Idea Exchange

Hydraulic pipe end reshaper

Crushed culvert ends are a common rural road maintenance problem. The lack of proper flow means water backs up in ditches and saturates the road base. From Oklahoma comes this idea for a hydraulic powered jack that quickly reopens culvert ends.

The device is a welded hydraulic cylinder with a scissors jack attached to the actuating rod. Collapsed, the jack fits inside the crushed pipe end. When the cylinder is retracted the jack expands, opening the pipe end in just seconds.

Several reshapers are in use in Oklahoma and Arkansas. You can make one for about $300 in materials costs. Parts are "off the shelf" and assembly requires minimal machining and welding.

Contact the T.I.C. for a set of plans. From the April 1997 ***Oklahoma LTAP News.***

One-person crack filling

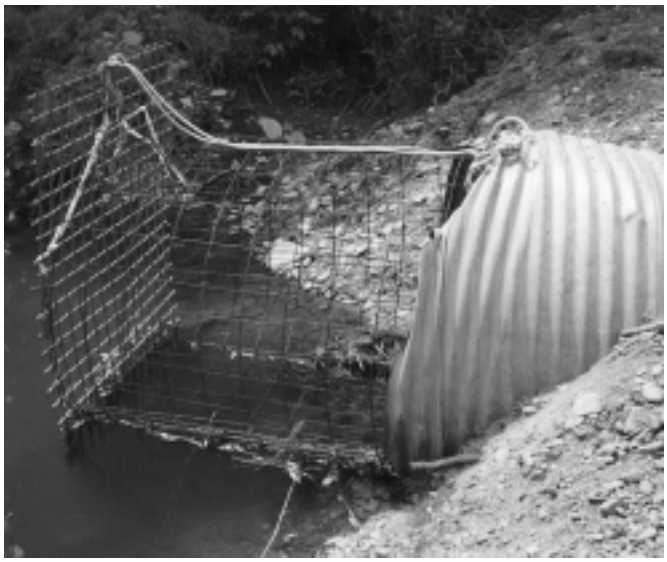
Loading an air compressor on a truck bed while the truck pulls an asphalt kettle has allowed the City of Clive, Iowa, to fill cracks with a one person crew. The crew uses a water emulsion crack filler called *Styrelf.* Agricultural lime dries the filler quickly, preventing wet asphalt from splattering on passing cars. The program saves time and labor, according to Clive Public Works Director Willard Wray. Last year his crew was able to fill cracks on all of Clive's busy streets and half of its residential ones. The program also helps reduce future maintenance—workers did not have to fill any potholes in 1996.

From the February 1997 Iowa ***Technology News.*** *For information contact Willard Wray, 515/223-6230.*

Beaver flood control device

When beavers use their legendary engineering skills on road culverts, the resulting ponds can damage road bases and flood pavements. From New York comes this solution: extend the culvert with a wire mesh "pipe" that produces a quieter water flow since beaver are attracted by the sound of flowing water.

Use concrete wire fabric (4 x 4 inches, 10-gauge wire) to make a rolled tube the diameter of the pipe. Since the mesh must be strong enough to support a beaver's weight, chicken wire won't work. The wire pipe must be at least four feet long and longer is better. Cover the end with another piece of wire fabric.



For help with beaver problems contact your nearby Wisconsin DNR office. A booklet, ***Beaver Damage Control,*** *is available from WDNR, P.O. Box 7921, Madison, WI 53707. From the Fall 1996 newsletter of the Cornell Local Roads Program.*

Crossroads

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