

'Everything Is Connected'

When I first read Rachel Carson's *Silent Spring* in high school, her message struck a chord. Little did I realize then, I would be carrying on her work 20 years later as a Fish and Wildlife Service Environmental Contaminants (EC) Specialist.

Carson's prophetic warning that contaminants are "the most alarming of all man's assaults upon the environment" continues to resonate with me as I see the effects of contaminants on migratory birds. One of my starkest memories of these effects comes from my second year as an EC Specialist. I was stunned after dissecting an American avocet egg for a selenium study. The misshapen head, missing toes and wings and crossed bill gave the bird embryo a grotesque, almost alien appearance. Were it not for our investigation, the embryo's deformed body would go undocumented and unwitnessed, joining the countless animals poisoned by contaminants that die in the shadows. Rachel Carson and others in the Service pioneered the work

on contaminants' effects on fish and wildlife over half a century ago. Today, I feel privileged to carry on her work with my peers.

Since becoming a father, my work has taken on a more personal significance. Last summer, during a family camping trip, I watched my kids using fishing line and bait to catch crawfish. They were soon joined by other kids who also tried their luck. Crawfish unlucky enough to be caught were placed in a small bucket and duly scrutinized by the gawking children only to be tossed back into the lake and caught again. This simple drama of innocent wonder and joy illustrates what it's all about and why we do what we do.

Silent Spring emphasized the interconnectedness of all living things and working in the EC program has reinforced this as my overarching approach to my career and life. Everything is connected. Thanks to the work of Rachel Carson and those that followed, the wild creatures that capture my children's curiosity have not been silenced. Although we have made a good deal of progress in conservation, we

still have a lot to do. I believe we must heed Rachel Carson's advice for those that follow: "The road we have been traveling is deceptively easy, a smooth superhighway on which we progress with great speed, but at its end lies disaster. The other fork of the road—the one 'less traveled by'—offers our last only chance to reach a destination that assures the preservation of our earth." □

Pedro 'Pete' Ramirez, Jr., Environmental Contaminants, Cheyenne, Wyoming



Ramirez's daughter Rita removes a crawfish from a net and into a bucket.

A Timeless Place

In 1947, Rachel Carson wrote about the Parker River National Wildlife Refuge in her "Conservation in Action" series. The Massachusetts refuge she wrote about 60 years ago remains mostly unchanged and would look familiar if she were to visit today. The land is still vitally important for the American black duck and many other species of waterfowl during migration, particularly as the surrounding landscape has changed from a primarily rural and agricultural setting to one more urban.

Since the refuge was established in 1942, the Service's role has increased so that it now manages for many other species of wildlife, including the threatened piping plover. Parker River was also recently designated a Western Hemisphere Reserve Network Site, reflecting the greater role it plays in protecting shorebirds.

Some of the economic and recreational activities that Carson observed at Parker River continue today. Visitors still go clamming. People still pick beach plums in late summer when the fruit ripens. Salt

hay, however, is pretty much a thing of the past, although a few individuals still harvest it nearby.

Each year, more than 250,000 people visit the refuge, one of the most popular bird-watching destinations in the Northeast. The road down the refuge is greatly improved and not the adventure it was when Rachel Carson visited 60 years ago. Refuge improvements enable birdwatchers and many other visitors the opportunity to catch a glimpse of a snowy owl in winter and many other species. Carson wrote about a rare Hudsonian Godwit seen at the refuge in 1946 and in 2006, the sighting of a rare European black-tailed godwit drew birdwatchers from all over the region to Parker River.

The landscape of Parker River may not change much over the next 60 years, but I believe its importance to migratory birds and other wildlife will increase much as it has since Rachel Carson visited in 1947. □

Graham Taylor, Refuge Manager, Parker River National Wildlife Refuge, Newburyport, Massachusetts

Carson in Florida, ca. 1950.

