# Research On Stream Crossings May Be Bridge To Better Forestry

UNIVERSITY PARK (Centre Co.) — Conventional wisdom might suggest that placing a portable bridge over a stream or installing a culvert in a creek might have significant impacts on stream ecology, but a study at Penn State has found that correctly built stream crossings have little shortor long-term effect on streams and wetlands.

According to David DeWalle, professor of forest hydrology in the College of Agricultural Sciences' School of Forest Resources, portable bridges caused less stream sedimentation than culverts during installation, but during actual use there were no important differences between the two types of crossings.

Loggers often encounter streams when building roads or skid-trails. Streams are obstacles that must be crossed to get logs from the cutting site to a landing area, where they are loaded onto trucks and transported to lumber mills. In Pennsylvania, De Walle said loggers are required to get a permit to cross streams, which means they have to install a culvert or build a bridge. Culverts large pipes covered by clean rock fill — are most common.

Historically, culverts have made good crossings. A previous Penn State study examined 70 crossing sites that had not been in use for at least two years and found few detectable long-term impacts.

"We never really saw any erosion," DeWalle said. "After at least two years, channel stability. stream bank stability, species diversity and abundance of vegetation remained the same above and below the crossings."

The researchers, funded by the National Council of the Pulp and Paper Industry for Air and Stream Improvement, then built test crossings in Penn State's Stone Valley Experimental Forest in Huntingdon and on land owned by Glatfelter Pulp Wood Company in Fulton County to study the potential short-term impacts on water quality. Building test culverts caused significant sediment increases in the stream, but water quality returned to normal after periods ranging from several hours to four days.

"The short-term installation impacts are negligible at low stream flows," DeWalle said. "After construction, it was hard to find any effects caused by the installation.

We subsequently took readings at high-flow periods and there was only minor degradation.

The use of local soil and rock as fill is not recommended." De-Walle said. "Clean gravel or shale, which can be difficult to haul to a stream crossing, should be used."

The portable bridge tested by the researchers had less environmental impact during installation than a typical culvert. The bridge, which weighs from 7 to 24 tons depending on its size, can be haul-

ed to the crossing by tractor and be installed in a few hours. The bridge model tested folded in half lengthwise, had guardrails to keep logs from slipping off and could be hauled by a standard logging truck.

"Any changes to the stream caused by installation of the portable bridge disappeared within 24 hours," DeWalle said. "The portable bridge caused less disturbance since its installation doesn't require digging in the channel. In

addition, the bridge can be used over and over again."

Openings in the bridge decking did allow organic debris and mud to fall into the stream during use, but such impacts had little significant effect on stream ecology.

"Using a portable bridge is probably good business for the logger because it saves on equipment, it's re-usable, and it's better for the environment in the long run," DeWalle said.

# **Association To Conduct Beef** Quality Assurance Program

KENNETT SQUARE (Chester Co.)—The public is demanding a safe food supply. It is our responsibility to provide it to them. Consumer confidence in our beef product is one of the most valuable assets for a beef producer. By proper management at all levels of production, we can gain the trust of consumers and enhance and expand on those assets.

To assist local beef producers. the Southeast Regional Cattlemen's Association is conducting a Beef Quality Assurance educational program, with the opportunity for producers to become certified.

On Thursday, March 23 at 7 p.m. at New Bolton Center Kennett Square, Chet Hughes, Lancaster County extension agent, is

going to present the classroom portion of the program. Hughes will discuss beef quality issues such as food safety, proper vaccine handling and administration, as well as proper animal restraint. and handling.

The classroom portion will be followed by a hands-on practice session on Saturday, March 25 at Herr Angus Farm Nottingham. The hands-on will cement what is

learned in the classroom. Both portions must be attended if you wish to receive certification.

Anyone involved in any portion of the beef industry is welcome. Reservations will be needed for the Saturday, March 25 hands-on portion. For information or reservation, contact Bobbi McMullen, Secretary, Southeast Regional Cattlemen's Association, (717)



**PUBLIC AUCTION** OF VALUABLE HOUSEHOLD GOODS, ANTIQUES, COINS, QUALITY COLLECTABLES. 1937 CHEVROLET SEDAN, **INTERNATIONAL 240** TRACTOR, 19' LOWBOY TRAILER, 175 CC YAMAHA DIRTBIKE, TOOLS, ETC. TUES., MAR. 28. 1995

- 3:30 P.M. at Nescopeck Township Fire Hall, along Rt. 93 (Berwick-Hazieton Highway) Briggsville, Nescopeck R.R. 1, Lužėrne Čounty

COMPLETE LINE OF HOUSEHOLD GOODS; LARGE QUANTITY OF QUAL-ITY COLLECTABLES including toys; more than 100 U.S. military and Boy Scout patches & related items

SPORTS COLLECTABLES: Autographed Team Baseball, New York Yankees (Mickey Mantle, Casey Stengel, etc.); approx. 25 Baseball Yearbooks from 1950's & 1960's; and many other valuable collectables.

ANTIQUES: Numerous pieces of furniture, glassware and other items.

VEHICLES & MISCELLANEOUS: 1937 Chevrolet, 4 Door Sedan, running condition; International 240 Tractor; 19' Tandem-Axle Lowboy Trailer; 1983 Yamaha IT 175 Dirtbike, very good condition; 5 HP Vanderbilt Rototiller and much more.

COINS: Large coin collection including many Silver Dollars from 1878 to 1926 including 1879CC (some are uncirculated); 1854 \$1 Gold Piece w/hole; Walking Liberty; Franklin, Barber, Cap Liberty, Columbian & Kennedy Half Dollars; Washington, Standing Liberty, Barber and Seated Liberty Quarters; Roosevelt, Barber, Seated, Bust & Mercury Dimes; Buffalo & V Nickels; Half Dime, 2¢, 3¢ & 1/2¢ Pieces; several rolls of Buffalo Nickels; several Coin & Mint Sets; 1909 VDB Penny; Indian Head Pennies; Large Cents and

much, much more in the line of quality coins. This merchandise is from several local estates.

Terms: Cash or good check, no out-of state checks accepted. Inspection 12 Noon until time of sale.

Lunch will be served by the Ladies Auxiliary of the Nescopeck Township Fire Co. **AUCTIONEERS** 

Albert L. Broyan, AU-000-105-L, (717) 379-3286 Edward L. Michael, AU-000-602-L, (717) 759-9591 Nescopeck, Pennsylvania

# **PUBLIC B AUCTION**

OF HOUSEHOLD GOODS, ANTIQUES & 16.8 ACRES Woodland Sold At 11:00 A.M. At Same Location

### SAT., APRIL 1, 1995 Sale At 9:00 A.M.

Location — 500' South of Rt. 741, 1/10 mile W. of Smyrna Road, 8 miles east of Strasburg, 1½ miles west of Gap in Salisbury Twp.

For inspection of woodland 442-8758. 10% down day of sale, balance on or before June

#### David & Esther Clark

H. Charles Benner, Atty. Aucts. Robert E. & Jeffrey R. Martin, 656-7770 AU000580L Randall L. Ranck

Michael L. Martin, App.

No Out of State Checks Lunch Available



#### \*\*\*\*\*\*\*\*\*\*\*\*\* Come One Come All



249 E. Main Street Hummeistown, PA Antiques, Toys, Trains Farm Toys, Ertl, Matchbox, Smith-Miller, Winross & More

OVER 100 TABLES ON THREE FLOORS For Sale - 1940 Ford Sedan Bank

Red In Color w/Gold Inprint Joe Ertl Scale Model Car -Only 250 Will Be Made Serial Number on Box and Car

# DATE: Sat., March 25 TIME: 9:00 AM to 3:00 PM

ADMISSION: \$2.00 FLOOR RIGHTS: \$10.00

6:30 AM TO 9 AM FOR MORE INFORMATION — CALL STAN WANNER 717-566-0056 STEVE KIENZLE 717-566-5525 LOCATED 3 MILES WEST OF HERSHEY OFF #322 AT HUMMELSTOWN EXIT FALL TOY SHOW SATURDAY NOVEMBER 11, 1995

## **Public Auction Register**

Closing Date Monday 5:00 P.M. of each week's publication

#### MARCH

MON. MAR. 20 - 10AM Absolute Auction, 6100 Germantown Ave. Phila., Pa. 19144. Liquidation of Major Door Manufacturer, Affiliated Auctioneers.

WED. MAR. 22 - 1:30PM Belleville Livestock Market. 15 hand picked Canadian cows from one herd. For more info. Glene Glick 717-667-2703 or sale barn 717-935-2146.

FRI. MAR. 24 - 10AM Tom & Irene Atchison farm auction. truck, equip, barn equip, misc, produce, household, antiques & collectibles. at the Atchison Farm, Oak Hollow Rd., Barton, NY. (Tioga Co.) Farm is three miles off Rt. 17C at Barton, 4 miles E, of Waverly, NY. Howard W. Visscher, auct.

SAT. MAR. 25 - 9AM Hummelstown Fire House spring toy show, 249 E. Main St. Hummelstown, Pa. Antiques, toys, trains, farm toys, Ertl, Matchbox, Smith-Miller, Winross &

SAT. MAR. 25 - 9:45AM Repossession Sale. approx. 225 repo's & off lease vehicles. Keystone Public Auto Exchange.

SAT. MAR 25 - 10AM Consignment auction. Farm machinery, fire truck & equip, automobile, misc. items. At the Jefferson Co. fairgrounds between Char-les Town, WV and Lee-town, WV. From I-81 at Martinsburg, WV take Rt. 9 E to the light in Kearney-sville, WV, take a right to Leetown. At Leetown take left to fairgrounds on left. From Charles Town, take Rt. 9 to eetown Road at Edge of Ranson, WV. Take Leetown Road to Fairgrounds on rioght. Kable

SAT. MAR. 25 - 10AM Tractors, hay equip, planters, tillage. Sussex Co. fairgrounds. Goodrich Auction Service, Inc.

## eastern shore Showcase sale

### SATURDAY, MARCH 25, 1995 12:00 Noon Sharp!

Solanco Fairgrounds, Quarryville, PA 1/4 Mile South of Quarryville on Route 472

A SUPER LINEUP OF 55 REGISTERED HOLSTEINS

Early Highlights

June 94 Winken from an Ex dam with 36,160m 1426f
Sept 94 Blackstar from an Ex dam with 37,000m 1615f
Dec 94 Prelude from 2 generations VG with over 20,000m
2 Raiders: 1 bred from a 23,000m 2 yr. old

\* 2 Mascots, both bred and both dams over 22,000m

Dec 94 Astre from a VG Mark with 26,850m
A fresh Prelude from a dam with 25,510m 852f

\* A Delegate from an Ex 91 cow with 26,740m due sale time

\* Dec 94 Royal, 2 generations VG, records to 26,150m 1066f

\* Sept 94 Stardust 2 gen. VG records to 24,032m 987f
\* 2 Lukes, both from VG dams with records to 28,276m 1221f

<u>Special Mention</u>
Embyros sell from "Pala", "Beach", and two other Excellent Cows. Sired by Lindy, Raider, Charles, and Southwind.

Sponsored by Cecil, Harford, Baltimore, York, Delaware, Chester & Lancaster Holstein Clubs.

Co-Chairmen: Bob Knutsen & Steve Wilson For information and catalogs: Bob Knutsen 130 Knutsen Lane, Rising Sun, MD 21911 410-658-6325