



The beaver (genus *Castor*) has been around since the Pliocene, 7-3 million years ago. In Eastern Canada species *canadensis* has created habitat for wood ducks and mallards; red-wing blackbirds, Virginia rails and marsh wrens; pussy willows, speckled alder and aspen; blue flag iris, arrowheads, pond lilies, cattails, pickerelweed and swamp loosestrife; water milfoils; bluejoint reedgrass; and northern spring peepers.



The beaver is a **keystone species** that modifies its environment in a way that creates habitat for many other species. And because, like the elephant, the bison, and the Bolson tortoise (now endangered or extinct in their former ranges), it actually re-structures the physical environment, it is sometimes called an 'ecosystem engineer'. But we must not let this reference to human *applied science* confuse the reality of *Natural Creativity*.



**The organizing principal of species association itself is competitive exclusion:** *Once an ecosystem is fully diversified and stable, any organism born with traits outside its species norm will experience greater competition from other species that have optimized those traits already, thus the 'misfit' organism is less likely to contribute to a next generation of its gene pool.* This is how an Intelligent Nature 'partitions its resources'. [Notice that, in the wild, even learned behaviours must conform to the greater biological system of optimized bodies. So when we human beings accessorize our bodies with technology, we *necessarily* defeat Nature's System.]