Cool summer streams provide refreshing nature lessons.

Water Tales

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There’s a simple recipe for a fun-filled afternoon outdoors—and a way to celebrate June as Illinois’ second annual Leave No Child Inside month.

Combine one shallow stream or pond and a curious, energetic youngster dressed in a pair of creek shoes and outfitted with a butterfly net, shallow pan and magnifying glass.

Challenge them to pick up small stones in the water and swing the butterfly net through the water, making sure they include the plant material along the shoreline. Dump the contents into a shallow pan and rinse with water. Settle down under a shade tree to examine the bottoms of the stones and sort through the mud and vegetation. How many kinds of aquatic organisms did you find?

Remind the child that aquatic organisms have important roles in the environment, and ask them to carefully return the contents of the pan to the stream or lake.

Yield: A relaxing session of splashing around in the water making discoveries about nature and memories that will last a lifetime.

Repeat often.

With long legs and a slender body, water striders appear to skate on the water’s surface, made possible by tiny, water-repellent hairs on their legs that hold pockets of air. The second and third pairs of legs are long, nearly twice as long as their bodies. The middle legs are used like oars to move and they steer using their rear legs. The shorter front legs are used to hold mosquito larvae and other insects they prey upon. When a strong vibration crosses the water surface, striders will dart to a sheltered area.

Explore your local stream as a way to cool off—and introduce children to nature.
Water scorpions, also called needle bugs (for obvious reasons if you handle one and are bitten), breathe through two long tail filaments. These aquatic predators feed on aquatic insects, snails and small crustaceans found in aquatic weeds or the mud along the shoreline of a lake, pond or stream.

As a vegetarian, the water boatman spends considerable time on the bottom of a pond or stream. Not only are boatmen excellent swimmers, using their long, flattened hind legs like oars, but they also dive and fly well. A fringe of hairs on the middle and back legs, and shorter, scoop-like front legs, help to identify this group of aquatic insects. Females lay their eggs on a hard surface, including the backs of crayfish.

A segmented worm with suckers on each end of its body, the leech, shown here with young on its back, is a predator, piercing their prey with its specialized mouth then eating blood or soft tissue. Leeches are adept swimmers, and they are capable of walking on land. They may be found attached to a solid structure (rock or plant) in the warm, shallow waters of ponds and rivers. During drought conditions, leeches hibernate in mud. Storing large quantities of blood in their body allows some species to survive a year after feeding.

Discussion points

Water covers about 75 percent of Earth’s surface. Biologists use the presence, condition and number of fish, insects and plants present to determine the health of a wetland river, stream or lake. What does your search reveal about that water body? Why is clean water important?

For more on the Leave No Child Inside campaign and Chicago Wilderness, visit http://kidsoutside.info.

The cyclops, a minute, cylindrically shaped copepod with a forked tail, lacks the compound eyes and carapace found on most other crustaceans. The cyclops pictured is carrying its eggs. Often called water fleas, cyclopses are important in the food chain of both salt and fresh water environments.

A body of water, some simple equipment and an innate curiosity are all it takes to make amazing discoveries in the world of water.

Examine a hydra closely and you’ll discover a small, soft-bodied organism with tentacles around its mouth and a hold-fast disc for attaching to a solid surface. Often found in groups in ponds, small lakes and streams, hydra use stinging cells on their tentacles to stun the small animals they prey upon. Stinging cells also may be used as a defense mechanism.