

Turning Degraded Streams into Healthy Streams

As you drive through the countryside, you may notice the water quality in the small streams running through pastures, grasslands, crop fields, and wooded areas. Where fields are farmed close to stream channels or where the channels are pastured, the waters are muddy and cloudy and look degraded. In contrast, the streams that run mostly through grassland and woodlots have clear water and abundant water life.

Two of the most damaging problems to local streams are pastured streambanks and the crops grown too close to the streambank.

Pastured streambanks.

Cattle pastured next to streams trample the banks, which flattens and widens the stream channel. This causes the stream to warm up, making it uninhabitable for desirable game fish. Cattle also trample and devour vegetation along streambanks, allowing the stream water to speed up and erode the banks. Faster running water will cause further erosion on sites downstream.

Cropped fields too close to the streambank.

Farming close to a stream edge allows field runoff to flow directly into the stream, with no buffering at all. Without buffering, the runoff speeds up and carries deadly pesticides and fertilizers into the stream waters. As the runoff moves faster, it can cause gully and rill erosion along the stream. Erosion allows soil particles in the water to silt up the stream bottom.

Fortunately, the two most damaging problems to area streams are also the easiest and most cost-effective to correct. Leaving a grass buffer area 50 to 100 feet wide (30 feet at a minimum) between a field or pasture and a stream is an easy and inexpensive way to help a stream repair itself.

Some practices can speed up a stream's repair process. You can seed buffer areas along channels with grasses to stabilize the streambanks. In some cases, you can plant tree species such as willow, cedar, spruce, maple or ash to shade the stream, cooling its waters for fish.

After you've tried a few stream-repair practices and have given them time to work, you can install other improvements.

As a stream heals itself, it will narrow and deepen. The bottom may clear up and uncover its natural

rocky bed. You'll see more aquatic animals, and fish species such as bass, pike, and bluegills may return to the stream.

Protecting streams can have far-reaching benefits. Grass buffer areas and trees enhance wildlife habitat, providing great cover for deer, rabbits, birds, pheasants, and other animals. Best of all, repairing the streams will also repair our watershed.

Degraded Stream



Cost-shareable ways of repairing damaged streams include reshaping, adding rip-rap to some banks and keeping livestock out.

Repaired Stream

