

# Summary of deep intellect

[Environment](#), [Animals](#)



In “ Deep Intellect” author Sy Montgomery makes his case in showing that octopuses are intellectual invertebrates. Scientists believed that octopuses were unintelligent brainless creatures. However new studies have amazingly revealed just the opposite. Studies now show that octopuses are intelligent, emotional and have individual personalities. Montgomery talks about his encounter with an octopus, Athena, at the Aquarium in New England and the different studies that prove that octopuses are intelligent. Octopuses are invertebrates that touch and taste with the thousands of suckers that are on their eight arms.

A study by Alexa Warburton although problematic revealed that “ California two-spots quickly learned which side of a T-maze offered a terra - cotta pot to hide in” (page 3). The octopuses appeared to intentionally not cooperate by jumping off the mesh while being scooped out of their tanks. Scientists measure intelligence by brain size and counting neurons. Octopuses have about 130 million neurons in its walnut size brain and amazingly three-fifths of their neurons are in its arms. The intelligence of octopuses also includes the ability to change colors and shapes to hunt and to escape predators.

Scientists believe that octopuses are colorblind but new evidence proposes that they may see with their skin. A study by Jennifer Mather shows that octopuses can employ foresight and even plan. Mather observed an octopus choosing rocks to place in front of its home to feel safe before going to sleep. Another study by Roland Anderson reports an octopus playing with a pill bottle as a toy. The octopus was blowing water to move the pill bottle from one end of her tank to the other. Anderson states that “ Only intelligent animals play - animals like crows and chimps, dogs and humans” (page 5).

In a study by Bill Murphy octopuses opened locks on boxes to get food and they used different strategies showing individuality. One octopus was so eager to get the food that he broke the outer box and then squeezed into the inner box. Roland Anderson also proved in a study that octopuses remember familiar humans. In this experiment one person would just feed the octopuses and another person would touch them with a bristly stick. After a few weeks, the octopuses would shoot water at the person that touched them with the bristly stick at first sight. However when the octopuses saw the person that fed them they would move toward that person.

Scientists have noticed that octopuses and humans have eyes that are almost the same. Humans and octopuses eyes have transparent corneas, regulate light with diaphragms and focus lenses with a ring of muscle. Based on the research data octopuses are unsocial creatures that have a short lifespan. They have evolved into intelligent and emotional creatures that have individual personality. Scientists today still know very little about the intellect of octopuses. To understand the mind of these eight arms wonders, scientists must rethink the way they examine the nature of the mind.