Impacts on Vegetation

One of the most noticeable changes after earthworms invade is in the forest vegetation. In the northeastern United States, where most research on earthworms has been conducted, earthworm invasions have resulted in changes to the vegetation where plants that use to be only found at the forest edge are now also found deep inside the forests. Normally the forest edge plants would be not be able to survive deep in the forest, because they would face competition from the plants that live in the leaf litter layer. However, when the leaf litter layer is removed by earthworms, the vegetation is reduced and the forest edge plants can become established due to reduced competition.

Trees in areas that have been invaded by earthworms also have increased sensitivity to drought. We don't fully understand the mechanisms behind these shifts in forest ecosystems but the thickness of the leaf litter on the forest floor seems to be a major factor.

On the left is a maple forest that has no earthworms, on the right is a maple forest that has been invaded by earthworms.

Reflections:

1. Look at the two images above, what differences do you notice about the forest with and the forest without earthworms?

Images from: http://www.nrri.umn.edu/WORMS/forest/index.html

Adapted From: Cameron, E. , Boyce, M. (2013) Don't dump your worms! Earthworms are trashing our forests. *Alberta Outdoorsmen*, Volume 15 (2), 16-18.

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2. What are two changes that can occur to forest vegetation after earthworms are introduced?

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Adapted From: Cameron, E. , Boyce, M. (2013) Don't dump your worms! Earthworms are trashing our forests. *Alberta Outdoorsmen*, Volume 15 (2), 16-18.

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