

Aquaculture is an educational and fun experience
By: Corine Burgess

Recently I took my son to Gatorama for the alligator hatching event, which occurs every August. In case you haven't heard of this miraculous wonder, it's where the visitor gets to hold an alligator egg while it hatches. It was truly an amazing experience for my son and I would highly recommend it for any of parent that has children who love animals. The look of pure delight on my son's face when the little creature emerged from its egg was priceless.

But Gatorama is more than a fascinating place to see reptiles up close and personal. It also serves as an alligator farm. It is a place where one can be thrilled at the sight of hundreds of alligators and crocodiles and watch while the brave staff members feed the huge beasts, but it's also a site where aquaculture is being practiced. By controlling the conditions for these cold blooded creatures, the owners can maintain a steady supply of products that are more uniform in size and price. In addition, these aquatic critter producers may create ideal breeding conditions which allow increased growth rates and enhanced disease resistance. As with all supply and demand, once the product becomes more plentiful, costs will decrease, making it more affordable to the consumer.

Since the science of aquaculture is becoming more popular and prevalent in today's world, the United States Department of Agriculture (USDA) has set up an Aquaculture Program. Its mission is "to conduct high quality, relevant, basic and applied aquaculture research and technology transfer to create jobs and economic activity that will improve the international competitiveness and sustainability of the United States aquaculture, and reduce dependence on imported seafood and threatened ocean fisheries."

There are many advantages to the controlled conditions of producing aquatic plants and animals in aquaculture. The research components of the program include:

- Genetic improvement
- Integrated aquatic animal health management
- Reproduction and early development
- Growth, development and nutrition
- Aquaculture production systems
- Sustainability and environmental compatibility of aquaculture
- Quality, safety and variety of aquaculture products for consumers.

But gator farming isn't the only type of aquaculture being practiced these days. There are many different types of aquaculture. Algaculture is the farming of algae or seaweed. Fish farming is the raising of fish in tanks or enclosures, generally for food. Freshwater prawn farming is designed to raise and produce freshwater prawn or shrimp for food. Mariculture is the farming of marine organisms and shrimp farming is the cultivation of marine shrimp for human consumption. In addition, many tropical species of aquatic life are collected for aquariums and pets. So, we can see that aquaculture is becoming big business.

According to the USDA Economic Research Service, during the past two decades, the value of U.S. aquaculture production rose to nearly \$1 billion. The National Oceanic and Atmospheric Administration (NOAA) reports that aquaculture is the fastest growing form of food production in the world. Globally, nearly half the fish consumed by humans is produced by fish farms and this trend is expected to continue.

Although Aquaculture is a popular science in this century, it is certainly not a new practice. It has been used in China since about 2500 b.c. The Hawaiian people have been using it for over 1,000 years. The Japanese, Romans, Europeans and Canadians have all utilized this practice for years and continue to do so in today's world. Americans jumped on the bandwagon in the 20th century with the harvesting of wild kelp. Today, aquaculture is big business worldwide. Interest in aquaculture production is on the rise for various reasons and the practice is catching on in a big way in the United States.

Our recent "aquaculture" experience was certainly a memorable one. Not only did we have fun during our visit to the gator farm, we learned quite a bit. My son got to hold an alligator while it was squiggling out of its egg; he learned that alligators don't eat once the water gets below 70 degrees; he understands that alligators reproduce better when the water they live in is warm year round. We also learned, first hand, that crocodiles and alligators can swim backwards! We saw it happen and we also know that they can jump pretty high, especially when they are being fed!