Focus on Habitat: Wild Brook Trout

by Walt Dietz, Northeastern ARPS

Brook trout are one of Pennsylvania's most colorful fish. They can be found in clean, coldwater streams, ponds and lakes. They are members of the trout and salmon family, and are more related to chars, also members of the trout and salmon family, than to trout. Chars include lake trout, Arctic char and Dolly Varden trout. Wild brook trout are natives to Pennsylvania and have the honor of being named our "state fish." They have not been introduced to our waters like the rainbow trout or brown trout.

Brook trout have "worm track" markings on their backs and white lines along their fins. Other names for them include eastern brook trout, speckled trout, square-tail and brookie.

Brook trout like water with temperatures less than 68 degrees and lots of oxygen. This is why they are most often found in fast-moving streams or cold mountain lakes and ponds. A brookie might also be found in a meadow stream, as long as the water temperature is cold enough.

Finding good habitat is the key to catching this colorful sport fish. Look for them around tree roots, fallen trees, undercut banks and the edges of large rocks. You might even catch a wild brookie as it leaves cover to feed in a stream riffle or as it enters a quiet pool to sip a hatching mayfly.

A wild brook trout will live a short life of about two years (five years maximum). They usually don't grow more than 12 inches long. The best time to see a wild brook trout is in the fall when they spawn. The colors of male brook trout become much brighter. Females construct a nest on the gravel bottom of the stream. Unpolluted water and clean stream bottoms are important to the survival of brook trout eggs.

A brook trout becomes an important part of the food chain after it hatches. The food chain in a coldwater stream may look like what you see here. The energy for this type of stream comes from leaves, sticks and organic remains (detritus). Aquatic insects eat the detritus and then become a food source for smaller fish. A young brook trout eats small aquatic insects. Large brookies add crayfish, worms and small fish to their diet. The food chain doesn't end with the brook trout. Kingfishers, mergansers, raccoons or fishermen may turn the brook trout into a delicious dinner!

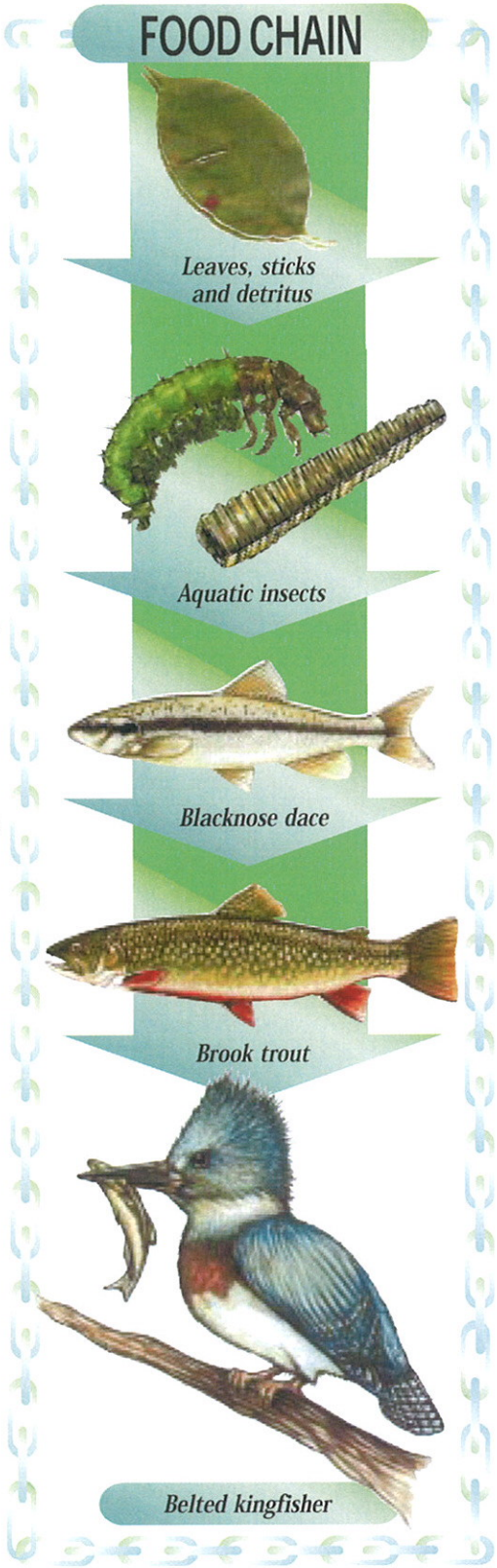
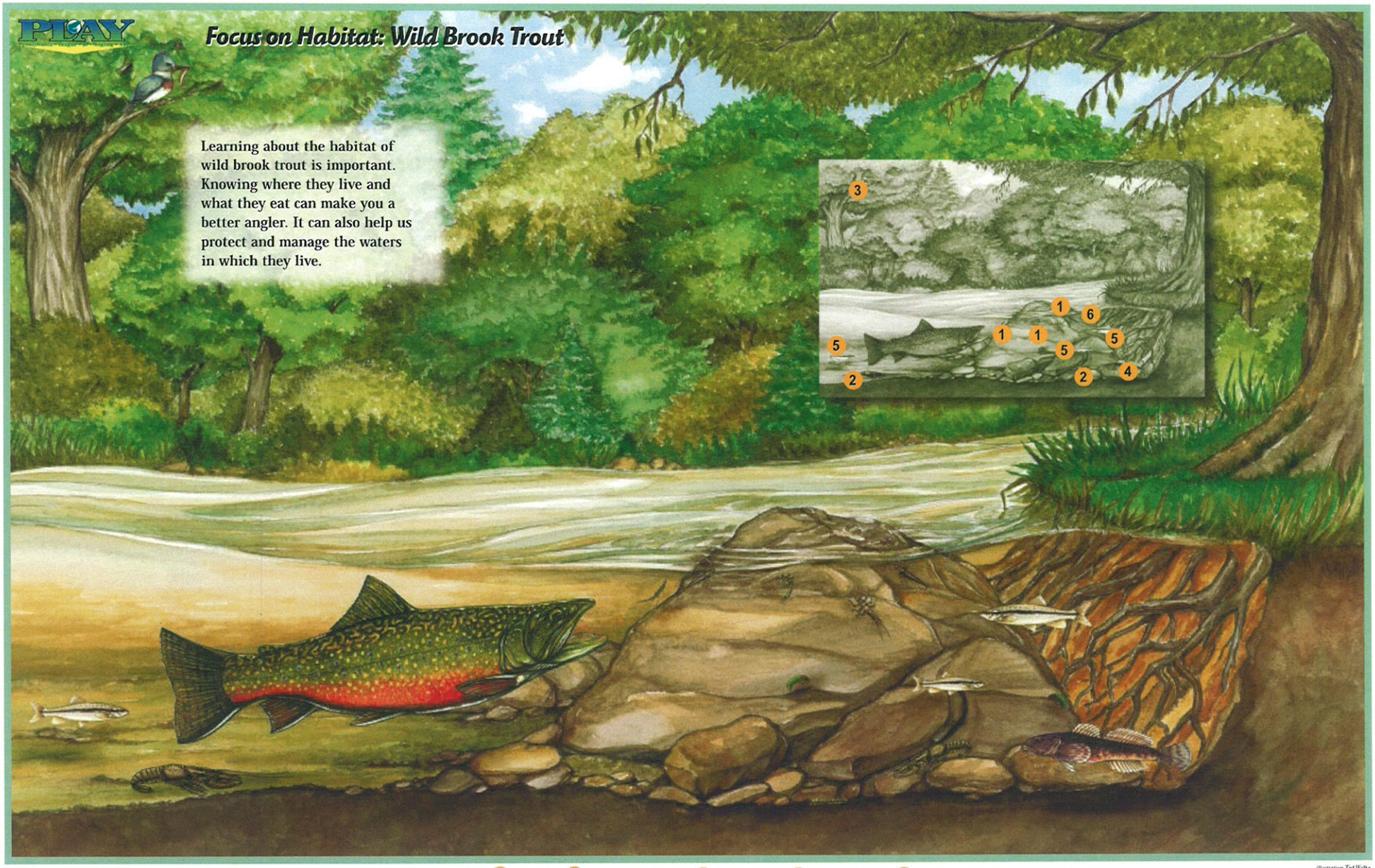


illustration-Ted Walke



1 *caddisfly larva, stonefly and mayfly nymphs* 2 *crayfish* 3 *belted kingfisher* 4 *slimy sculpin* 5 *blacknose dace* 6 *water penny*

illustration Ted Walke