



The **Bennett Environmental Education Centre** has been helping to educate kids about environmental issues since 1980. **Enviro Kids Guide** recently spoke with Rick Sims, an instructor at the Centre. Rick tells us that “we offer one-day sessions dealing with several different topics, including:

- Waste in Our World
- Pond Study
- Trees and Forests
- Stories, Histories and People of Alberta

Edmonton-area schools typically attend programs at the Centre between the hours of 9:30 a.m. and 2:30 p.m. The centre also has dormitory-style sleeping space that can accommodate 64 people - and many school groups from outside the city come and stay overnight. They have hosted school groups from Edmonton and area, as well as from cities like Calgary and Lethbridge, and even from as far away as the Northwest Territories!



A bird sees everything at once in total focus.

Waste In Our World



The Bennett Centre encourages kids to reduce the amount of garbage they generate by recycling, composting and finding ways to be garbage-free in their lives. Fourth-grade kids taking part in the program at the Centre spend about fifteen minutes walking around the neighbourhood and picking up any garbage they find. After they are done, they bring it back to the Centre where it is sorted out. Paper and plastic that can be recycled is put into a recycling bin, while apple cores, banana peels and orange peels are placed into a composting bin. All the materials that can't be recycled or composted are thrown into the garbage. "This is a great way to teach kids about recycling and composting," says Rick. "We touch on how cardboard is recycled into boxboard, and how paper milk containers are turned into things like Kleenex. We also get a chance to discuss things like contamination - how paper that is badly contaminated with food or liquid can no longer be recycled. This allows us to tweak the kids' interest somewhat, and maybe encourage them to learn more about recycling when they get back to their homes

or schools."

Before coming to the Bennett Centre, participating teachers are sent a letter asking them to encourage their students to bring a "garbage-free" lunch to the Centre. For example, the kids might put their sandwiches in a reusable Tupperware container rather than using wax paper or saran wrap. This helps persuade them to reduce the environmental impact they have on the planet. Once lunch is over, the kids are asked to evaluate all their lunch containers. "It's not all about simple right and wrong answers, though," says Rick. "I've had kids point out that Tupperware containers need to be cleaned with hot water and detergent, and that also has an environmental impact. Ultimately, kids have to make their own choices and decide what is best for them. The important thing is to encourage discussion and get kids thinking creatively about ways they can deal with these problems."



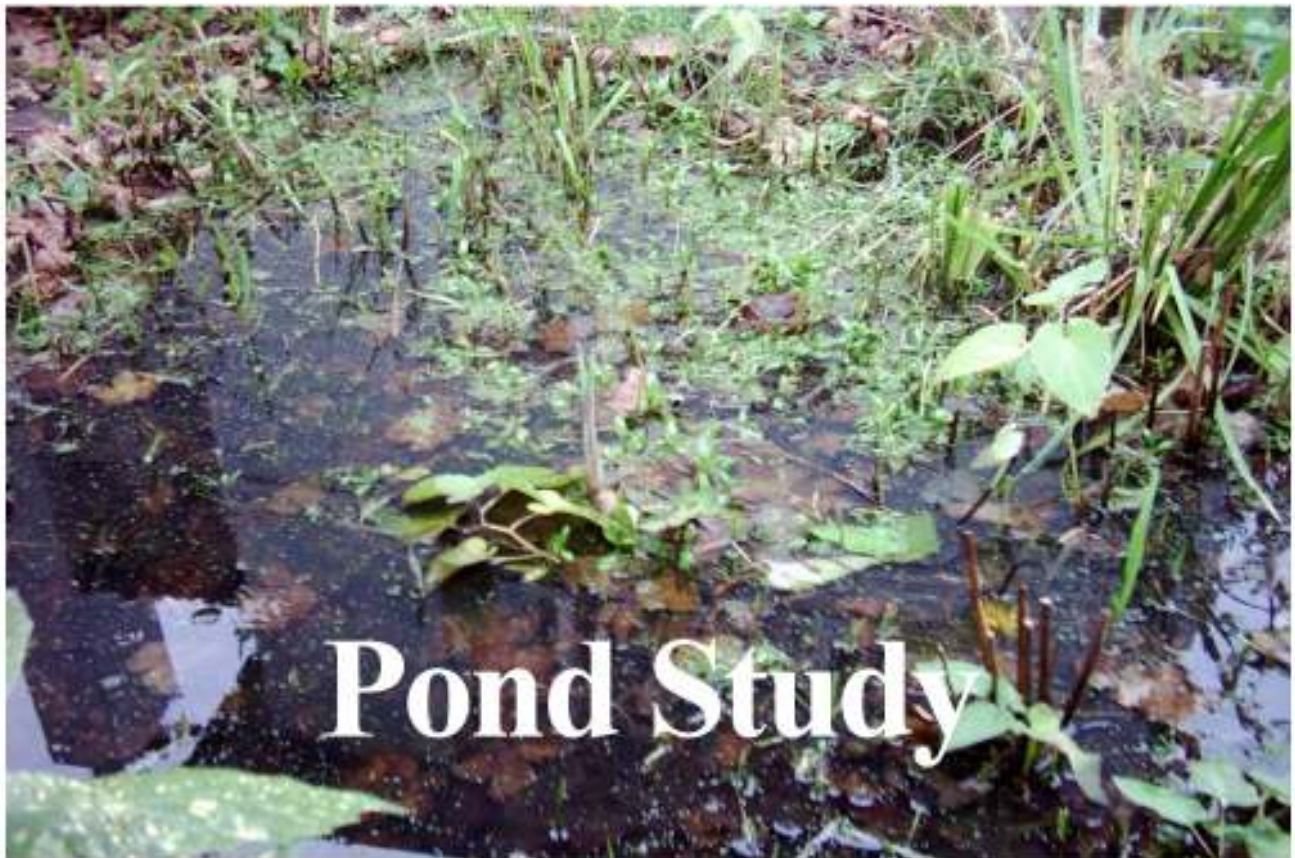
Trees & Forests

A module on Trees and Forests is offered to students in the sixth grade. Students are able to walk along the trails in the river valley and see the different trees and shrubs located there. They learn about photosynthesis, and about the food chains and food webs in the forest - finding out how the different plant species interact with each other. "We also discuss things like tree rings," says Rick, "and about how these rings can be examined to find out if that tree had good or bad growing seasons. Kids are pretty amazed to learn that some of these tree rings can tell you what the weather has been like for over a hundred years!"

As humans, we often think of ourselves as being outside of the web of nature, but this certainly isn't the case at all. One of the ways we impact the environment is by accidentally or intentionally introducing new

species. One perfect example is the dandelion. There were no dandelions in North America prior to European settlers moving here. Rick points out that "one of the introduced species that is having a big effect on our river valley is the Manitoba Maple. It is pushing out many of our native trees and becoming quite invasive."

When school groups stay overnight, one of the activities they can take part in is a debate on logging versus conservation. A lot of people are employed by the logging industry, and it is a vital sector of our economy. At the same time, many natural habitats are being threatened by excessive logging. It's a complex issue, so it's important for kids to discuss the subject and see all the different angles.



Pond Study

A Pond Study component is offered to students in the fifth grade. The Centre has a pond in the yard, and students are able to go out and collect the different organisms that live there. They then bring these organisms inside and identify them. Kids are able to use microscopes in the science lab to identify the really small organisms. "It's all catch-and-release," laughs Rick, "so we are able to put all of the organisms back in the pond when we are done."

There are approximately twenty different types of organisms that live in the pond through the course of the year. Many of them have different life cycles, though, so they won't all be found in the pond at any one time.

Kids learn about the various interactions in nature, including the prey different organisms eat to survive, and the types of creatures they are eaten by in turn. They are given cue cards

which show illustrations of the organisms and outline where they fit in the predator/prey relationship. The following example shows how the dragonfly nymph fits into the food web:

Dragonfly Nymph

Eat

- *Aquatic Insects
- *Mosquitoes
- *Mayflies
- *Small fish

Are Eaten By

- *Trout
- *Birds

"This is a really hands-on way to help kids understand the complex interactions found in nature," says Rick. "They aren't just looking at pictures in a textbook - they actually get the chance to experience the wetlands environment for themselves."

Human activity affects the wetlands just as much as it affects forests, and staff at



Teamwork

the Bennett Centre touch on some of the ways these changes impact our environment. "Purple Loose Strife is an example of one plant that has a very serious impact on our wetlands," says Rick. "It never used to live in Alberta wetlands, but it was either intentionally or accidentally introduced to our province. Now it has become very invasive and is pushing out many of the plant species that once existed here. This, in turn, changes the habitat and makes it more difficult for some insects and other organisms to survive."

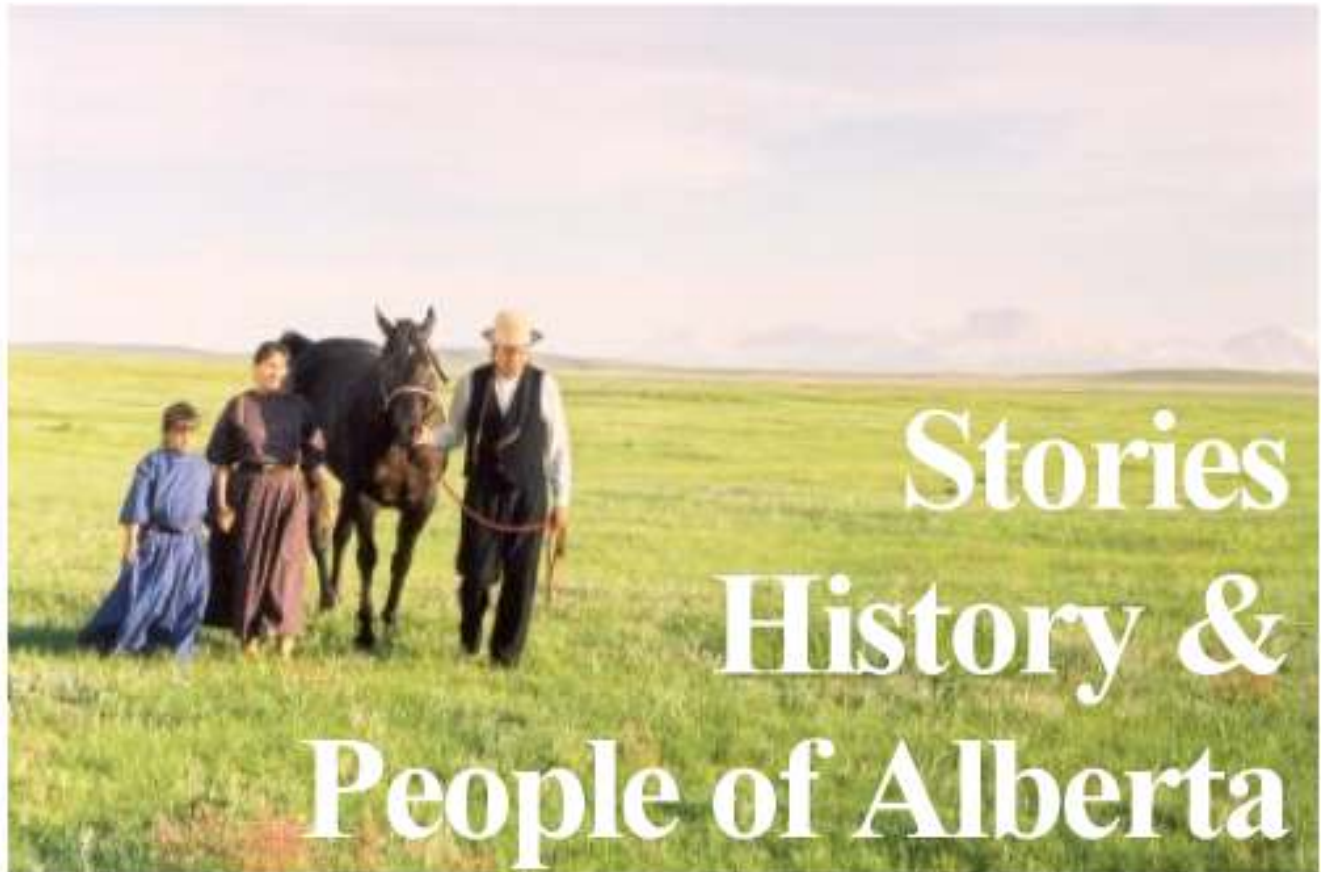
Teamwork

The Bennett Centre promotes teamwork in all their learning modules. "Cooperation is a theme that runs through all grade levels and all activities," says Rick. "Our

teaching is done in a group setting, so we naturally incorporate teamwork."

One of the ways they promote cooperation is through initiative tasks. These are activities that need to be solved by a group working together. One such task might be "Remove the Hazardous Waste. The group has to remove a garbage can full of "hazardous waste using a tire tube and some rope. The can cannot tip over, and they cannot touch the can. It must be lifted up onto an imaginary truck."

It's a great way to get everybody feeling and thinking like part of a team. Ideally, this can lead to a greater sense of community responsibility - as kids expand on the lessons they've learned at the Bennett Centre to become more environmentally conscious.



One of the programs the Bennett Centre offers teaches kids about the lifestyles of Alberta's earliest residents. "We focus on what life was like for Aboriginal communities before European settlers showed up," explains Rick. "These people found everything they needed to survive in nature. This included animal products, plants, wood and rocks. They used whatever was available to them and adapted themselves to the environment, rather than adapting the environment to suit themselves. Students often assume that early Aboriginal communities subsisted primarily on buffalo - but that's not the case. They were hunters and gatherers who relied on **many** different plants and animals to survive."

Kids take part in a game called "Subsistence" to learn more about Aboriginal life. They are assigned roles pretending to be an Aboriginal family, and are given tasks

that include: **1) Building a Shelter**
2) Finding Water
3) Gathering Food

During the game, kids receive "surprises" from Mother Nature, and these can be either good or bad. Some of the unpleasant surprises might include an early snow or a flash flood, while a pleasant surprise might involve finding wild berries. "These kinds of activities drive home the idea of just how hard it was to survive back then," says Rick. "People living in that era had a completely different set of skills than we have today."

Located in the river valley at
9703 94 Street Edmonton

www.bennettcentre.epsb.ca



Some dinosaurs had tails up to 45 feet long.