UPDATE OF THE NUTRIENT REQUIREMENTS OF POULTRY

Dr. William B. Roush Associate Professor Poultry Science

The "1994 Nutrient Requirements of Poultry" manual is available from the Nutrition Research Council. The new edition of the poultry manual represents a major effort to update the 1984 edition of this classic reference source. A reassessment of the nutritional data in the previous edition was made. Substantially more information has been added (the size of the manual was increased from 71 to

155 pages).

Chapter titles include 1) components of poultry diets; 2) nutrient requirements of chickens: 3) nutrient requirements of turkeys; 4) nutrient requirements of geese; 5) nutrient requirements of ducks; 6) nutrient requirements of ringnecked pheasants, Japanese quail, and Bobwhite quail; 7) signs of nutritional deficiencies in chickens and turkeys; 8) toxicity of certain inorganic elements; 9) composition of feedstuffs used in poultry diets; and 10) standard reference diets for chicks. The appendices include documentation of the nutrient requirements, estimating the energy value of feed ingredients, and conversion factors.

In most instances, the nutrient requirements were derived from

empirical observations of poultry to changes in dietary concentrations or intakes of specific nutrients. The committee emphasizes that the requirements reported have not been increased by a "margin of safety." The values represent the judgment of the subcommittee on poultry nutrition after reviewing published data. The criteria used in establishing nutrient requirements included growth, reproduction, and feed efficiency and, where possible, poultry health and quality of poultry products.

Dr. Jerry Sell, chair of the subcommittee on poultry nutrition, indicated that the scientific knowledge about many of the nutrient requirements was incomplete. As a result, calculations and interpolations were made to estimate some of the requirements. These estimations are designated by bold type in the tables. Where estimations were determined to be inappropriate, a question mark was included.

As compared to previous editions, this report contains additional information on feedstuffs, including the procedures used to determine metabolizable energy values and a method to estimate amino acid contents of feed ingredients. A detailed discussion is made of dietary fat sources. The nutrient composition of feedstuffs includes true metabolizable energy

values, coefficients of true amino acid digestibility, and equations to estimate amino acid values based on proximate analysis data.

The 1994 revised edition of the poultry manual should be a welcome addition to the nutrition

library of anyone who is interested in the nutrient requirements of poultry. The new manual is available for \$24.95 from the National Academy Press, 2101 Constitution Ave., N.W., Lockbox 285, Washington, DC 20055, (800) 624-6242.

Threshermen Show Aug. 5-7

DENTON, Md. — The Eastern Shore Threshermen and Collectors Assoc., Inc. will be holding its 34th annual Wheat Threshing, Steam and Gas Engine Show on August 5-7 at their show-grounds located on Rt. 313 between Denton and Federalsburg. The show features free admission and free parking.

Besides the main attraction of wheat threshing, there will be shingle sawing, sawing with a miniature sawmill and rock crushing. There will be steam engines, antique tractors, gasoline engines, antique cars and steam models in operation. A daily parade of all equipment will be held at 5 p.m. on Friday and Saturday and at 4 p.m. on Sunday.

Smokey Joe, a miniature steam train which is a replica of the Civil War locomotive "The General," will provide rides to kids of all ages.

There will also be a large flea market with more than 125 dealers and plenty of good food, including fried chicken dinners, crab cakes, hamburgers, and hot dogs.

Free country music shows will be held Friday evening with the "The Bay Country Gentlemen" bluegrass msuic and "J.R.'s Midnight Express" on Saturday evening. Both shows will start at 7:30 p.m. On Sunday evening at 5:30 p.m. "Hearts Afire" will be providing Gospel music.

Exhibitors of antique equipment are welcome. There is no charge to exhibit.

STEEL BALE BOXES



3 Sizes Available... 16', 18', 20' with or without running gear

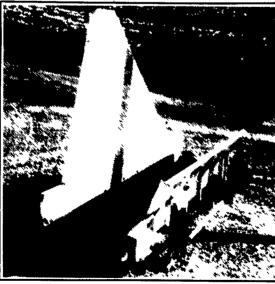
Also will fit sides onto your flat wagon

Farm Gates Made To Your Specifications

MFD GAP HILL FARM WAGONS

5549 Lincoln Hwy. - Gap, PA 17527 717-442-9489 Call Bet. 8:30 & 9:00 A.M.

ALUMINUM CORN BINDER LOADER



- Corn Slides Easier On Aluminum Than On Wood
- Available In Either Hydraulic Or Mechanical Drive

- Light-Weight Durable Aluminum
- All-Belt Conveyor: No Chains To Break Or Add Weight
- Pillow Block Bearings
- Lighter Than Wooden Loaders

BARTVILLE WELDING SHOP

1245 Noble Rd. Christiana, PA 17509 (at Bartville)

Keep them simple, we did. Belarus Sensible Down-Tb-Earth Tractors If you're looking for a

looking for a small tractor that gets you through tough spots, you'll like the new 4-wheel drive Belarus 310.

It's a simple, economical 36-hp tractor with the 4-wheel advantage that gives you extra traction on rough, wet ground. You'll like the fuel efficiency and low maintenance of the 310. And its low price is another real advantage. Stop in and see us for all you farm equipment needs and take a look at the Belarus 310.

MARYLAND

SCHROCK FARM EQUIPMENT

Route 1, Box 2568 Oakland, MD

ANDERSON TRACTOR SALES

4600 BreldenBaugh Lane (Off 12200 Manor Rd.) Glenarm, Md. 410-592-7422

STARKEY FARM CO.

Rt. 213, PO Box 250 Galena, Md.

NEW YORK

NEL'S LUG-A-LOT COMPANY

4793 Watkins Road, Millport, NY

BROWN'S TRACTOR & EQUIPMENT SERVICE, INC.

RR 2, Box 11B, Jackson Hill Rd. Bonnville, NY

WEST VIRGINIA

BEVERAGE TRACTOR

Rt. 522 S. Stuarts Draft, VA 800-296-3325

PENNSYLVANIA

ROVENDALE AG & BARN EQUIPMENT

RD 2, Box 210 Watsontown, PA

ANDERSON TRACTOR SALES

636 B S. Main St. Shrewsbury, PA

LUBINIECKI WELDING

& EQUIPMENT RD 2, Box 160

Meadville, PA MARSHALL

MACHINERY, INC. Route 652, RR 4

Honesdale, PA

Sensible, Down-To-Earth Tractors

