Ducks Unlimited Canada History

- not-for-profit, est. in 1938- 70 years of conservation
- protect wetland habitat
- protect, directly/indirectly, 25 million acres of habitat in Canada
- DUC invests approx. $75 million per year in Canadian wetland conservation
- DU Inc, DUMAC, DU–NZ, AUST
150,000+ DUC members

38,000 Greenwings

16,400 landowner partners

8,000 active volunteers
Why Wetlands?

Wetland Values

• Wetlands help to filter our water.
• Wetlands act like sponges.
• Wetlands help to keep our groundwater clean.
• Wetlands provide habitat fish & wildlife.
• Wetlands provide recreational, educational and important scientific opportunities throughout Ontario
• Wetlands help to store carbon, reducing its impact on our atmosphere.
National Education Strategy

- Primary audience: students, teachers and other educators
- Interactive, fun and engaging
- Focus on doing a few things and doing them well
- Improve quality and access
- Deliver through partnerships
Education Focus

- key messages
  - values of wetlands
  - habitat loss
  - conservation solutions
  - “call to action”
- curriculum based
  - Grade 4(5) – Habitats
  - Grade 7 – Ecosystems
  - Grade 10 – Sustainability
Education Focus

In Class Resources:
- for teachers & students, Eng/Fr
- sponsored classes ($300/class)
- free downloads

Field Trip:
- high conservation value
- Key urban area
Wetland Centres of Excellence

- Sponsored nationally by GreenStreet
- 3 centres in Ontario:
  - Timiskaming District SS
  - East Elgin SS
  - Wellington Heights SS

*DU partners/mentors/students role
Ducks Unlimited Canada, in partnership with the Ontario Trillium Foundation have come together to provide educator’s with a comprehensive guide on “How to Deliver a Wetland Field Trip”.

The Ontario Trillium Foundation (OTF)
- Agency of the Government of Ontario
- Supports communities
How to Deliver a Wetland Field Trip

... at a nature centre, park or right next door
DU Wetland Field Trip

A typical DU Wetland Field Trip Includes:

- Intro to wetlands/ wildlife
- Nature Walk
- Critter Dipping/ Invert ID
- Wetland values games
- Info on DUC
DU Wetland Field Trip

Where do you go?
- Is there a pond/wetland nearby that you can use?
- www.downatthepond.ca - many great examples of wetlands in Ontario that are accessible to a school group.
- School property?
- Storm water pond? - contact your local municipality to enquire about accessing the property as well as wetland health

Questions to ask before you head to the wetland?????
DU Wetland Field Trip (Pre Trip)

What’s a wetland?

- An area of land which is covered by water for all or part of a year
- Possess 3 Characteristics:
  - Hydrology – water source
  - Hydric Soils – mucky, able to hold water at or near surface
  - Vegetation – capable of withstanding prolonged flooding
- 4 types: Marsh, Swamp, Bog and Fen
Wetland Type - Marsh

- Most productive for most wildlife
- Most productive when equal mix of open water and vegetation
- Very diverse plant communities
Wetland Type- Swamp

- Flooded trees
- May dry out in summer
- Soft maple, black ash and cedar
Wetland Trip - Bog/Fen

- More common in north
- “old” wetlands
- Nutrient poor
- Wildlife poor
- Acidic soil/water
- Unique plants
- Fens are more productive than Bogs
Wetland Values

- Wetlands help to filter our water.
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- Wetlands help to keep our groundwater clean.
- Wetlands provide habitat for fish & wildlife.
- Wetlands provide recreational, educational and important scientific opportunities throughout Ontario.
- Wetlands help to store carbon, reducing its impact on our atmosphere.
Wetland Wildlife!
Let's Get Ready
We Are Going On A Field Trip

Cool Weather
- Dress in layers
- Don't wear good clothes
- Wear a hat

In Your Pack:
- Always bring water to drink
- Sunscreen
- Bring a long sleeved shirt
- Bring a bottle of insect repellent
- Rubber boots
- Bring mitts or gloves

Warm Weather
- Wear a hat
- Wear sunscreen
- Don't wear good clothes

In Your Pack:
- Always bring water to drink
- Sunscreen
- Bring a long sleeved shirt
- Bring a bottle of insect repellent
DU Wetland Field Trip (Pre Trip)

• To find more detailed info about wetlands visit www.education.ducks.ca where you can find free lesson plans (4-6, 7-8, 9-12) and resources

• Fact sheets (general, values etc.)
DU Wetland Field Trip

- Games to play in the field or in the classroom
- Wetland values
- Migration Headache
- Research about the wetland you plan to visit - where is it? Watersheds near-by? What critters/plants are there?
Nature Walk

- Keep the walk short
- One Interpreter
- Bring Volunteers
- Plan short activities
Critter Dipping

- ID sheets
- Appropriate dipping site
- Fine nets/strainers
- White pans
- Health and Safety
- Critter respect
Critter Dipping & Water Quality

- [http://www.indianriverlagoonenvirothon.com/water/benthicinvertebratefacts.htm](http://www.indianriverlagoonenvirothon.com/water/benthicinvertebratefacts.htm)

<table>
<thead>
<tr>
<th>Clean Water Indicators</th>
<th>Moderate Water Indicators</th>
<th>Poor Water Quality Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alderfly larva</td>
<td>Damselfly nymph</td>
<td>Midge larva</td>
</tr>
<tr>
<td>Mayfly larva</td>
<td>Dragonfly nymph</td>
<td>Worms</td>
</tr>
<tr>
<td>Stonefly larva</td>
<td>Predacious diving beetle larva</td>
<td>Leech</td>
</tr>
<tr>
<td>Caddisfly larva</td>
<td>Freshwater shrimp</td>
<td>Snail</td>
</tr>
</tbody>
</table>

These species need clean, well-oxygenated water to live. Finding them could indicate very good water quality. These species can tolerate some pollution but need moderately clean water to live. Finding them could indicate that the water quality is good to fair. These species can be found in any type of water quality, even highly polluted water. If you ONLY find these species, they could indicate that the water quality is poor.
Discussion/Questions?