

# Watchic Lake and Wildlife Connectivity



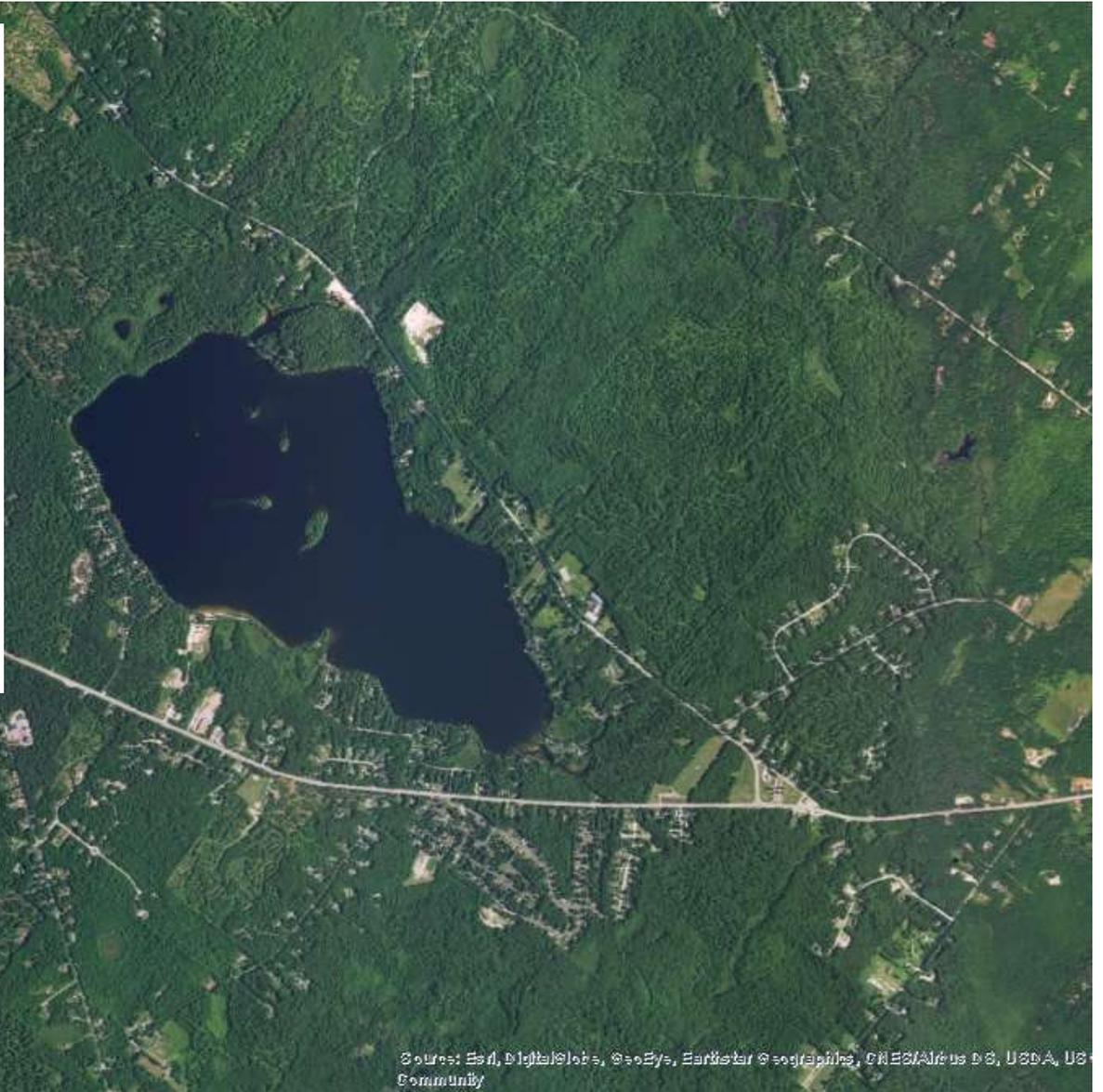
Maine Audubon  
[www.maineaudubon.org](http://www.maineaudubon.org)

©Kerry Woodberry

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## Watchic Lake

1. **Within the Saco River Watershed**
2. **448 acres and 41 feet deep at deepest point**
3. **Spring-fed and has 2 inlets, Page Brook and Paine Brook**
4. **Outlet at Watchic Brook, into Saco River**
5. **Dam at outlet**
6. **Warm water fishery (bass stocked in '50s)**



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, US  
Community



**How does a bald eagle see it?**



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, US  
Community

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**Probably more like this... fish!**



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, US  
Community

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## A “Kettle” of Bald Eagles riding thermals

Maine now has over 600 nesting pairs of Bald Eagles, up from the low of 20 nesting pairs in 1978.

The ban of DDT as well as habitat improvements and reintroduction programs in a number of nearby states have all contributed to the amazing recovery of the national symbol

**Mature bald eagle with white head.**



**Immature bald eagle.**



Which picture doesn't belong?

**Immature golden eagle.**





The Bald Eagle nesting (breeding) season in Maine is from February 1 through August 15.

They're primarily fish eaters, so the health of our lakes and rivers is really important to them.

Unfortunately, they still face challenges. Bald Eagles in Maine have among the highest mercury concentrations in the country. As top predators, heavy metals like mercury concentrate in their tissues, and Maine seems to have the right environment for converting airborne mercury to a form easily taken up into fish and other species.

**BUT IT IS STILL A SUCCESS STORY!**

Let's zoom a little closer to the lake and see it from the loon's perspective.



Sources: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, Aero  
Community



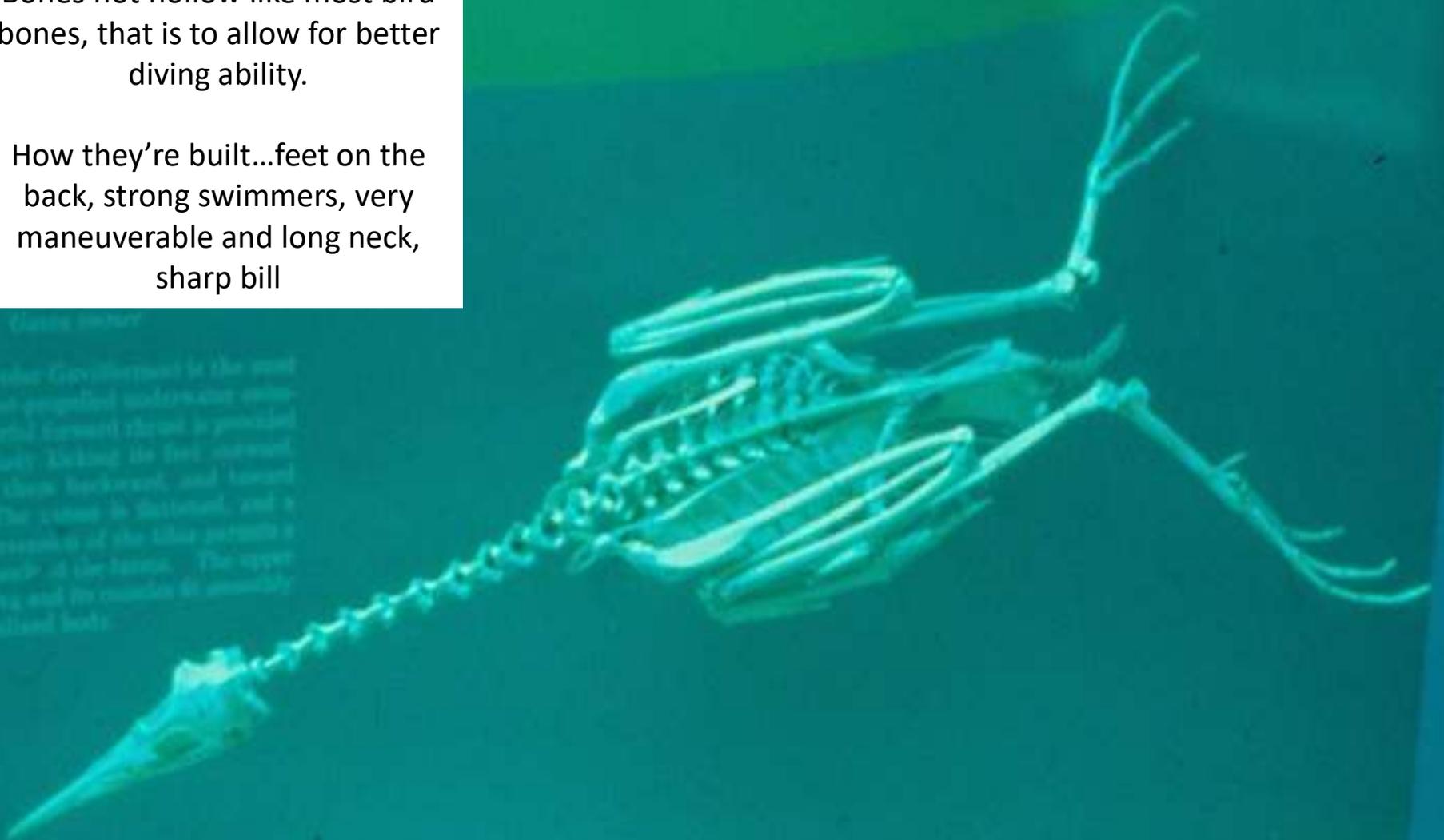
© Alex Rogers 2005

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Bones not hollow like most bird bones, that is to allow for better diving ability.

How they're built...feet on the back, strong swimmers, very maneuverable and long neck, sharp bill

*Class: Ichthyofauna*  
The Great Cormorant is the most long-proboscis waterfowl observed forward along a parallel course. Looking to the left, the neck is bent backward, and toward the water is directed, and a series of the ribs forms a series of the bones. The neck is long and the muscles are strongly developed.

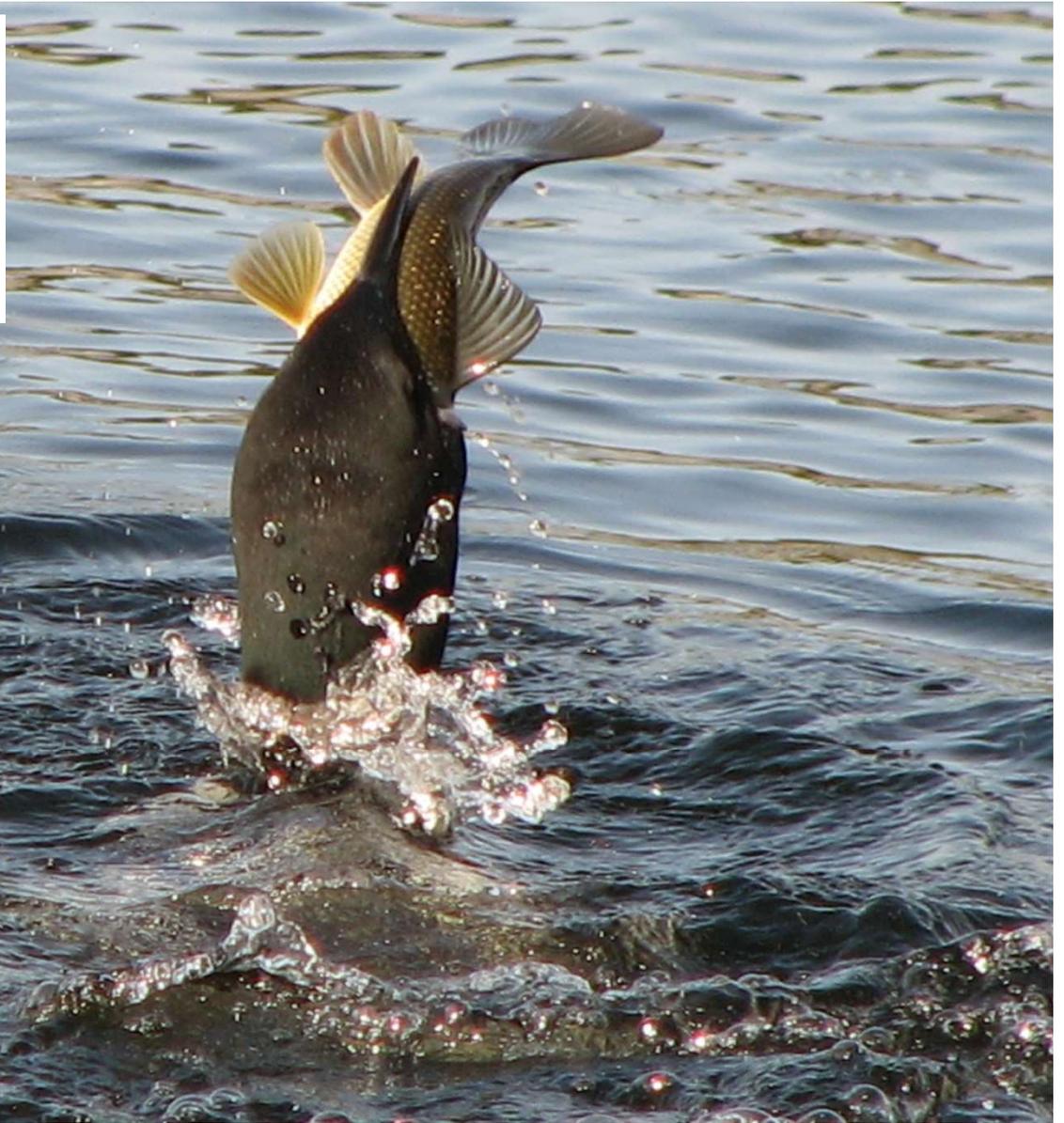


Here are the feet underwater...note  
size and placement!

This is also a great picture to remind us  
of how important clean clear water is.  
Loons are visual predators, so clear  
water is critical for their survival.



Loons are primarily fish-eaters, will eat any fish as well as some crustaceans. Average daily consumption is about 2 lbs/loon/day. Family of four will consume nearly a ½ ton of fish throughout the 6 months breeding season.

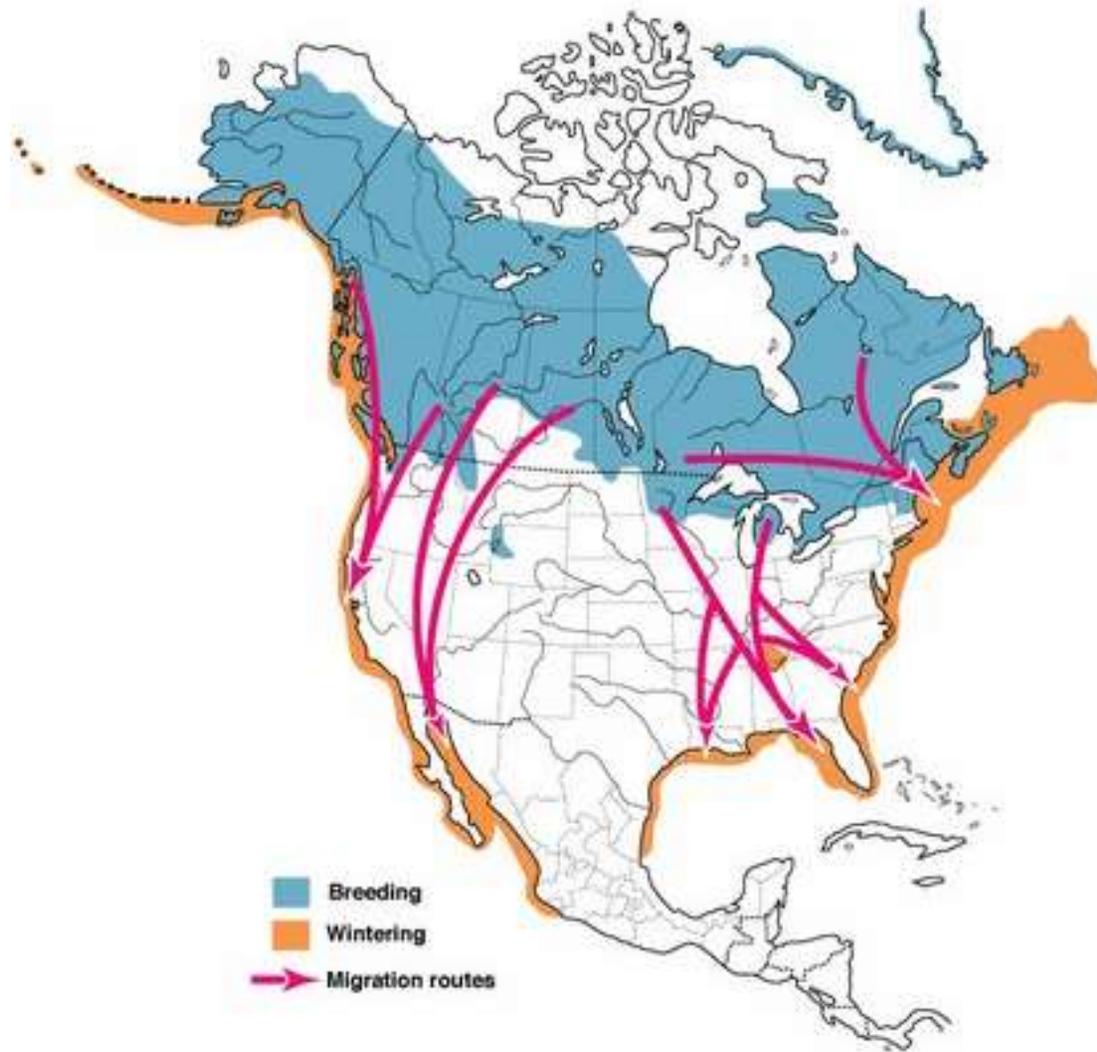


© Bill Higgins

Loons are large and heavy so takes them  
awhile to get going...  
They need up to ¼ mile of open water to  
fly...can go up to 90 mph.



©Larry Warfield



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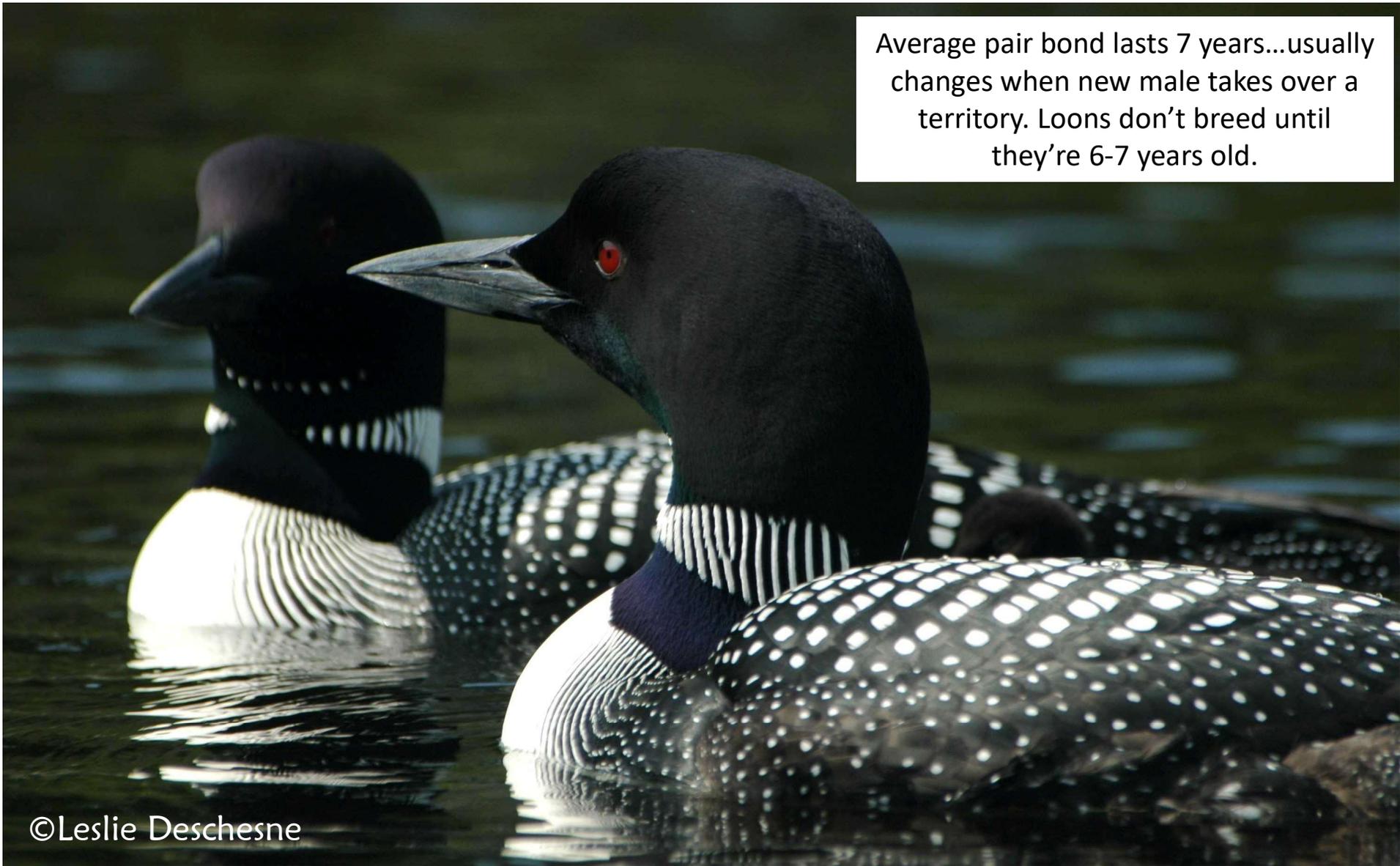
**Males are first back on territories...get there early to establish best territories, fend off other males.**



© George Ely

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Average pair bond lasts 7 years...usually changes when new male takes over a territory. Loons don't breed until they're 6-7 years old.



©Leslie Deschesne

Both parents build nest, right on water's edge (because they can't maneuver on land). Watchic Lake nest from May 2017. Note how close the nest is to the shore. One of the reasons dam management is so important.



©Steve Lajoie



Loons lay 1-3 eggs, usually 2, a day apart. Eggs usually laid between May 15 and June 15...incubate for 26-30 days...have to continually rotate egg

**Head Down on Nest:** This is a posture you should NOT see...means you are too close, making the loon very anxious and getting ready to slip off the eggs and nest into the water.





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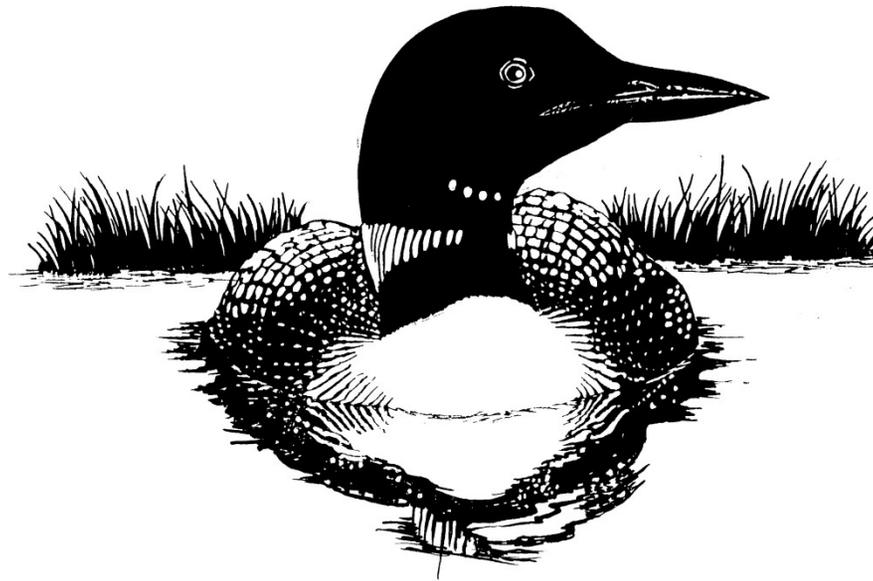
< One Week



Chicks are completely helpless when they're born...they weigh about a quarter of a pound (stick of butter)...this is why they ride on parents back.

© June LeDuc

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*Loon Project  
1984-2017*

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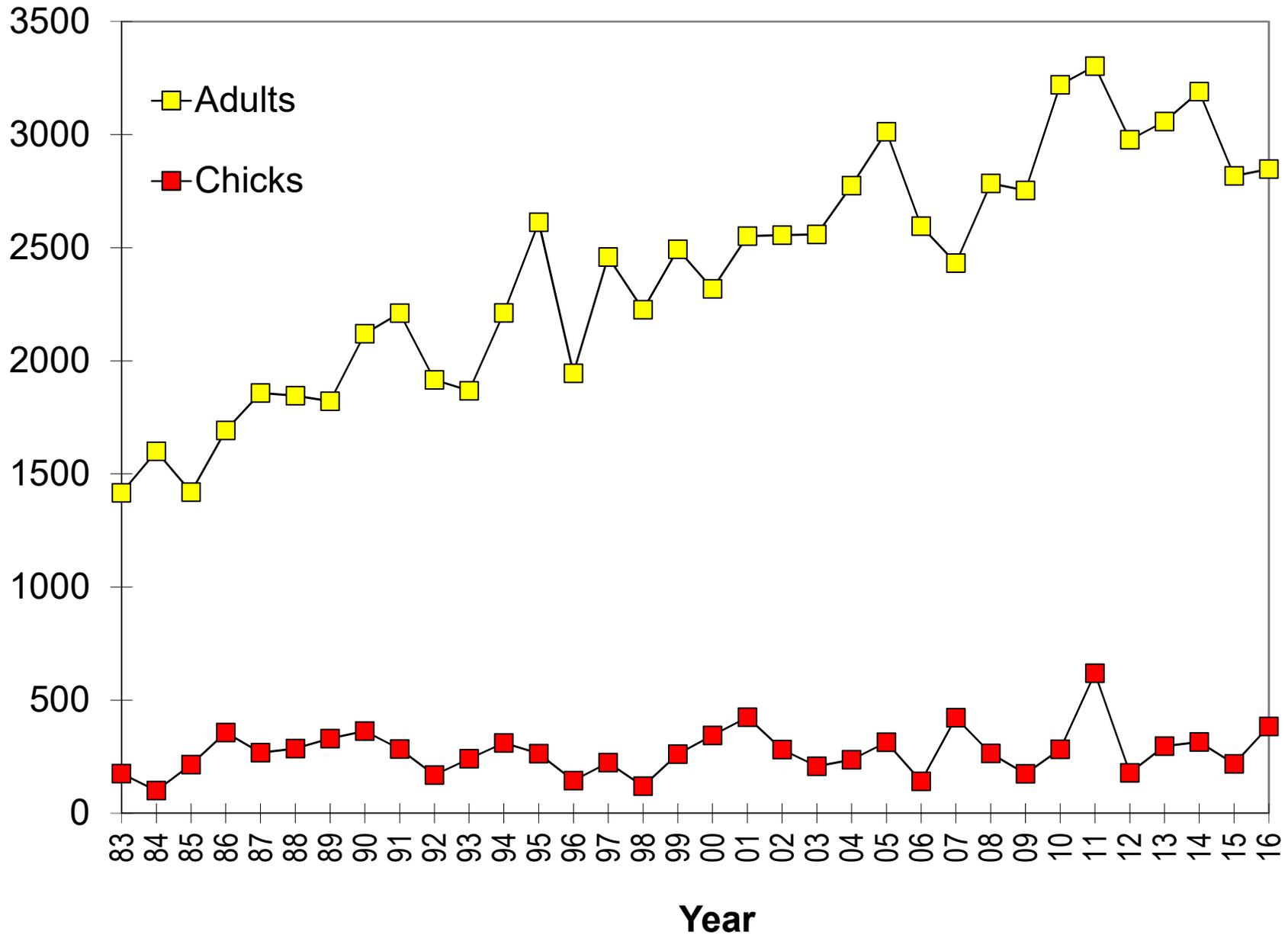
**Maine Loon Project:** Organize about 1000 volunteers like this to go out and count loons on the third Saturday of July.



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# Loon Population Estimate

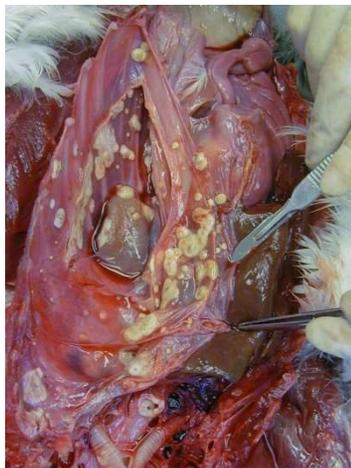
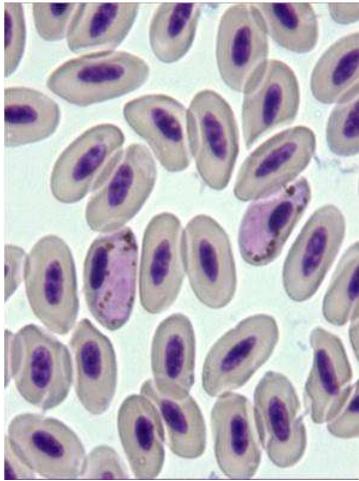
(south of 45<sup>th</sup> parallel (roughly from Rangeley to Calais))



# Many Threats Today...



# More Threats Coming Tomorrow...



# **For Common Loons in Maine...**

**Not one big threat...**

**Many, many small threats.**

***Only way to improve loon habitat and productivity in Maine is to chip away at those small threats, one action, one person, at a time.***

# LakeSmart Award



**Living Lightly on the Land  
For the Sake of Our Lake**

[www.mainelakesociety.org](http://www.mainelakesociety.org)

In 2016 Watchic Lake earned the  
LakeSmart Gold Award –  
**CONGRATULATIONS!**

In 12 years of LakeSmart programs,  
only 7 other lake associations (out of  
150 in Maine) have achieved this level  
of participation with 15% of lakeshore  
landowners LakeSmart certified.

**What's next?**

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## Loon Smart Standards:

### 1. Landscaping

Landscaping directs most or all stormwater runoff to a vegetated buffer, infiltration trench, rain garden or other "best management practice."

### 2. Shoreline vegetation buffer

The width and complexity of the shoreline vegetation buffer is maximized to the extent possible (three or more tiers of vegetation at least 10 feet wide)

### 3. Predators

Leave no outside attractions for egg predators (skunks, raccoons, ravens), such as pet food or unsecured trash.

### 4. Boating

- Keep from getting too close to loons. Get up-close views only with binoculars
- Maintain headway speed within 200 feet of the shore, in accordance with Maine law.
- Be cautious when boating (or swimming) near breeding loon pairs and young chicks, especially between June 15 and July 15 when chicks are most vulnerable.

### 5. Fishing with loons in mind

- "Fish Lead-Free" and remove lead tackle from tackle boxes.
- Properly dispose of monofilament line, including any found in lake or onshore.

### 6. Spread the word

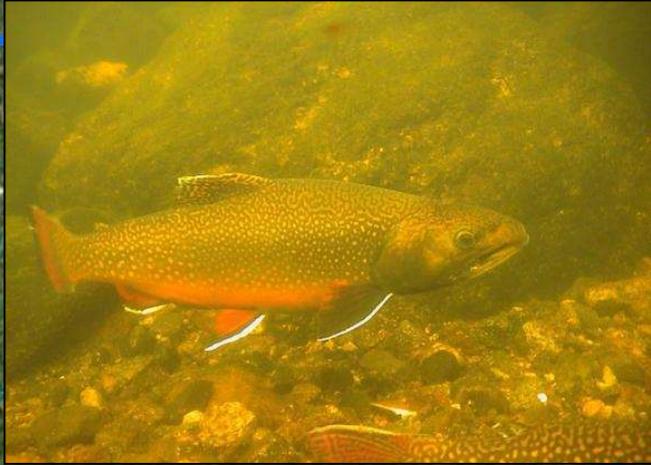
Share information about *Loon Smart* with three or more other lake dwellers.

## A Stream Smart crossing

“Let’s the Stream Act Like a Stream”  
Don’t forget the roads leading to the lake,  
and the culverts that pass the water  
through those roads and driveways.



Let's zoom back out and think about the landscape again, and about connectivity from the perspective of non-flying creatures



Watchic Lake is in Eastern Brook Trout country, and possibly has a population of Endangered Blanding's Turtles in the area.



Sources: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, US Community

This is what the landscape looks like to them. The black lines are the roads, and the dots are all the culverts that are impassible to fish at some point in the year.



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, US  
Community



These are all  
stream crossings  
leading to  
Watchic Lake



# Stream-Smart Crossings...

Maintain fish and  
wildlife habitat...



...while protecting roads  
and public safety.

**This is what we're trying to avoid**

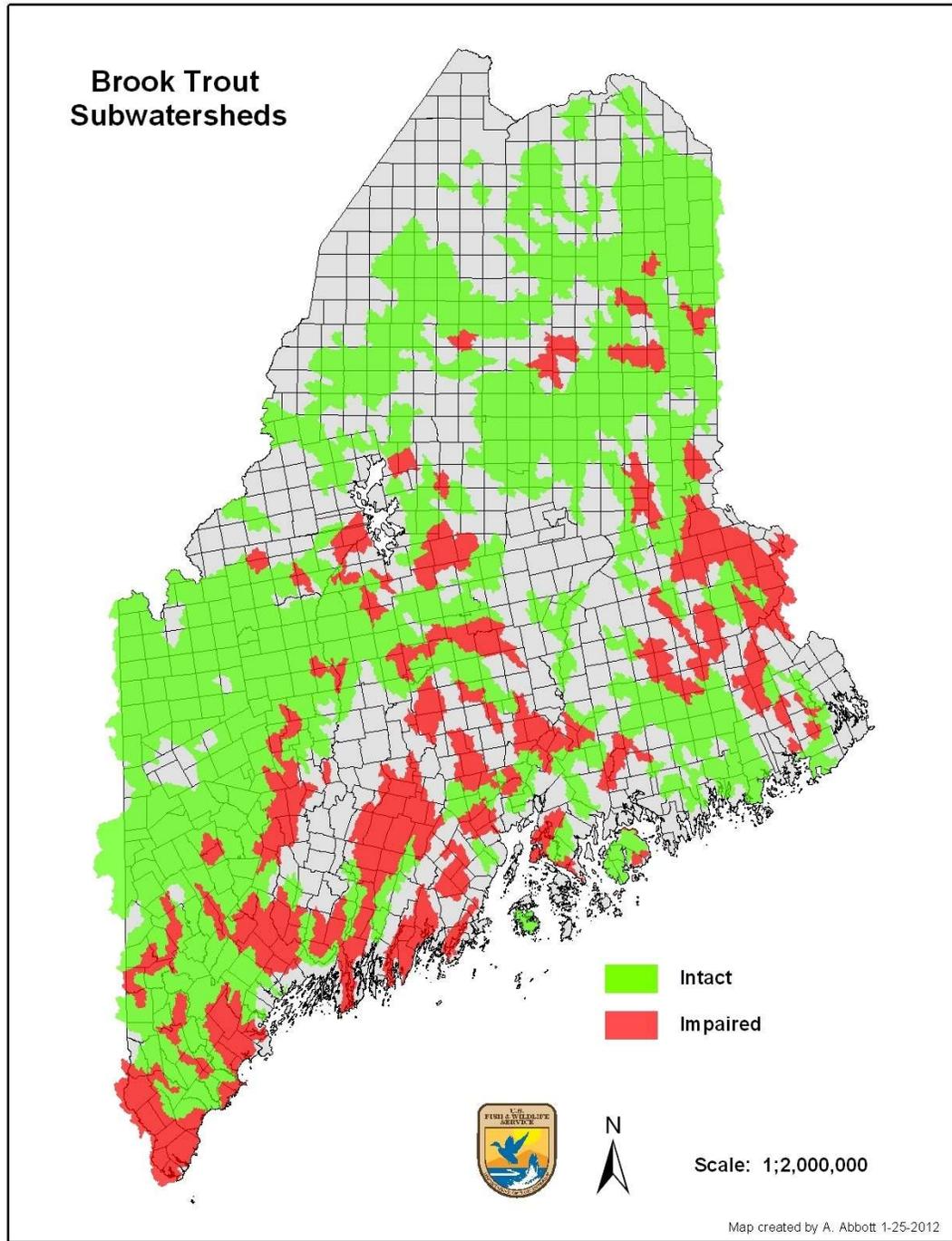


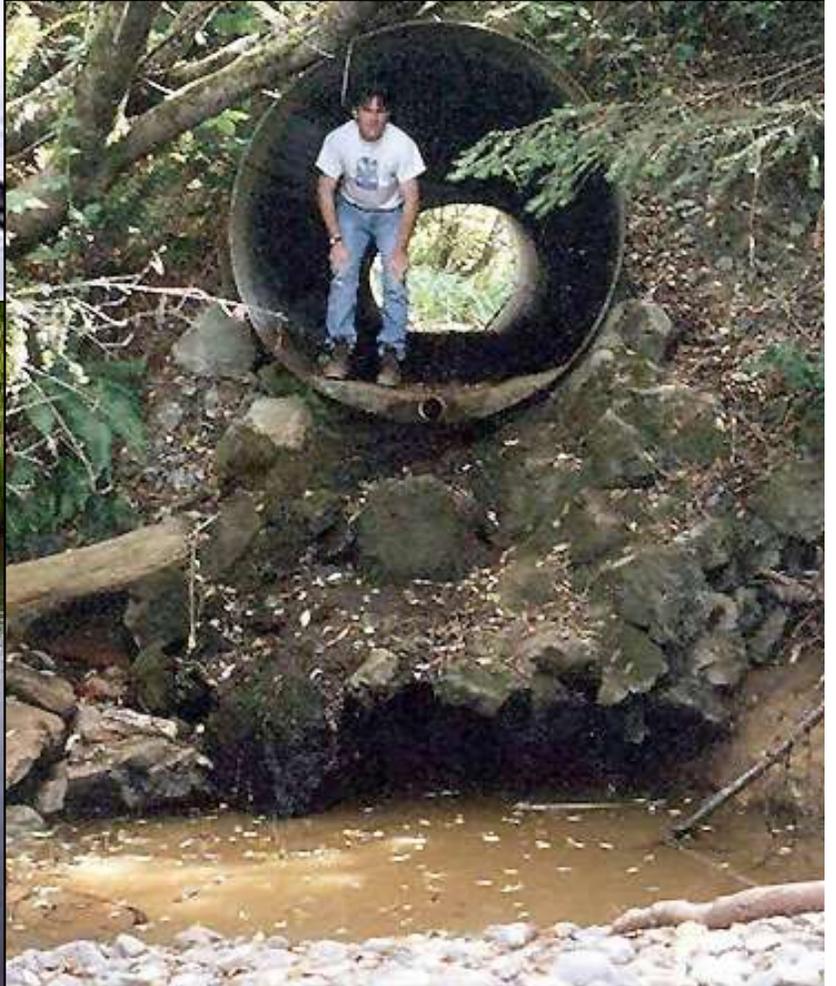
Photo: WMTW

**This is what we're trying to promote**



# Eastern Brook Trout





# Stream Smart Rules of Thumb

(4 S's)

Span the Stream

Set the Elevation Right

Slope Matches Stream

Substrate in Crossing

The Golden Rule: Let  
the Stream Act Like a  
Stream

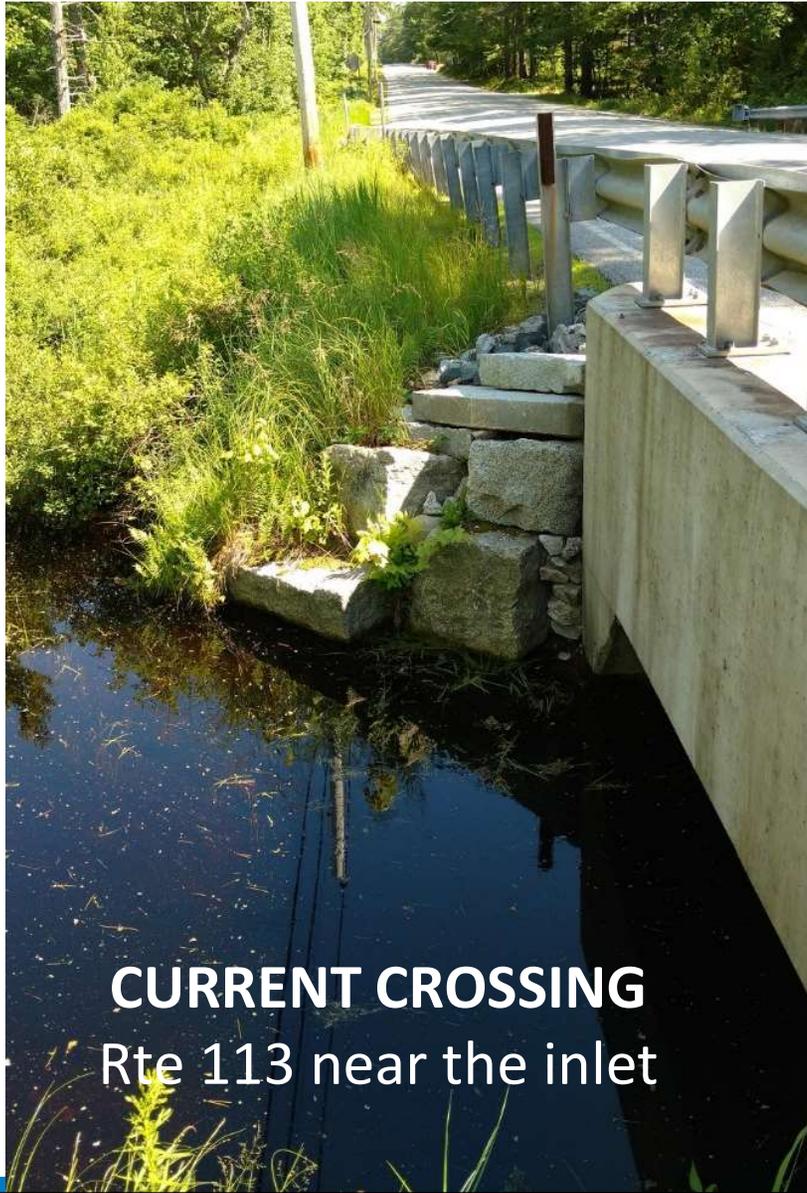




**Pre-restoration**



Take them one crossing at a time, as they need to be replaced

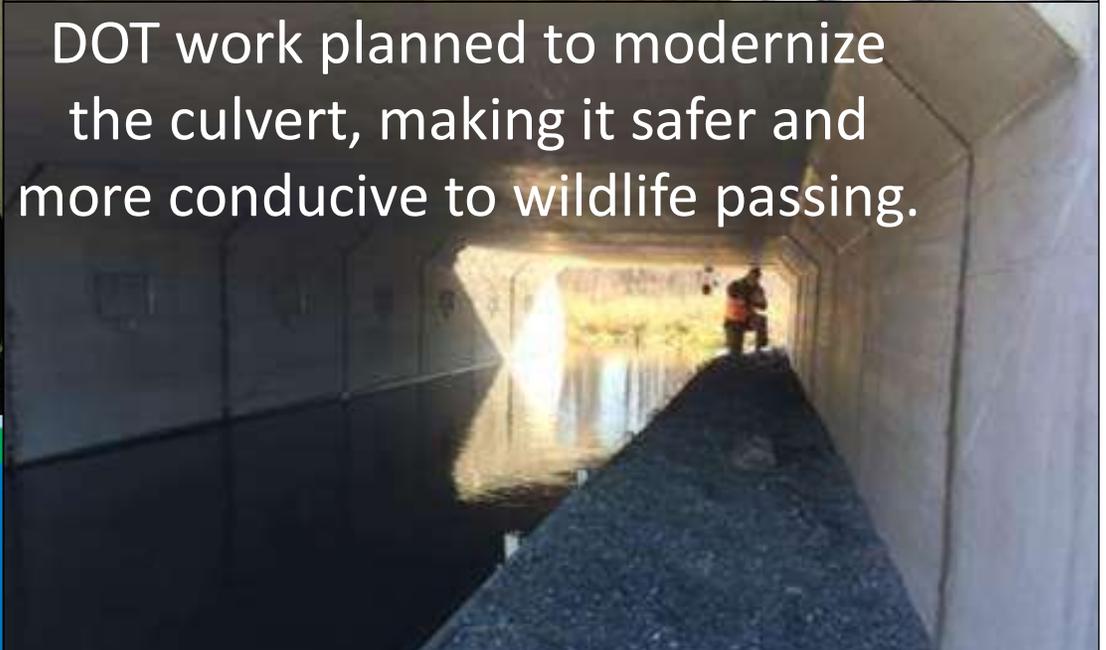


**CURRENT CROSSING**  
Rte 113 near the inlet



**PROPOSED CROSSING**

DOT work planned to modernize the culvert, making it safer and more conducive to wildlife passing.





## **Blanding's Turtle Endangered in ME**

- High-domed top shell (like WWI army helmet)
- Dark black or brown shell
- Yellow throat and chin



**Standish is home to the endangered  
Blanding's Turtle!**

If you think you see one, take a picture, note the place and time and contact IF&W right away!

Derek Yorks with IF&W [Derek.Yorks@maine.gov](mailto:Derek.Yorks@maine.gov)

# What Else Can You Do?

- Encourage neighbors to be LakeSmart, LoonSmart, and StreamSmart
- Encourage Stream Smart crossings on town roads and private roads
- Support DOT in their wildlife connectivity efforts
- Report any Blanding's Turtles you see to Derek Yorks with IFW  
[Derek.Yorks@maine.gov](mailto:Derek.Yorks@maine.gov)
- Volunteer for Wildlife Road Watch surveys next year



KEEP UP  
THE GOOD  
WORK!



# Thank you!

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