

Birds of Prey Lecture

Show and tell

Equipment- Glove, Jesses, swivel, leash, Hood, Telemetry, Scale, Lure, Giant Hood
Food, Binoculars, Range Finders

Adam's Bio

- Adam Chavez has been practicing falconry on and off since the age of 12.
- I have over 30 years' experience training raptors to hunt as well as rehabilitating birds of prey that have been injured.
- I have trained 17 apprentice falconers over the last 30 years.
- I am currently the Vice President for the **California Hawking Club**.
- I am also the **South Pacific Director of the North American Falconers' Association** (California, Nevada, and Hawaii).
- As a master falconer over the years I have worked with falcons (Kestrels, Merlins, Barbary Falcons, Prairie Falcons, Peregrines, Gyr Falcons, and hybrid falcons) Hawks (Sharpies, Coopers, Gos Hawks, Red Tailed Hawks, Red Shouldered Hawks, and Harris Hawks), Eagles (Golden and Bald) and, Owls (Great Horned and Barn Owls).
- Owner of Adamsfalconryservice.com
- I have also participated in and judged numerous **Sky Trial** competitions.
- I placed first in the preliminaries for **Falcon Racing** and 2nd in the finals.

Falconry

- Falconry by definition is the hunting of wild quarry in its natural state and habitat by means of a trained bird of prey. Falconry is a one-on-one relationship based upon trust. A dedicated, patient human joins with a bird of prey and the result is a unique linking of diverse beings in a sport called falconry. Two basic requirements for success as a falconer are time and patience.

Falconry is known as the sport of kings. In the **medieval times** when falconry was a sport of royalty in Europe, a person's position in society determined what species of raptor that person could fly. For example, the Gyrfalcon was reserved for the King, the peregrine for a prince, the goshawk for a knight, and the merlin for a lady. Historically, falconry was a popular sport and status symbol among the nobles of Medieval Europe, the Middle East, and Mongolian Empire. Falconry was largely restricted to the noble classes due to the prerequisite commitment of time, money, and space. Evidence suggests that the art of falconry has been more or less continually practiced for a very long time reaching back at least to the beginning of recorded history, there are artifactual records that reach back 3000 years.

- The **United Nations** Educational Scientific and Cultural Organization (UNESCO) Intergovernmental Committee for the Safeguarding of the Intangible Cultural Heritage added Falconry, a traditional hunting method, to its **List of the Intangible Cultural Heritages of Humanity**. For over 4000 years, falconry as a hunting method has retained an unbroken thread of tradition: Mongolia, Japan, China pre-gunpowder and firearms. Egypt hieroglyphics of Horus. For nearly 200 generations in an unbroken chain of intangible heritage, falconers worldwide have passed along their knowledge and skills

bringing this art to us in the 21st century. Today's modern lifestyle and rapid urbanization have restricted opportunities to practice falconry. This has led to a dangerous decline in many countries.

- The **UNESCO** submission stated "Falconry is one of the oldest relationships between man and bird, dating back more than 4000 years. Falconry is a traditional activity using trained birds of prey to take quarry in its natural state and habitat. It is a natural activity because the falcon and her prey have evolved together over millions of years; their interaction is an age-old drama. The falcon is adapted to hunt the prey, and the prey has evolved many ways to escape from the falcon. This leads to a fascinating insight into the way nature works and poses an intellectual challenge to the falconer in his understanding of behavior. His task is to bring the actors together on nature's stage. To do this the falconer must develop a strong relationship and synergy with his bird."
- Evidence suggests that the art of falconry originated in Mesopotamia, Mongolia, or China some 4000 years ago. Its arrival in North America can be traced back to 1622, when Thomas Morton, an attorney arrived in New England and wrote accounts about hawks and falconry in the new world. In 1650, Jan Baptist sent to Holland for his falcon and flew her at quarry in the Hudson Valley.
- **Conservation-** Until mid-20th century considered vermin and shot for bounties. Due to research, increased knowledge now protected by various federal and state regulations.

Abatement

- I am a **pest bird consultant** and as such use my expertise of raptors for bird control. Abatement by definition is the use of trained raptors to flush, haze, or take birds (or other wildlife where allowed) to mitigate depredation problems, including threats to human health and safety. Any take of protected migratory birds by an abatement permit holder must be authorized by a Federal depredation order or depredation permit.
- Raptors are used to reduce human/wildlife conflicts such as: protecting crops, improving water quality, preventing air strikes at airports, improving health and safety issues at landfills, resorts, golf courses, and home owners associations. I like to think of my team of Raptors as an **elite winged special force security team**. Protect against human/wildlife conflicts.
- Successful Projects- Prima Landfill, Poche Beach, RMV- HOA for Sendero and Esencia, Montage Laguna Beach, Marriott Dana Point, Ware Disposal Transfer Station.

Raptors- What makes them special

- **Speed-** clocked at 242 miles per hour- Ken Franklin skydiving from 15,000 feet.
- **Anatomy-** The demands of flight have stripped down the hawk's skeleton to combine lightness with strength. Most of the **bones are hollow** and filled with light spongy bone or internal cross-braces and marrow. Birds of prey have the most evolved eyesight of all living creatures. They have a wider spectrum of colors than ours. They can see into the **ultraviolet range** and therefore plumage patterns which to us appear drab, to birds may

appear quite colorful. Kestrels can detect areas of vole trails by the ultraviolet urine stains. They can resolve details **eight times better** than us. The **field of vision** for each eye is up to about **170 degrees**. They have a blind spot behind the head of about 70 degrees. Raptors like pigeons can detect the **polarization of light** and use this to navigate. Raptors can see things which are much closer together in time than we can. The human eye has a **flicker fusion frequency** that allows us to see 25 pictures a second and a hawk has a flicker rate of 70-80 events per second. The **hearing** of birds of prey is also better than ours. They can hear a wider range of sounds and discriminate between closer frequencies than we can. Hawks can easily recognize one another by their individual voices even though they may sound the same to us. Falcons and hawks have **crops** to store food before it is put into the stomach, an owl has no crop, and instead food passes directly to the stomach. Owls are also less able to dissolve bones and their pellets often contain near complete skeletons. When the gizzard is full of unwanted material the pellets are regurgitated. The **buteos** are more efficient at digesting their food than the accipiters. The gut of an accipiter is only $\frac{1}{2}$ as long as a **buteo** of the same size so it needs more food because it digests more quickly. Curiously unlike mammals, in birds it is the females which decide the **sex** of the offspring. Some of the eggs contain a male chromosome and some do not. The tail is used for steering and braking. A **long tail** is good for steering but adds drag in a stoop. **Juvenile birds have longer wing and tail feathers** than the adults. This allows them to fly more slowly than their parents, the feathers are also softer and less easily broken, but these feathers are not as efficient for fast flight. The **foot** tightens like a ratchet mechanism which allows a bird to lock its foot on a branch while sleeping and once it has a tight grip on its prey it does not require much muscular effort to maintain its grip. The female raptors are $\frac{1}{3}$ **larger** on average than the males which is known as reverse sexual dimorphism.

- **Attrition-** 75% don't see their first birthday due to natural causes of mortality, starvation, disease, predation are abundant. Unfortunately, unnatural causes of premature death are also prevalent such as automobiles, buildings/windows, fences power-lines, wind turbines, power-lines, poisoning, and shooting are all insidious threats.
- **Peregrine Falcon Population Recovery-** Eggshell thinning from DDT Fully protected in 1967. Removed from the federal endangered species list in 1999.
- **Wing load-** Falcons have a high-wing load due to their high body mass relative to the area of their wings, thus a snappy wing beat.

Types of birds used

Different hunting styles as well as size of quarry that will be effective chasing
The incalculable risk is ever present when the falcon departs the fist.

Training Methods- Conditioned Response-Fly to the fist, Lure Machine, Jump-ups, Restrained Pursuit, Lure flying, Ballooning/Kite, Chasing game

- **Buteos-** Short rounded wings, short tail, likes to soar up high-Redtail, Harris Hawk

- **Accipiters**- Short round wings, long tail, fast wing beat- Goshawk, Cooper's Hawk, Sharp Shinned Hawk
- **Falcons**- Long pointed wings, black eyes, toothed beak-Gyr Falcon, Peregrine, Prairie, Saker, Barbary, Merlin, Kestrel
- **Eagles**- Golden
- **Owls**- European Eagle Owl, Great Horned Owl, Barn Owl

Becoming a falconer

- Day in the life of a falconer- Hawks and falcons are weighed on a gram scale every morning before either being loaded in the truck. Or for those staying home blocked out in the weathering yard with pans of fresh water for drinking and bathing. The birds are weighed to accurately measure their caloric intake. Much of a falcon's training is food based. I'm aiming for peak athleticism, while at the same time generating an appetite each morning in order to stimulate predatory drive and recall. They eat commercially grown quail.
- You must pass a state falconry exam to demonstrate proficiency in falconry and raptor-related subject areas before being issued a license. An applicant shall correctly answer at least 80 percent of the questions correctly to pass the exam.
- You need to find a sponsor willing to mentor you for your two year apprenticeship.
- You must pass a facilities inspection from the California Department of Fish and Wildlife which consists of inspecting your mews and equipment (scale, glove, jesses, leash, swivel, perch, bath pan, hood, telemetry).
- I require my apprentices to also join the state club: California Hawking Club and the national club: North American Falconer's Association
- **Apprentice Falconer**- An individual needs to be at least 12 years of age. A sponsor is required for the first two years in which an Apprentice falconry license is held. The sponsor will assist the apprentice in learning the husbandry and training of raptors held in falconry; learning the relevant wildlife laws and regulations; and determining what species of raptor is appropriate for the new falconer to possess. May have only one raptor at a time.
- **General Falconer**- Must be at least 16 years of age and have successfully completed the two year apprenticeship. May possess any of the approved raptor species for falconry with the exception of an eagle. The general falconer can have up to three raptors. A General Falconer remains at this level for at least 5 years before advancing to Master falconer.
- **Master Falconer**- A master falconer may possess any number of raptors except they shall possess no more than 5 wild-caught raptors. To possess an eagle you need to submit a resume of experience handling large raptors along with two letters of recommendations.