

# The importance of alewives in our ecosystem

There has been much talk lately on the importance of the renewed alewife runs in the state of Maine. Alewives have co-evolved and co-existed with other native fish and wildlife in Maine's streams, rivers, ponds and lakes for thousands of years. Many Mainers have never experienced an alewife run because the once thriving population has declined significantly over the last 200 years. Dams, pollution and overfishing have taken their toll.

Historians and scientists say that prior to European settling this region, there was probably not a stream flowing out of a lake or pond anywhere in the Gulf of Maine region that didn't have an annual alewife migration, unless it was blocked by impassable waterfalls.

One history of Gardiner and Pittston written in 1852 relates that "alewives are so plentiful there at the time the country was settled, that bears, and later swine, fed on them in the water. They were crowded ashore by the thousands."

In 1997, the Maine Department of Marine Resources began stocking alewives to a very dismal-looking Webber Pond, in Vassalboro, that was due to massive algae blooms every year. Many efforts to "clean up" the lake were implemented, but the re-introduction of alewives seemed to tip the scales toward the positive. Since the removal of the Edwards Dam, in Augusta, in 1998, the alewives can now come up the Kennebec River naturally like they had done for thousands of years into their natural spawning grounds, going as far as Sebasticook Lake, in Newport.

Togus Pond, in Augusta, was

also going through the same water quality problems. Their four-year effort to re-introduce alewives finally came to fruition this spring when, on May 16, 9,600 alewives were introduced into the lake. One day this summer, I witnessed what were thousands of alewife juveniles running along the eastern shore of Togus Pond.

A request to the state department for alewife stocking by the China Lake Association was declined.

Alewives are anadromous fish that spend the majority of their life at sea but return to freshwater to spawn.

Native American and European settlers depended on the bounty brought to inland waters by spring migrations. When one river town built a dam and blocked the fish from their spawning grounds, one early chronicler wrote that the inhabitants of the next town were outraged, sometimes approaching acts of violence.

In 1809, the selectmen in Benton ordered a dam to be torn down because it blocked huge runs of alewives and shad on the Sebasticook River.

Every May and June, adult alewives, guided by their sense of smell, migrate upstream from the ocean, and spawn in quiet backwaters or rivers and streams.

Following the spawning, adult alewives return to the ocean, leaving the juveniles behind. During the time the juveniles are in the lakes, everything within those waters eats alewives, including eels, rainbow trout, brown trout, landlocked salmon, smallmouth and largemouth bass, pickerel, pike, white and yellow perch, eagles, osprey, great blue

heron, even otters, mink, fox, raccoons, skunks, weasel, fishers and turtles. See what I mean when I said *everything*. And that's not even the complete list.

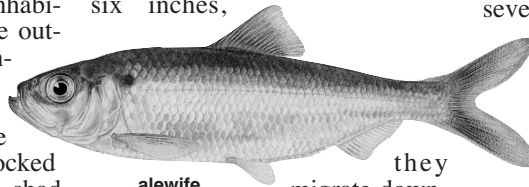
A female alewife can produce somewhere between 60,000 to



## SCORES & OUTDOORS

by Roland D. Hallee

100,000 eggs, although only a few eggs survive to the juvenile stage. The juveniles then spend the summer and early fall months feeding on zooplankton. Come October, when the juveniles should have reached a length of six inches,



alewife

they

migrate downstream to the ocean where they grow to adulthood. Some males return to freshwater when they are three years old, but females will return when they are four or five years old.

It is well documented that the major factor causing algae blooms in our lakes is the introduction of phosphorus, most directly linked to residential development.

When adult alewives migrate into a freshwater pond or lake, there is an influx of phosphorus to the lake. However, the majority of the spawning alewives

return to the ocean, taking phosphorus with them. In addition, young alewives that grow in freshwater will ingest phosphorus from these lakes. That phosphorus is removed from the lake when the young migrate to the ocean.

While alewives present a spectacular migration every spring that's fascinating for people to watch, alewives perform other vital functions in the larger ecosystem. Alewives provide cover for salmon smolts that are moving down river. In the same way, alewives provide cover for upstream migrating adult salmon that could be preyed on by eagles or ospreys, and for young salmon in the estuaries and open ocean that might be captured by seals.

However, alewife populations are on a drastic decline along the eastern seaboard of the United States since the 1950s. There are several threats that have most likely contributed to their decline. These threats include loss of habitat due to decreased access to spawning areas from construction of dams and other impediments to migration, habitat degradation, fishing, and increased predation due to recovering striped bass populations.

In response to the declining trend of alewives, states like Massachusetts, Rhode Island, Connecticut and North Carolina have instituted moratoriums on taking and possessing alewives.

Water quality studies were coordinated by the Maine Department of Environmental Protection in the 1970s and a coordinated study between the DEP and DMR on Lake George in Canaan in the 1990s. Other

studies have been done on other lakes throughout Maine. All of the studies have found that when alewives are restored, there is either no change or a minor net decrease in total lake phosphorus. In fact, data from Maine points to good water quality on lakes with healthy alewife populations.

In freshwater, alewives are food for the local fish population. In the estuaries, striped bass, haddock and cod feed on alewives, and the recovery of these economically valuable fish depend in part on restored populations of alewives. In addition, lobstermen depend on alewives as they are the traditional spring bait for lobsters. In the spring, alewife harvesters pay the towns for the rights to harvest, and in turn sell their product to lobstermen. In this case, Vassalboro benefits financially from the Alewife harvest.

Tests have indicated that alewife reintroduction to Webber Pond has had a positive affect on the water quality, and the jury is still out on Togus Pond because it is so early in the program there.

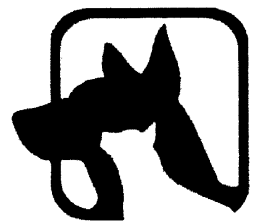
But, if you want to witness the spring migration of thousands of alewives, visit the two-year-old fish ladder located at the dam at Webber Pond, on the Webber Pond Road, in Vassalboro, and watch the alewives work their way from the stream to the lake. It is quite something to watch.

**Roland's trivia question of the week:**

Name the only NFL quarterback/running back tandem to each rush for over 1,000 yards in the same season.  
*Answer on page 19.*

August thru  
October  
2010

## WINDSOR VETERINARY CLINIC QUARTERLY MEWS 207-445-2373



### Fall Focus On Senior Pet Wellness

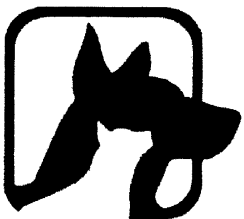


To encourage appropriate senior pet wellness care, for the months of September and October, we are offering a 20% discount on wellness testing for all pets over 7 years old, when performed during the senior pet's routine healthy pet and/or vaccine appointment.

#### Wellness Care

Like people, animals can develop a variety of medical problems as they age. Our pets generally deal with the early stages of these issues without complaint. Once mild problems have progressed, they will typically let the owners know, but at a much later stage of disease. Just as with people, however, most problems are more cheaply and effectively managed when discovered early. It is for this reason that many people have their blood pressure or cholesterol checked. When you combine all of these facts with the fact that pets age much faster than people do, up to seven "dog years" in one "people year," wellness tests can become that much more important for our pets' well-being. If you have any questions about what type of senior wellness screening might be appropriate for your pet, please make an appointment with your veterinarian. Hopefully, all tests results will be normal. That will certainly be good news! For the many whose results are not normal, however, they will be much better off for having their issues uncovered early.

## WINDSOR VETERINARY CLINIC



P.O. Box 157  
Windsor, Maine  
04363

We are located at 736 Ridge Road,  
5 Miles South of Route 3, on Route 32

**CLINIC HOURS BY APPOINTMENT:**  
Monday, Wednesday and Friday 8 am – 5 pm  
Tuesday and Thursday 8 am to 7 pm  
1st and 3rd Saturday each month 8 am – 1 pm  
All other Saturdays 9 am to noon

## WINDSOR VETERINARY CLINIC

Visit us on line at [www.windsorvetclinic.com](http://www.windsorvetclinic.com)

#### VETERINARIANS

Dr. Erika Matthies Praul  
Dr. Darryl Praul  
Dr. Kathryn Mayerson

#### TECHNICIANS

Dawn Clifford, LVT  
Amy Ring, AA  
Betty Pierce, AA  
Jennifer Tinnin, LVT  
Heather Doucette, AA

#### RECEPTIONISTS

Erin Bessey  
Peggy Dostie  
Amanda Brooks  
Laurie Thomas

#### OFFICE MANAGER

Darlene Lenfest

#### HOSPITAL MANAGER

Dale Turner, LVT

Our kind, caring and knowledgeable staff is available to help you with your pets needs.  
Call today for an appointment. 445-2373. *We accept personal checks and all major credit cards.*