



# FACILITATOR'S GUIDE

## GIANTS OF BIG SUR: CALIFORNIA CONDOR STORIES

**GRADES:** 6 - 12+

**SUBJECTS:** Biology, Earth Science, Ecosystems, Wildlife, Habitat, Biodiversity, Environment, Conservation

**VOCABULARY:** Click on the **orange** vocabulary words below to go to the glossary page that contains the definition. The definitions are from Merriam-Webster unless otherwise indicated by an asterisk\*.

### CALIFORNIA CONDOR RESTORATION

By the 1980s, the California Condor population was in crisis and **extinction** in the wild seemed imminent. The dramatic decline of condors in the 20th century has been attributed to shooting, poisoning, electric power lines, egg collecting, and **habitat loss**. In 1987, the last wild California Condor was taken into captivity to join the 26 remaining condors in an attempt to bolster the population through a **captive breeding** program. At that time, it was uncertain whether or not North America's largest flying land bird would soar in the wild ever again.



Ventana Wildlife Society began releasing captive-bred California Condors in 1997 to **restore** a wild population in central California. They continue to co-manage the population with Pinnacles National Park and work toward reducing threats to long-term condor recovery. Ventana Wildlife Society field **biologists** are the front line workers of condor care. From late nights in tents in the cold of Big Sur, to early morning surveys peering through the dusky marine layer, the "Condor Crew" are the humans on the ground braving the **elements** to ensure a lasting, protected future for our feathered friends.

### ABOUT CALIFORNIA CONDORS

The California Condor (*Gymnogyps californianus*), with a **wingspan** of 9.5 feet and weighing up to 25 pounds, is the largest land bird in North America. Adult condors stand at 3 to 3.5 feet and weigh 17 to 25 pounds. Males are generally slightly larger than females. Condors don't reach adulthood until they are six or seven years old. They can live for 50 years or more--much longer than most other kinds of birds.



Soaring on warm **thermal updrafts** for hours, California Condors can reach speeds of more than 55 miles per hour and **altitudes** of 15,000 feet. Condors hold their wings in a **horizontal** position and fly very steadily, unlike turkey vultures which fly with their wings held in a V-shape and appear to be unsteady or "wobbly." When condors **soar**, their wings spread more than nine feet from tip to tip. Condors can soar and **glide** for hours without beating their wings. With the right air conditions, condors are known to fly up to 250 miles a day across mountainous terrain in search of food. California Condors use vast **expanses** of varying habitats for foraging, roosting, and nesting. Foraging habitat includes open **grasslands**, oak savanna **foothills**, and beaches adjacent to coastal

mountains. Condors roost on large trees or snags, or on rocky outcrops and cliffs. Nests are located in cliff caves and ledges of steep rocky mountains or sometimes in giant sequoia or redwood trees. Condors love the cavities created by fire and the wind-broken tops of these old-growth conifers.



**Nesting** condors raise only one chick at a time. The four-inch long egg is laid in late winter or spring. Parents alternate **incubating** the egg, each often staying with the egg for up to several days at a time. The egg hatches after 54 to 58 days (approximately 2 months) of incubation. Then, the parents share duties in feeding and **brooding** (warming) the chick. Chicks are fed partially digested food **regurgitated** from the adult's **crop**. Flight feathers are fully developed at about six months of age. The chick is dependent on its parents for one to two years as it learns to forage and feed on its own in the wild.

As scavengers, condors search and **forage** for dead animals from the air. Condors do not kill for food; they are **carrion** eaters and feed on the carcasses of mammals including deer, cattle, and marine mammals such as whales and seals. A condor may eat up to 3 to 4 pounds of carrion at a time and may not need to feed again for several days. Condors find their food by sight or by following other scavenging birds. Condors normally feed in a group where a strict **dominance hierarchy** is followed. Dominant birds usually eat first and take the choicest parts of the carcass.

The condor's beak is long, sharp, and powerful. It can pierce the hide of a horse. Condors use their beaks to tear the flesh from carcasses, and to touch, feel, and explore their surroundings. Condors have been observed using their beak to remove foliage from trees to create better roosting sites and to manipulate rocks and other objects in caves to improve a nesting area.



Condors spend most of their time roosting, **perched**, **sunning**, and **preening**. Condors **roost** where they can easily launch themselves into flight with just a few wing beats. Roost sites include large trees, snags, cliffs, and rocky outcrops. Condors will often roost in groups and will return to the same roost sites year after year. Dominant birds often take the choice position in a group roost.

Condors are highly intelligent, social birds. They are inquisitive and often engage in play, especially immature birds. They will entertain themselves at length with feathers, sticks, and grass, often playing tug-of-war, and tossing, chasing, and retrieving the objects. This activity is especially pronounced around **water holes**.

## THREATS & CAUSES OF THE CONDOR'S DECLINE



During the Pleistocene Era, ending 10,000 years ago, the condor's **range** extended across much of North America. At the time of the arrival of European **settlers**, the condor ranged along the Pacific Coast from British Columbia south through Baja California, Mexico. By 1940, the range had been reduced to the coastal mountains of southern California with nesting occurring primarily in the rugged, **chaparral**-covered mountains, and foraging in the foothills and grasslands of the San Joaquin Valley.



As people settled the West, they often shot, poisoned, captured, and otherwise disturbed the condors by collecting their eggs and reducing their food supply of antelope, elk, and other large wild animals. Eventually, condors could no longer survive in most places. By the late 1900s, the remaining individuals were limited to the mountainous parts of southern California, where they fed on dead cattle, sheep, and deer.

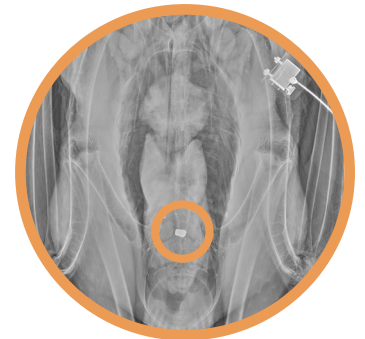
Most causes of death in the past two centuries have been from human activities. For nearly 100 years it has been illegal for anyone to kill California Condors.

But, illegal killing was not the only problem that these birds faced. A major problem has been **contamination** from lead fragments in carcasses, poison bait, and environmental **pollutants**. Contamination from past use of the pesticide **DDT** may have prevented the hatching of some condor eggs in the recent past, and human activity in the condor nesting range has been followed by growing numbers of ravens, which threaten condor eggs and nestlings. Accidental collision with wires and structures is a risk to condors, as well. Unfortunately, the death rate for condors was higher than the birth rate so it became clear that the species was not going to survive in the wild without help from people.

By the mid-20th century, condor populations had dropped dramatically, and by 1967 the California Condor was listed as **endangered** by the federal government. In 1982, only 22 condors survived worldwide. By 1987, all remaining wild condors were placed into a captive breeding program in an effort to save the species from extinction. Today, condors are **reintroduced** into the mountains of southern California north of the Los Angeles basin, in the Big Sur vicinity of the central California coast, near the Grand Canyon in Arizona, and in the mountains of Baja California.

## LEAD POISONING IS THE MOST SIGNIFICANT THREAT

Lead ammunition **fragments** upon impact and, if consumed by a scavenger such as a condor, can result in lead **poisoning**, which is the number one known cause of death in California Condors. Today, lead poisoning is a serious problem for the condors in the wild.



Even after legislation banned the use of **lead ammunition** within the condor range in California, we have many documented cases of lead **toxicosis** in condors. This type of bullet is widely used to shoot ground squirrels and other non-game mammals. The availability of non-lead ammunition has remained inconsistent years after the ban was enacted. Ventana Wildlife Society works to **mitigate** the lead threat by providing free non-lead ammunition. They also monitor movement patterns of the condor **flock** to identify potential lead exposure sites, provide a lead-free supplemental food source, and facilitate treatment for condors discovered with symptoms of lead poisoning. Managing the lead threat is paramount to the full **recovery** of the California Condor population.

## WHAT IS BEING DONE?

The California Condor Recovery Program is an international, multi-entity effort led by the U.S. Fish and Wildlife Service (USFWS), to recover the endangered California Condor. Partners in condor recovery include The Peregrine Fund, Ventana Wildlife Society, National Park Service, San Diego Zoo,



Los Angeles Zoo, Oregon Zoo, Santa Barbara Zoo, Chapultepec Zoo, Arizona Game and Fish Department, California Department of Fish and Wildlife, Utah Division of Wildlife Resources, Bureau of Land Management, U.S. Forest Service, the federal government of Mexico, the Yurok Tribe, and a host of other governmental and non-governmental organizations.



Since 1992, when the California Condor Recovery Program began reintroducing captive-bred condors to the wild, the partners have grown the total **free-flying** and captive population to more than 500 condors.

It was hoped that by raising young condors and releasing them to the wild, the species would be given another chance. But, nobody knew for sure whether this action by the California Condor Recovery Program known as “captive breeding” would be successful. It didn’t take long to find out.

The first condor chick hatched out in 1988. Within a few years, it was clear that captive breeding was working. The captive condors had produced more than 100 eggs by 1994. Nearly 20 chicks hatched each year at the four captive breeding centers. So, the total population grew from 27 birds in 1987 to 161 birds by mid-1999. In 2004, the California Condor Recovery Program reached an important **milestone** with the first successful chick hatched in the wild. Then, 2008 saw more California Condors flying free in the wild than in captivity for the first time since the program began.

During that time, captive-bred condors have been released back to the wild. There are five active release sites in California, one in Arizona and one in Baja, Mexico. Ventana Wildlife Society is working with National Park Service and the Yurok Tribe on a new release site in Yurok Ancestral Territory and Redwood National Park in northern California. [Click here to view a larger map.](#)

The goal of the California Condor Recovery Program is to take steps toward recovery by establishing two wild, **geographically distinct, self-sustaining** populations, each with 150 birds in the wild and at least 15 breeding pairs, with a third population of condors retained in captivity. Until then, the condor population would still be in danger of extinction.



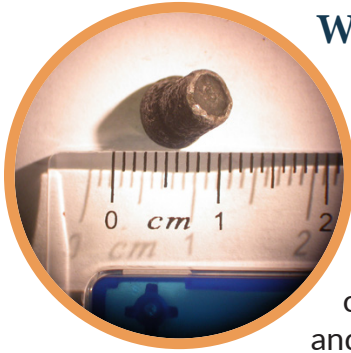
An important milestone in the recovery of condors on the central California coast (the stars of the film “Giants of Big Sur”) was the first nesting attempt in 2006. The last known attempt in the region had been more than 100 years prior.

Ever since the first successful **fledging** of a chick from a nest here in 2007, the productivity of the population has been gaining momentum. Each year, more and more young condors reach the minimum breeding age of 6-8 years and establish pair bonds that can last a lifetime. Now, the central California population includes more than a dozen pairs.



Each year, Ventana Wildlife Society releases a group of California Condors at the Big Sur or San Simeon **sanctuaries** along the central coast. Field staff transports young condors from captive breeding facilities, where they have been raised, to flight pens in the sanctuary where they will be released. They provide food and monitor the birds for at least several weeks in the pen to ensure that they are adjusting to their new **environment** and are well-prepared for life in the wild. Before being released, the condors are equipped with numbered wing tags and **transmitters** for identification and tracking in the field.

Once the door to the pen is opened on the release day, the fieldwork really begins. The birds might leave immediately or linger in the pen for a while. The staff tracks the new releases with radio telemetry and satellite GPS to identify movement patterns and determine their ability to navigate back to the sanctuary. They are prepared to assist if the birds experience difficulty. The staff places supplemental carcasses to help ensure feeding opportunities during this vulnerable period when the birds are learning about local resources and threats. Placing the carcasses can be an adventure for the staff as this is done at night so the birds will not learn to associate humans with food.



## WHAT STILL NEEDS TO BE DONE?

The California Condor Recovery Program's focus is on the creation of self-sustaining populations across the species' historical distribution, or range. We are placing increased emphasis on captive-breeding to augment the wild population of California Condors while working with the hunting and ranching community to reduce the threat of lead poisoning caused by spent ammunition, which is the primary cause of death in the wild and the biggest hurdle to sustainable wild populations.

In an effort to get the lead out of condor range, the Governor signed Assembly Bill 821 (also called the Ridley-Tree Condor Preservation Act) in 2007 to create a "non-lead" zone relative to hunting within the range of the California Condor. In 2008, the California Fish and Game Commission adopted **regulations** to implement this law. In 2013, the Governor signed Assembly Bill 711 which requires the use of non-lead ammunition statewide for the taking of all wildlife, including **game** mammals, game birds, non-game birds, and non-game mammals.

Full implementation of this law was required by July 2019, however, lead poisoning remains the greatest threat to condor recovery. So, Ventana Wildlife Society became a licensed ammunition vendor to legally assist hunters and ranchers with the new rules and documentation processes and continue to support hunters and ranchers as they switch to non-lead ammunition. In 2012, Ventana Wildlife Society started a grant-funded free non-lead ammunition program, and since then they have distributed more than 10,000 boxes of copper ammunition in the condor range.

They meet with hunters regularly and help them choose and acquire non-lead ammunition. Because laws now restrict ammunition shipments to California residents, the Ventana Wildlife Society team even delivers the ammunition to at least six different counties. By providing free ammunition, the message is clear that the California Condor Recovery Program supports hunters and ranchers, and value their tradition of wildlife **conservation**. Working together, they will reduce the risk of lead exposure and hasten the full recovery of the California Condor.

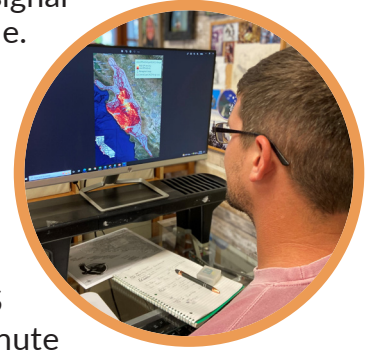
## OTHER METHODS OF CONDOR BIOLOGISTS

All wild condors are tagged with radio transmitters that allow us to track their movements. Condor biologists and field staff (otherwise known as the "Condor Crew") along the California coast use a **receiver** and an **antenna** to listen for regular beeps that indicate a condor is near. Each condor has its own **radio frequency**, and the Condor Crew scan all frequencies to see which condors might be around. In addition to the usual signal, the transmitter can also generate what is known as a mortality signal when the bird has not moved



for a certain amount of time. The Condor Crew will investigate any mortality signal to determine if the transmitter has been shed or if a condor might be in trouble.

To manage the population, we need to know where condors go – and not just when it is convenient for us to hit the trail with an antenna and receiver. So, in the last 15-20 years, **GPS telemetry** has also become a critical part of our management efforts. We use **GPS transmitters** on a sample of the population. These 50-gram **patagial tags** operate on solar power and use **GPS** to collect locations, including coordinates, speed, heading, and elevation. The GPS transmitters are capable of collecting a condor's location as often as every minute and transmitting the data using a **cellular network** or satellites. With such a massive database to manage, the Condor Crew spend part of their time indoors, poring over GIS data to identify pair formations, nesting, and feeding, as well as creating **GIS maps** to identify potential concerns like prolonged use of a high-risk area or a lack of movement for a particular condor.



As needed, the Condor Crew capture condors in the central California population to provide health assistance. This also gives them an opportunity to attach and maintain each bird's tags and transmitters over time. Health exams include taking a blood sample to document lead levels, checking overall body condition and feather wear, and administering vaccinations as needed.

Ventana Wildlife Society is often asked how they can catch a bird with a 9-ft plus wingspan. It starts by luring them to the flight pen in the sanctuary with a carcass. The Condor Crew watches quietly in an **observation blind**; they might need to wait for hours, or days, for a condor to enter the pen. If the condor is one that is on their trapping list, they pull a lever to close the pen door. They might catch several condors or more in one day.



When it is time to handle the condors, the crew sends one lucky biologist into the pen, equipped with a **hoop net** and gloves. Here is where the biologist demonstrates their training and coordination as they corner the condor and slip the net over its body. This is when the rest of the team will come and assist with the handling. While one experienced biologist can handle a condor, it helps to have a team to secure the powerful beak and feet. To minimize stress and heat, they place a damp rag over the condor's head while they process the bird and collect data in the blind. They release the condor minutes later when they are finished.

Keeping up with the growing number of **breeding pairs** each year is a welcome challenge for the Condor Crew. With the help of GPS and radio telemetry, they are able to locate nest sites. These are often in burned-out hollows in large redwood trees, or on ledges and caves along mountain slopes and cliffs. If the Condor Crew is lucky, the nest can be accessed by an established trail. Some nests, however, are in remote areas that are difficult to access without an extraordinary cross-country hiking effort. We monitor all accessible nests to document the hatching and growth of chicks. The Condor Crew members station themselves at a distance where they can watch the nest without disturbing the condors. Some nests might be close enough to set up a **live-streaming web cam** so that viewers around the world can join the monitoring efforts. If threats to the nest are observed, the Condor Crew has the option of using their climbing skills to **intervene** if conditions allow.







# VENTANA WILDLIFE SOCIETY

## ACTIVE CONDOR FLOCKS & OUR PARTNERS

There are currently 7 active condor release sites. Five in California, one in Baja California and one in Arizona. Ventana Wildlife Society manages the Big Sur and San Simeon sites. We would like to acknowledge the following partners who take great care in managing the other five:

### NORTHERN CALIFORNIA

- The Yurok Tribe
- National Park Service

### BITTER CREEK NATIONAL WILDLIFE REFUGE

- U.S. Fish and Wildlife Service

### SIERRA DE SAN PEDRO MÁRTIR NATIONAL PARK

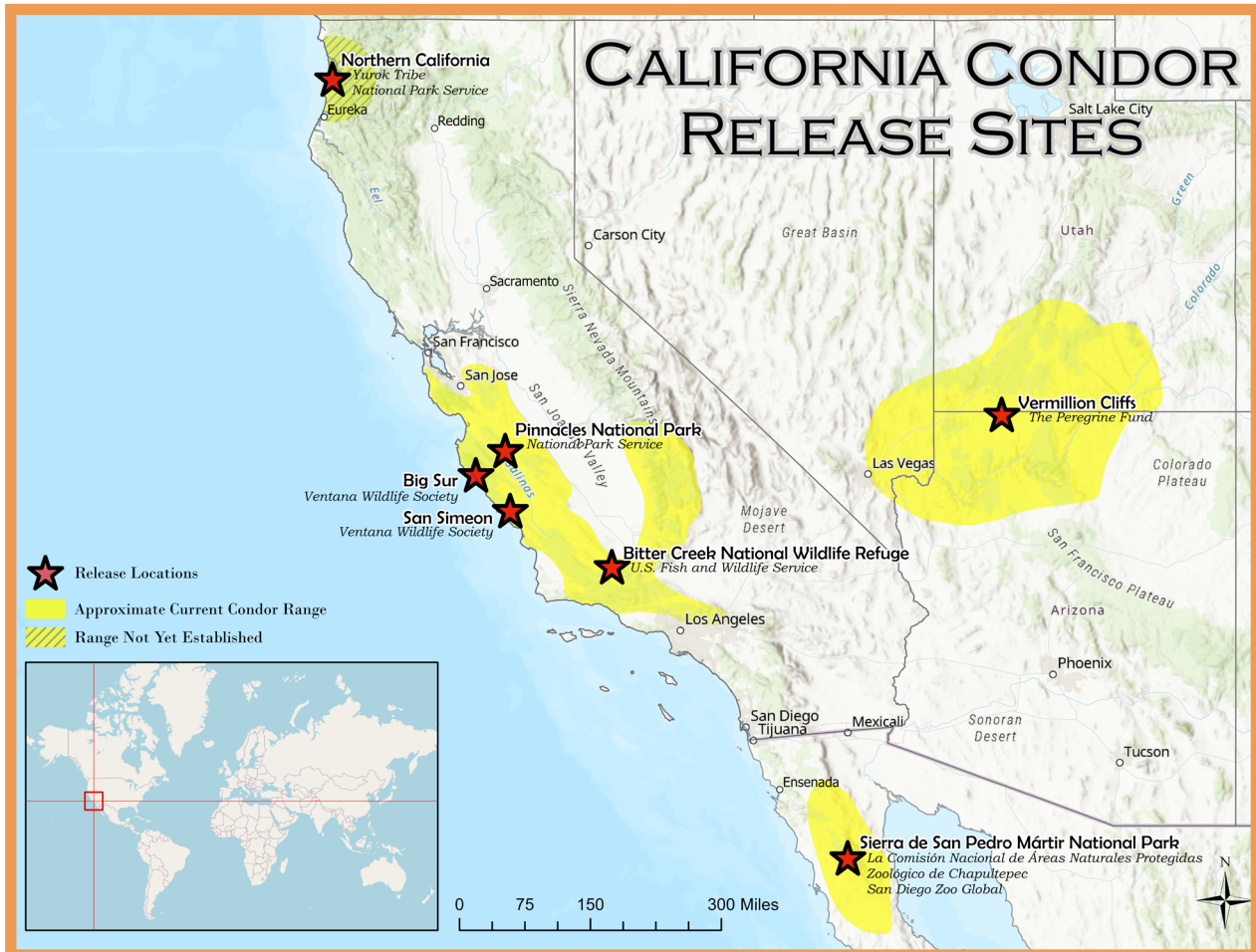
- Comisión Nacional de Áreas Naturales Protegidas
- Zoológico de Chapultepec
- San Diego Zoo Global

### PINNACLES NATIONAL PARK

- National Park Service

### VERMILLION CLIFFS

- The Peregrine Fund





# GLOSSARY

## DEFINITIONS OF HIGHLIGHTED WORDS

**al·ti·tude** - altitudes plural - noun - the vertical elevation of an object above a surface (such as sea level or land) of a planet or natural satellite

**an·ten·na** - noun - a usually metallic device (such as a rod or wire) for radiating or receiving radio waves

**bi·ol·o·gist** - noun - one who studies a branch of knowledge that deals with living organisms and vital processes, the plant and animal life of a region or environment, the life processes especially of an organism or group

**breeding pair\*** - is a pair of animals which cooperate over time to produce offspring with some form of a bond between the individuals.[1] For example, many birds mate for a breeding season or sometimes for life. They may share some or all of the tasks involved: for example, a breeding pair of birds may split building a nest, incubating the eggs and feeding and protecting the young - Wikipedia definition

**brooding\*** - egg incubation - Wikipedia definition

**captive breeding\*** - also known as captive propagation, is the process of maintaining plants or animals in controlled environments, such as wildlife reserves, zoos, botanic gardens, and other conservation facilities. It is sometimes employed to help species that are being threatened by the effects of human activities such as climate change, habitat loss, fragmentation, over hunting or fishing, pollution, predation, disease, and parasitism - Wikipedia definition

**car·ri·on** - noun - dead and putrefying flesh

**cellular network\*** - or mobile network is a communication network where the link to and from end nodes is wireless - Wikipedia definition

**chap·ar·ral** - noun - 1: a thicket of dwarf evergreen oaks  
broadly : a dense impenetrable thicket of shrubs or dwarf trees 2: an ecological community composed of shrubby plants adapted to dry summers and moist winters that occurs especially in southern California

**con·ser·va·tion** - verb - a careful preservation and protection of something  
*especially* : planned management of a natural resource to prevent exploitation, destruction, or neglect

**con·tam·i·nation\*** - noun - the presence of a constituent, impurity, or some other undesirable element that spoils, corrupts, infects, makes unfit, or makes inferior a material, physical body, natural environment, workplace, etc. - Wikipedia definition

**crop** - noun - a pouched enlargement of the esophagus of many birds that serves as a receptacle for food and for its preliminary maceration

**DDT (Dichlorodiphenyltrichloroethane)\*** - noun - a colorless odorless water-insoluble insecticide  $C_{14}H_9Cl_5$  that is an aromatic organochlorine banned in the U.S. that tends to accumulate and persist in ecosystems and has toxic effects on many vertebrates - Wikipedia definition



**dominance hierarchy\*** - In biology, a dominance hierarchy (formerly and colloquially called a pecking order) is a type of social hierarchy that arises when members of animal social groups interact, creating a ranking system. A dominant higher-ranking individual is sometimes called an alpha, and the submissive lower-ranking individual a beta. Different types of interactions can result in dominance depending on the species, including ritualized displays of aggression or direct physical violence.[2] In social living groups, members are likely to compete for access to limited resources and mating opportunities. Rather than fighting each time they meet, relative rank is established between individuals of the same sex, with higher-ranking individuals often gaining more access to resources and mates. Based on repetitive interactions, a social order is created that is subject to change each time a dominant animal is challenged by a subordinate one. - Wikipedia definition

**el·e·ment** - plural elements - noun - 1a: any of the four substances air, water, fire, and earth formerly believed to compose the physical universe b: elements plural : weather conditions

**en·dan·gered** - adjective - being or relating to an endangered species

**en·vi·ron·ment** - noun - 1: the circumstances, objects, or conditions by which one is surrounded  
2: the complex of physical, chemical, and biotic factors (such as climate, soil, and living things) that act upon an organism or an ecological community and ultimately determine its form and survival

**ex·panse** - plural expanses - noun - great extent of something spread out

**ex·tinc·tion\*** - noun - the termination of a kind of organism or of a group of kinds (taxon), usually a species. The moment of extinction is generally considered to be the death of the last individual of the species, although the capacity to breed and recover may have been lost before this point  
- Wikipedia definition

**fledg·ing\*** - noun - the stage in a flying animal's life between hatching or birth and becoming capable of flight - Wikipedia definition

**flock** - noun - a group of animals (such as birds or sheep) assembled or herded together

**foot·hills** - plural noun - a hilly region at the base of a mountain range

**forage** - verb - to wander in search of forage or food

**frag·ment** - plural fragments - noun - a part broken off, detached, or incomplete  
The dish lay in *fragments* on the floor.

**free·flying\*** - in the context of the Facilitator's Guide - a condor that lives in the wild as opposed to captivity  
- defined by Ventana Wildlife Society

**game animal** - an animal made legitimate quarry (for hunting) by state or other law

**geographically distinct\*** - two landmasses separate from one another landmass  
- defined by Ventana Wildlife Society

**GIS map** - Geographical Information System (GIS) mapping uses spatial (geographical) data to create information-rich maps that benefit understanding, analysis, and decision-making

**glide** - verb - to move smoothly, continuously, and effortlessly

**GPS** - noun - stands for Global Positioning System - a navigational system using satellite signals to fix the location of a radio receiver on or above the earth's surface

**GPS telemetry\*** - a method of tracking animals using GPS transmitters. Condors are also tracked by radio telemetry (VHF radio transmitters) - defined by VWS Condor Biologist, Joe Burnett

**scav-en-ger** - plural scavengers - noun -an organism that typically feeds on refuse or carrion

**GPS transmitters\*** - We use two different types of GPS transmitters, Solar GPS/GSM transmitters and Solar Argos/GPS PTT-100 transmitters. GPS/GSM transmitters use the local cell phone network to download GPS data and Argos/GPS use Argos satellites. - defined by VWS Condor Biologist, Joe Burnett

**grass-land** - noun - 1: farmland occupied chiefly by forage plants and especially grasses

2a: land on which the natural dominant plant forms are grasses and forbs b: an ecological community in which the characteristic plants are grasses

**habitat loss\*** - habitat destruction is the process by which a natural habitat becomes incapable of supporting its native species - Wikipedia definition

**hoop net** - an elongated cylindrical net supported by one or more hoops and fitted with one or more valves resembling funnels

**hor-i-zon-tal** - adjective - parallel to, in the plane of, or operating in a plane parallel to the horizon or to a baseline

**in-cu-bate** - verb - incubated; incubating - 1a: to sit on (eggs) so as to hatch by the warmth of the body b: to maintain (something, such as an embryo or a chemically active system) under conditions favorable for hatching, development, or reaction

**in-ter-vene** - verb - to interfere with the outcome or course especially of a condition or process (as to prevent harm or improve functioning)

**lead ammunition** - projectiles made from lead with their fuses, propelling charges, or primers fired from guns

**live-streaming web cam\*** - camera footage broadcast in real time via the world wide web - defined by Ventana Wildlife Society

**mile-stone** - noun - a significant point in development

**mit-i-gate** - verb - 1: to cause to become less harsh or hostile 2a: to make less severe or painful

**nest-ing** - verb - the process of an animal preparing a bed or receptacle and especially a bird for its eggs and young

**observation blind\*** - The observation blind is adjacent to the flight pen/trap. Biologists use the observation blind to stay hidden from the condors while trapping or releasing condors. - defined by VWS Condor Biologist, Joe Burnett

**patagial tag\*** - a color/numbered identification tag attached to the patagium at the mid-part of the wing to identify individual condors ([www.condorspotter.com](http://www.condorspotter.com)) - defined by VWS Condor Biologist, Joe Burnett

**perch** - noun - a: a roost for a bird b: a resting place or vantage point

**poisoning\*** - noun - the harmful effect that occurs when too much of that substance has been taken  
- Wikipedia definition

**pollutant\*** - plural pollutants - noun - a substance or energy introduced into the environment that has undesired effects, or adversely affects the usefulness of a resource - Wikipedia definition

**preening\*** - verb - a maintenance behaviour found in birds that involves the use of the beak to position feathers, interlock feather barbules that have become separated, clean plumage, and keep ectoparasites in check - Wikipedia definition

**radio frequency** - noun - any of the electromagnetic wave frequencies that lie in the range extending from below 3 kilohertz to about 300 gigahertz and that include the frequencies used for communications signals (as for radio and television broadcasting and cell-phone and satellite transmissions) or radar signals

**range\*** - noun - a chain of hills or mountains; a somewhat linear, complex mountainous or hilly area - Wikipedia definition

**receiver** - noun - a device for converting signals (such as electromagnetic waves) into audio or visual form: such as a radio receiver with a tuner and amplifier on one chassis

**recovery\*** - in the context of condor recovery; the act of re-establishing a population of individuals in an area in which they once sustained themselves - defined by Ventana Wildlife Society

**reg-u-la-tion** - plural regulations - noun - an authoritative rule dealing with details or procedure  
safety *regulations*

**regurgitate** - noun - to throw or pour back or out from or as if from a cavity  
*regurgitate* food

**re-in-tro-duce** - verb - to introduce (someone or something) again  
efforts to *reintroduce* the animals into the wild

**re-store** - verb - 1: to put or bring back into existence or use 2: to bring back to or put back into a former or original state

**roost** - noun - 1a: a support on which birds rest b: a place where winged animals and especially birds customarily roost

**sanc-tu-ary\*** - plural sanctuaries - noun - (1): a place of refuge and protection for individual animals (2): a refuge where populations of wildlife can be restored or managed - defined by Ventana Wildlife Society

**self-sus-tain-ing** - adjective - maintaining or able to maintain oneself or itself by independent effort

**set-tler** - plural settlers - noun - someone who settles in a new region or colony

**soar** - verb - a: to fly aloft or about b: to sail or hover in the air often at a great height

**sunning** - verb - to expose to or as if to the rays of the sun



**thermal updraft\*** - Thermal updrafts are made by uneven heating of the air near the earth's surface, which begins to rise as it warms, providing "lift" to birds using their broad, long wings as a glider and begin soaring - defined by VWS Condor Biologist, Joe Burnett

**tox-i-co-sis** - noun - a pathological condition caused by the action of a poison or toxin

**trans-mit-ter** - plural transmitters - noun - an apparatus for transmitting radio or television signals

**water hole\*** - plural water holes - a depression in the ground in which water can collect, or a more permanent pool in the bed of an ephemeral river - Wikipedia definition

**wing-span** - noun - the distance from the tip of one of a pair of wings to that of the other



# VENTANA WILDLIFE SOCIETY

## ABOUT US

### OUR MISSION:

*Conserving native wildlife and their habitats through science, education, and collaboration.*

### CONSERVING NATIVE WILDLIFE AND THEIR HABITATS SINCE 1977

Ventana Wildlife Society restored a population of bald eagles to central California and dedicated the last 25 years to restoring California condors to the wild while providing meaningful outdoor experiences to youth and families. In doing so, we create hope for humans and wildlife to thrive, together. Help us restore condors to the wild and educate the next generation.