

Grade Three Resources

TRC's Education Program Director/Consultant, Dave Taylor, has put together a variety of resources for teachers and students that can be used to enhance the learning experience of field trips at Riverwood.

This document contains a list of recommended videos and questions to help guide discussion. These resources follow the appropriate curriculum for the various grades and will help your students to connect their time at Riverwood to their classroom learning.

Recommended Videos for Growth in Plants (Full or Half Day) Field Trip

Title	Vimeo Ref #
Insects and Invertebrate Series	
Honey Bees in the Hive	https://vimeo.com/142680332
Pollinators and Predators	https://vimeo.com/138188061
Monarch	https://vimeo.com/138188059
Habitat Series	
Wild Riverwood (no narration)	https://vimeo.com/247240424
Wild Riverwood (narration)	https://vimeo.com/246723815
The Credit River	https://vimeo.com/136302909
The Gardens of Riverwood	https://vimeo.com/139156254
The Marsh: Late Summer	https://vimeo.com/139921652
Water Falls	https://vimeo.com/141351235
Forest Wildlife in Summer	https://vimeo.com/140056479
Fall Comes to Riverwood	https://vimeo.com/143640179
Riverwood in Summer	https://vimeo.com/316859894

General Discussion Questions General (Based on Grade 3 Understanding Life Systems: Growth and Changes in Plants)

Q: How do the animals make use of plants?

A: Nesting material (various birds), food, shelter

Q: What types of plants are seen in the video?

A: Flowers, trees, cattails, lilies, bushes and ...

Q: What colours were the flowers seen in the videos?

A: Yellow, pink, white, red, purple and ...

Q: What colours seem to attract the insects?

A: Yellow (especially for the bees), white. Remember that these videos were taken at different times. Insects are attracted to flowers by their colours (which they see differently than you and I) but they are also attracted to the flowers for their nectar. Nectar is not always available. As plants bloom they produce the nectar and after pollination the flowers no longer produce nectar and the insects move on to other plants. Thus insects are attracted to different flowering plants at different times of the year.

Q: What benefit do the flowers get from the visiting insects?

A: Flowers store their nectar at the base of the flower. To get to this food source insects must force their way into the flower. During this activity they pick up pollen (the male fertilizing agent). When the insect visits another plant of the same species the some pollen falls off and fertilizes the plants ovules. Not all plants rely on insects to do this but most flowering plants do.

Q: What is the difference between garden plants and wild plants?

A: Garden plants are cultivated by humans. They are selected for their colour, their stamina, their compatibility and so forth. Gardens are usually very organized and planned habitats. Wild plants rely on natural processes and are much more responsive to changes in their habitat. Humans may help some garden plants out by clearing away competitors such as weeds whereas natural communities of plants must compete with other plants for space, food and water.

Q: Which plants were tall? Short?

A: Trees tend to be tall but if you look at a garden there are tall plants and short plants. Cattails in a marsh are tall but lily pads are also tall given that their roots are anchored on the wetland's bottom. For this question then it is more about observing that in any plant community some plants will "reach for the sky" while others "hug the ground". These are all adaptations that help the plant survive. It increases the chances of then getting enough nourishment and water to live and reproduce.

Q: Describe plants living in wet habitats?

A: There are three types of plants that live in wet environments; submergent, emergent and floating. Emergent plants rise out of the wetlands and have stiff stalks that support them (e.g. cattails, sedges). Submergent plants live under the water (e.g. "sea weed", sea grass) and Floating plants have leaves and flowers that float on the surface (e.g. water lilies).

Q: Which plants dominated their environment?

A: The answers to this question will vary. Young naturalists might say "trees" or "grass" where more experienced naturalists might say "white pine trees" or "blue grass". For primary students forests are dominated by trees, marshes by cattails and meadows by grasses.

Supplemental Discussion (based on Grade 3 Understanding Structures and Mechanisms: Strong and Stable Structures)

As this series develops videos on structures made by wildlife will continue to be added to the collection. In the current series there are several examples of bird's nests that can be observed and analyzed.

Additional Resources

Dave Taylor's Wildlife

www.DaveTaylorWildlife.com

Dave Taylor's Youtube

<https://www.youtube.com/channel/UCZATOyhjleb9Tte9neU1CBQ>

About Dave Taylor

The videographer and creator of these resources is Dave Taylor, TRC's Education Director/Consultant. Dave is a retired Peel Teacher who for most of his 30 plus years taught science and geography to grade 7 & 8's. He was also a Science Resource Teacher and he spent two years at the Britannia School Farm when it first opened. He has written over 40 books on natural history including resource books for teachers.

He is one of Canada's best known wildlife photographers. His company, *J. D. Taylor "Senses of Wildness" Inc.* produces and holds the copyright on these productions. Schools may use them for educational purposes but no unauthorized use other than as stated above may be undertaken without the written consent of *J. D. Taylor "Senses of Wildness" Inc.* He can be reached via this website.

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