are necessary to produce comparable data over time. A large sample size (number of routes) is needed to average local variations and reduce the effects of sampling error. The density of BBS routes varies considerably across the continent, reflecting regional densities of skilled birders.

Buteo. A genus of 28 species of largely open-habitat diurnal raptors with long, broad wings and short tails.

Chain migration. Occurs when migratory populations that breed at high latitudes migrate approximately the same distance as those that breed at lower latitudes, thereby maintaining their latitudinal relationship between seasons.

Christmas Bird Count (CBC). A winter monitoring program for birds in North America, administered by the National Audubon Society. It consists of a series of “count circles,” 15 miles (24 km) in diameter, which are surveyed on a single day between December 14th and January 5th each year. On the survey day, a team of birders counts every bird they encounter within the circle and records its species. The Christmas Bird Count began on Christmas Day 1900, when ornithologist Frank Chapman proposed a

new holiday tradition - a "Christmas Bird Census" - that would count birds in the holidays rather than hunt them.

Complete migrant. A species or population in which at least 90% of all individuals regularly migrate.

Critically imperiled. At very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors.

Differential migration. Age-or sex-related differences in one or more aspects of migration behavior, including direction or speed of travel, distance traveled, timing of departure, etc.

Diurnal. Active primarily during daylight hours.

Diversion line. A geographic or topographic feature that has features that cause migrants to alter their course so as to avoid crossing the feature, concentrating them and making them appear to follow it (see leading line).

DDT. DDT (dichlorodiphenyltrichloroethane) is a pesticide once widely used to control insects in agriculture and insects that carry diseases such as malaria. DDT is a white, crystalline solid with no odor or taste. A persistent, broad-spectrum compound often termed the "miracle" pesticide, DDT came into wide agricultural and commercial usage in the United States in the late 1940s. By 1972, approximately 675,000 tons had been applied in the U.S. The peak year for use in the United States was 1959, when nearly 80 million pounds were applied. After 1959, use declined steadily to about 13 million pounds in 1971, most of it applied to cotton. The decline was attributed to a number of factors including increased insect resistance, development of more effective alternative pesticides, growing public and user concern over adverse environmental side effects, and

governmental restriction on DDT beginning in 1969. Its use in the United States was banned in 1972 because of damage to wildlife, but is still used in some countries. DDE (dichlorodiphenyldichloroethylene) and DDD (dichlorodiphenyldichloroethane) are chemicals similar to DDT that contaminate commercial DDT preparations. For additional information on these and other pesticides, visit the following internet website:
<http://www.atsdr.cdc.gov/tfacts35.html>

Endangered. In danger of extinction throughout all or a significant portion of the species' range

Extirpated. Eliminated from an area.

Falcon (genus *Falco*). A genus of 37 diurnal raptors with long, pointed wings and long tails.

Imperiled. At high risk of extinction due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors.

Irruptive migrant. Species or populations in which the extent of migratory movement varies annually, typically due to among-year shifts in prey abundance, and whose migrations are less regular than those of partial and complete migrants.

Leading line. Geographic or topographic features that intersect the principal axis of migration of a region and have properties that induce migrants to change their direction of travel so as to follow them.

Leap-frog migration. Occurs when migratory populations that breed at high latitudes migrate substantially farther and "leap over" non-migratory (and sometimes, migratory) populations that breed at lower latitudes. This effectively reverses their latitudinal relationship between seasons.

Long-distance migrant. A species in which at least 20% of all individuals regularly migrate more than 1,500 miles (2,400 km).

Migration. Directed movements from one location to another, recurring seasonally and alternating in direction.

Raptor migration count. A location at which visible migrants are regularly and systematically counted and recorded.

Migration flyway. Pathway of travel along which raptors concentrate while migrating.

Partial migrant. Species or population in which fewer than 90% of all individuals regularly migrate, whereas others do not.

Population trend. Geometric rate of change in a population over a pre-determined period of time.

Secure. Common; widespread and abundant.

Short stopping. A phenomenon, first described in migratory waterfowl, that occurs when migrants shorten the lengths of their outbound movements to take advantage of newly available wintering areas that are closer to their breeding grounds than traditional wintering areas.

Statistically significant. A population trend is considered statistically significant if there is high level of confidence that a population change has occurred. The P -values associated with the trend estimates report this probability that the trend is real (non-zero); the smaller the P -value, the greater the probability. For example, $P \leq 0.001$ for Cape May means the chance that the true trend equals 0% per year is less than 0.1%. Our confidence in the Cape May trend is therefore very high. Ecologists typically describe any result where $P \leq 0.05$ as statistically significant, but other levels (for example 0.10 or

0.01) are sometimes chosen, depending on the question being asked. In the raptor conservation status reports, any trend for which $P \leq 0.05$ is considered to be statistically significant.

Thermal. A pocket of warm, rising air created by the differential heating of the earth's surface.

Threatened. Likely to become an endangered species within the foreseeable future throughout all or a significant portion of the species' range.

Vulnerable. At moderate risk of extinction due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors.

Wind drift. Occurs when migrants encountering cross winds are pushed off their intended course while maintaining the same heading.

West Nile Virus. West Nile Virus (WNV) has emerged in recent years in temperate regions of Europe and North America, presenting a threat to public and animal health. The most serious manifestation of WNV infection is fatal encephalitis (inflammation of the brain) in humans and horses, as well as mortality in certain domestic and wild birds. WNV has also been a significant cause of human illness in the United States in 2002 and 2003. West Nile virus has been detected in dead birds of at least 138 species in North America. Although birds, particularly crows and jays, infected with WN virus can die or become ill, most infected birds do survive. There is no evidence that a person can get WNV from handling live or dead infected birds. For information about West Nile Virus, try this webpage operated by the Centers for Disease Control (<http://www.cdc.gov/ncidod/dvbid/westnile/index.htm>).