March 10, 2016

*When the water rises, the fish eat the ants.*
*When the water dries up, the ants eat the fish.*

Last fall, as we raced through harvest season and life in Iowa, our son Neil shared this Lao proverb that reflects the more pragmatic lifestyle and approach to growing seasons of the Lao people. Fish and rice are mainstays of the Lao diet, and many farms feature small fish ponds among the rice paddies. Here in Iowa, farm ponds are also popular and many people enjoy fishing year round, though few of us depend on fish for our main source of protein.

Iowa – the Land Between Two Rivers – is not only rich in soil resources but also water resources. Between the Missouri and Mississippi Rivers stretches a landscape highlighted with farm ponds, natural and man-made lakes, as well as interior rivers and streams. Did you know Iowa is home to 148 different species of fish? The following families of fish live in Iowa’s waters: catfish & bullheads, sunfish, perch, trout, pike, temperate bass, suckers, minnows, as well as several species of primitive and miscellaneous fish. Iowa is also home to many families of fishermen. Each year over 400,000 residents and non-residents purchase Iowa fishing licenses. The Iowa DNR also sponsors a free fishing weekend each year. This year’s free fishing days are June 3-5. Of course, a fishing license also allows the harvest of mussels, turtles, frogs, and bait with the exception of threatened and endangered species.

The March-April 2016 issue of *Iowa Outdoors* included a feature article entitled “2016 Iowa Fishing Forecast: Top Picks in Every County.” Here’s the Iowa DNR’s top pick in Pocahontas County: Newly renovated Lizard Lake has lots of wildlife viewing plus perch and northerns. Its abundant habitat limits shoreline access so “you could really have fun canoe or kayak fishing,” says Wallace. Reports from local ice fishermen, however, have not been encouraging, and so we will have to wait to see what the spring will bring at Lizard Lake.

In closing, I’d like to clear up some reader confusion about last week’s evolutionary topic and the sentence “Using atavism activation, a unique cluster of genes that govern facial development in chickens was isolated and then silenced.” Atavism is simply the tendency to revert to the ancestral type. In this case the gene sequence for beaks was turned off, which allowed the ancestral trait of a snout, whose genes were still present in the DNA, to be expressed in the chicken embryo.

Biotechnology and genetic engineering has come a long way since I returned in college in 2000. Dr. Hampton, my botany professor, told stories from his days as a graduate student when researchers would literally load genetic material on a .22 bullet and shoot it into another organism. One controversial project involved inserting strawberries and tomatoes with fish genes to protect the fruit from late spring frosts, a project that was abandoned because of the public’s misconception that the strawberries would smell fishy!