Liberty Wildlife Rehabilitation Foundation



Education Program's Natural History



SWAINSON'S HAWK

Swainson's Hawk (Buteo swainsoni)

Range: The Swainson's Hawk spends most of the year in the western United States extending into southwest Canada and south to west Texas. Each autumn, nearly the entire breeding population migrates from this temperate zone to "wintering" areas in Argentina. From the prairies of Canada, this migration is more than 6,200 miles (10,000 km) each way, a distance second among raptors only to that of the Arctic Peregrine Falcon. Although the majority migrates between the northern and southern hemispheres, some have been found wintering in California, Texas, Mexico, and Central America.

Habitat: The Swainson's Hawk inhabits open plains, prairies, grassland, shrub land, and agricultural areas where it has open areas to forage for its small prey and where roost sites are available. In breeding season, this hawk also requires nesting trees, usually trees bordering agricultural fields, in wetland borders, and on abandoned farms. It is common to see this hawk perched on a fence post in a prairie or open range. The Swainson's Hawk is known to



prairie or open range. The Swainson's Hawk is known to follow farmer's tractors in search of insect or rodent prey (Brown 1996, AID 1997).

Description: The Swainson's Hawk is a medium sized Buteo with a long tail and pointed wings compared to other Buteos. When it is perched, its wings extend beyond its tail. It measures 17-21 inches in length with a wingspan of four feet. The average weight for a male is 1.8 pounds,



while the average weight for a female is 2.5 pounds. It has a dark brown head and bib and back with a lighter brown chest and light belly. The tail is grayish with narrow, dark bands. The last dark band is the widest and bounded below by a white or buffy band.

This hawk's most unique and most obvious feature, especially in the field, is the light under wing coverts (wing linings) and the dark flight feathers. This is a distinct characteristic that no other North American raptor exhibits.

This hawk, like the Red-tailed Hawk, has a great variation in its color morphs. The light color morph includes white patches on the forehead, the throat and the belly. The rest of the body is a dark brown. When seen from below, light color morphs have darker flight feathers than winglinings. The dark color morph, which is the less common type, includes an entirely dark brown

body with only a white patch under the tail. Dark morphs appear to be uniformly colored underneath, except for the tail. All morphs have uniform coloring on their upper parts. Juveniles have a similar underwing pattern as the adult of the same morph and streaking on the underparts with spotting on the breast.

This bird is commonly confused with a Red-tailed hawk, but the Swainson's Hawk has a longer wingspan, and flies in a slight dihedral pattern (Brown 1996, AID 1997).

Hunting/Prey: The Swainson's Hawk is both a perch and aerial hunter. In the air, it will soar through open-country, frequently coursing over prairies. It will snatch insects in the air in impressive acrobatic aerial maneuvers. Perch hunting occurs from tree limbs, poles or posts. Like other hawks, it will follow farm equipment to prey on rodents disturbed by these activities.

Groups of Swainson's Hawks will perch on the ground near ground squirrel holes waiting for them to emerge, especially near dusk. When hunting pocket gophers they perch near fresh mounds, waiting for gophers to push fresh dirt to surface; then pounces stiff-legged on the mound to pull out the gopher. It will also run on the ground like a chicken adeptly pursuing a large insect.

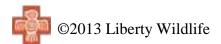
The Swainson's Hawk is somewhat of a generalist, and eats whatever it can find. During the breeding season, as much as 90% of the Swainson's Hawks diet will consist of small mammals. It will also hunt insects especially grasshopper, crickets and locusts and birds, and occasional reptiles and amphibians. During migration and winter, however, they are almost exclusively insectivorous, with grasshoppers and dragonflies both major components of their diet

Breeding/Nesting: Swainson's Hawks breed throughout much of the Rocky Mountains and western Great Plains from southern Alberta and Saskatchewan to northern Mexico. They typically begin breeding when they are three years old (Wheeler). They start the breeding season by building nests in March and April. The nests are usually found in trees, shrubs, on the ground, or on top of utility poles. These hawks are mostly monogamous, so a breeding pair may return to a previous nesting site. They become highly territorial towards their nest and their mate during this time of the year. Clutch size ranges from one to four eggs, but averages two to three whitish-colored eggs with brown flecks. The male usually helps the female with the incubation, which lasts for about 30 days. The young hatch between March and July, and stay in the nest for another 30 days. While most juveniles migrate the following winter with their parents, there are some groups that do not migrate their first winter (Brown 1996, TPWD 1997).

Lifespan: While many live less than two years, those that survive the first few years in the wild can live 8 to 10 years. The oldest known wild Swainson's hawk lived to at least 24 years old.

Threats: Some of the main threats are: Habitat loss of agricultural lands to development, illegal shooting, electrocution, pesticide poisoning, collisions with traffic and Great Horned Owl and Raven predation on the young. Wind storms and hail caused 30 percent nest failure in one study.

The Swainson's Hawk has suffered population declines since the first half of the twentieth century, and was listed as a species of special concern in the United States from 1972 to 1982. The Swainson's Hawk was removed from the active Federal list in 1982 because it was found to

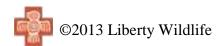


be more abundant than previously thought and is not considered a threatened species by the International Union for Conservation of Nature.

The Swainson's Hawk has adapted well to grazing and pastureland and seems to be holding its own over much of its breeding range, from northern Mexico to the southern parts of the prairie provinces. However, far western populations, like that of Oregon, and southern California, have drastically declined, often due to habitat loss or incompatible agricultural practices. A possible reason for declines in parts of its range may be reductions in populations of ground squirrels and grasshoppers, major seasonal foods. It does remain listed as a threatened species by the California Department of Fish and Game as it has been since 1983.

Other Swainson's Hawk Facts:

- A highly gregarious species, the Swainson's Hawk forages and migrates in flocks sometimes numbering in the thousands. Its movement through Central America has been described as among "the most impressive avian gatherings in North America." Nearly 350,000 Swainson's Hawks have been counted passing over a single point in Panama City in October and November, and up to 845,000 have been counted in a single autumn in Veracruz, Mexico.
- The Swainson's Hawk has one of the longest migrations of any American raptor from Canada to Argentina. During its migration, this hawk will travel 6214 mi in less than two months, averaging nearly 200 km (124 mi) per day. Only tundra breeding Peregrine Falcons travel farther.
- This hawk's flight is characterized by its shallow dihedral similar to that of Turkey Vulture and Zone-tailed Hawk.
- Swainson's Hawk chicks frequently kill and eat the youngest nestlings. The killing of siblings may be related to food availability, but the ultimate cause is unknown.
- It is colloquially known as the Grasshopper Hawk or Locust Hawk, as it is very fond of both and will voraciously eats these insects whenever they are available. Pellet analysis has shown that a single hawk can consume an average of 100 grasshoppers each day (Morley Nelson Snake River BLM report).
- Although generally gregarious, a nesting pair remains solitary until the breeding duties are completed. Then they will join the flocks for migration.
- The Swainson's Hawk was named for William Swainson, the first to illustrate this hawk
 which was in the 1820's classified as the Common Buzzard of Europe and called Buteo buteo.
 It was not until some years later that it was realized the Swainson's Hawk was a different
 species from the common hawk of Europe and was subsequently renamed the Swainson's
 Hawk.



 More than 20,000 Swainson's Hawks were killed by pesticides used in the Argentina agricultural areas in 1995-1996. With Argentina subsequently banning these pesticides in the hawk's wintering grounds, no hawks were found to have died as a result of poisoning two years later.





Sundance

Swainson's Hawk

Sundance came to Liberty Wildlife on July 11, 2012 from a facility in Sierra Vista. His accompanying medical notes revealed that a person found Sundance on the ground as a nestling and cared for him for several days. During that time, he became imprinted and non-releasable.





Etta Swainson's Hawk

Etta was transferred to Liberty Wildlife in December 2012 when a Sierra Vista rehabilitator down-sized her operations. Etta had been brought to this rehab center originally with a wing injury as a young hawk, precluding her release. Over her three years as an educator, Etta was prized for her calmness and reliability which continues with her transfer to Liberty.

Compiled by Max Bessler

Photos courtesy of Barb Del'Ve

Sources: Cornell Lab of Ornithology "Birds of North America On-Line," Cornell Lab of Ornithology "All About Birds," The Peregrine Fund, University of Michigan "Museum of Zoology Animal Diversity," Hawk Watch International, Audubon Society, <u>Raptors of Western North America</u> by Brian K. Wheeler, <u>Hawks, Eagles, & Falcons of North America</u> by Paul Johnsgard.

