

Diverse Habitat

Ingredients:

- Mix of rock and gravel bottom, free of silt
- Meandering stream channel
- Stable stream banks, network of roots from streamside vegetation

Clean stream bottom provides shelter for aquatic invertebrates and young fish. Mix of riffles and runs provides protection from predators. Aquatic invertebrates provide food to fish.



Recipes...

for a *Healthy Stream*



Good Riparian Buffer

Ingredients:

- Streamside vegetation
- Stable banks

Streamside vegetation provides shade, keeping water cooler. Roots keep banks from eroding. Overhanging vegetation provides shelter from bird and mammal predators. Leaves and other woody debris provide food and cover. Decomposing vegetation provides important nutrients.

Runaway Stream

Steep, eroded banks are one sign that the stream is out of its natural state. These streams have little to no vegetation on the banks or **riparian buffer**. The stream may also be very wide and shallow with the water moving slowly. Silt often covers the bottom of these streams.

These streams can be great candidates for habitat improvement. Biologists sample the stream at different places. They collect data on fish, bugs and water quality. Analysis of the stream **hydrology** occurs. Biologists and other technical staff review the data and develop habitat improvement plans.

Most projects work to stabilize banks and create diverse instream habitat. Narrowing the channel increases the water speed. Fast water keeps the bottom clean and creates places for fish to hide. Things



PFBC and Greater Latrobe High School students build multi-log deflectors.

like logs, root wads, rocks and native plants are used to provide places to hide.

It may take many years to see the full benefit of stream improvements. Trout are stocked when natural reproduction doesn't support fishing.

