



# Alaska WildBird Rehabilitation Center

The next time someone calls you a bird brain, you can thank him. Even though that comment is usually intended to be less than kind, the brain of a bird is quite remarkable.

Consider birds in migration. They depart their northern nesting territories to fly sometimes thousands of miles to wintering grounds. Ornithologists now believe that many migratory species actually have sensors in their brains allowing the bird to use the earth's magnetic field to find its way. The use of this internal mapping is a combination of learned and genetic behavior. A young bird in its first migration will still be able to generally find its way. Adult Tundra Swans nesting in the arctic depart south before their cygnets are ready to fly. Once fully flighted, the young birds find their way to wintering areas without the benefit of experience. Along with this internal compass, birds can use the position of the sun to keep their bearings, an internal GPS.

Many species spend long amounts of time in the air during these migratory flights, sometimes days. Their brains are designed to sleep one hemisphere at a time. During long flights one eye will close to rest half the brain. This behavior may be associated with micro naps, sometimes lasting only a few seconds. These tiny periods of sleep give the bird's brain needed rest while in flight.

A superb memory can be a positive adaptation when it comes to food collection. Jays and crows are masters of stashing food and finding it again. They will take acorns and other seasonal treats and store them in tree bark, under leaf litter or any other safe storage spot. Clarke's Nutcrackers have been observed hiding as many as 30,000 pine seeds over an area of 200 square miles, and later finding over 90% of them.

Many birds have now been found to use humans to actually assist them in food gathering. In Japan, Carrion crows have been observed placing nuts in the road, so the passing cars will drive over them and crush open the hard shell, then the crow returns to collect his prize. Gulls collect shellfish, then drop it from on high to break open on hard pavement. In the Galapagos the Woodpecker Finch will pluck a twig, shape it to its liking and use the tool to dig in holes after insects.

One of the best known cases of bird intelligence is that of Alex, the African Gray Parrot. He has been taught a vocabulary of over 100 words, and can correctly use conceptual words such as those for colors and shapes. His language abilities are considered equal to a 4 year old child

If all this doesn't convince you that birds have amazing brains, then watch them in play. I have watched Ravens tumble down an icy slope, stop at the bottom, shake off and fly back to the top to do it all again. There is no survival trait learned here, no food gathered or mating conducted. These birds were simply enjoying themselves. What bird brains!!

The mission of the Alaska WildBird Rehabilitation Center is to care for injured, sick and orphaned wild birds; and to educate the public about these birds and their habitats.

## Thank you to Pick-Click-Give donors



A heartfelt thanks to all our supporters who donated through Pick-Click-Give for 2013. This was our first year in the program, and we were very excited to see how many of you chose to donate a portion of your PFD to help the wild birds.



## Meet Sandy

Sandy is a Lesser Sandhill Crane, rescued from Palmer. She does not have any injuries, but is heavily imprinted on humans, which prevents her release. We tried to release her into a flock of cranes heading south in the fall, but she did not leave with them and resumed her begging behavior with the neighbors. Some species of birds, including many ducks and geese, will rapidly learn to recognize humans as their flock if hand fed at certain impressionable times in their first year. This was apparently what happened to Sandy. Some well-meaning person fed her, she became tame and no longer associated with other cranes.

Sandy is a unique bird to have in our education program. She was taught to wear a harness and walk on a leash. When taken out in public, she must have 2 handlers due to her size, strength and eagerness to greet people. Despite her tame demeanor, that bill can still cause harm.