Sleeping Ducks – From Dandy Designs

There is an expression that is often used in which a person is said to be a "sitting duck" meaning that he is unprotected and vulnerable to attack. Did you ever wonder how ducks are protected when they are sleeping? They are not up in a tree like most birds. They are not in a hole in the ground like many animals. They are out in the open. Are they what you might call "sitting ducks" when they are sleeping?

Dr. Niels Rattenborg has studied sleep patterns of birds, including ducks. He monitored the brain waves of ducks as they sleep and learned some interesting things. Ducks often spend the night together as a group, often sleeping in a row. The ducks on the end of the row or outside of the group are easily spooked by any movement nearby. They sleep with their eye away from the group open, while the other eye is closed. Rattenborg found that one of the hemispheres of the brains of these outside ducks was functioning at 100% capacity while the other hemisphere was in sleep mode. Apparently the duck has the ability to sleep with half the brain at a time asleep while the other half is fully responsive to the environment.

There is an obvious advantage to this system. Not only is the duck protecting itself by being constantly awake on the side that danger might come from, but the duck is also protecting the other ducks in the center. Science teacher John N. Clayton has noticed in watching mallard ducks sleeping by the river behind his house that when they get disturbed, the outside duck will not be on the outside when they regroup. Apparently there is a rotation of responsibility so that a fresh duck ends up on the outside of the group awaiting the next disturbance. The ones in the center are free to sleep with both hemispheres of their brains. Dr. Rattenborg's research has shown that to be the case.

Ducks are not known for being intelligent animals, but they have been given a design and an instinctive method of behavior that allows them to survive in a hostile world. The Creator has given all creatures a method of survival to protect them from their enemies.

References-
Discover, May 1999, page 19
Scientific American, May 1999, page 27
Nature, Feb 4, 1999, page 397
www.sciencenews.org/pages/sn_arc99/2_6_99/fob5.htm