Nothing goes to waste in meat processing

WASHINGTON, D.C. — There's more to a steer than steak. Actually, an average 1,000-pound market steer yields only about 440 pounds of beef. Most of what's left—around 40 percent of the animal's live weight—becomes byproducts.

Although beef makes up about 5 percent of the total U.S. diet, Americans really eat even more—disguised in chewing gum, marshmallows, some margarines, and gelatin capsules. And many more items are manufactured from cattle byproducts--sporting equipment, bone china, cosmetics, and photographic film are just a few.

Dividend products come from parts of the slaughtered animal called the "fifth quarter" in the cattle industry.

All these "dividend" products come from parts of the slaughtered animal called the "fifth quarter" in the cattle industry.

In reality, of course, the carcass of a 1,000-pound market steer is divided into only four quarters—two front and two hind—which weigh about 600 pounds and include the fat and bone that will be trimmed at the retail counter. But almost all of the remaining 400 pounds—the "fifth quarter"—become byproducts which have a potential market value.

According to USDA economist Larry Duewer, byproducts make a significant contribution—just over 10 percent—to the packer's profit margin. Byproducts benefit both cattle producers and consumers by helping increase the value of fed cattle without further increasing retail beef prices.

In dollar value, hides account for about half of all byproduct sales. Last year's average of $44.50 per 100 pounds of hide was about $27 per animal (a normal hide weighs around 60 pounds).

However, in recent years, hide prices have been erratic. During spring 1979, native heavy steer hides reached a record $90 per cwt., although 1979's average was only $73—still a hefty 64 percent above the 1980 price.

And volatile prices may reflect the primary hide market—export. Between 60 and 70 percent of U.S. hides from commercial slaughter are bound for world trade, and almost all of those (90 percent) go to Japan.

In dollar value, hides account for about half of all byproduct sales.

Of course, any change in Japanese demand or in U.S. supply can drastically affect hide prices. And some analysts suggest that dramatic price swings—as in 1979/80—could be a future trend unless the industry replaces hide exports with leather exports.

Some leather industry officials believe that leather—simply hides that have been tanned—would have a wider market appeal and offer greater price stability for wholesalers.

Over the past few years, leather exports have been reaching new records. In 1980, the industry had export sales of $310 million.

But only better grade hides are made into leather—latigo, suede, or tooling. Those of lower quality can be used in the manufacture of felt and certain textiles, as binders for plaster and asphalt, or for the base of some ointments and building-insulation materials.

Leather manufacturers usually buy hides complete with hair and trim them before making a finished product. This leaves another byproduct—animal hair—one of the more difficult items to move.

At one time, upholstery stuffed with animal hair was popular, but synthetics have practically wiped out this market. However, one long-time use of animal hair is the manufacture of artist's paint brushes. This market is limited, though, because only the fine hair from the animal's ear can be used.

Hair does contain a lot of protein, and researchers have developed it as a feed additive for livestock—a less expensive alternative to meat and grain as a protein source.

Tallows and greases are probably second to hides in terms of cash value for byproducts. And the slaughter process provides a lot—an average 60 pounds per animal—of both the edible and inedible varieties.

A relatively new and sophisticated byproduct market is the manufacture of pharmaceuticals.

In 1975/76 alone, 2,580 metric tons were produced. This is much more than domestic use (about 1,500 metric tons during that same period) because demand for these items has really been slipping over the last two decades.

As far as eating tallow outright, the average American consumer is no longer interested. Lard, a pork byproduct, had been widely used in cooking before the sixties, but margarine and shortening have essentially replaced lard in the kitchen.

Today, edible tallow's major domestic use is as an additive in livestock and pet foods, again because it is a cheaper source of protein than meat itself. And it sells. The pet food industry is huge, with domestic sales reaching over $2 billion in 1980.

Some inedible tallow is still used industrially, mostly for lubricants, although its bigger market—soap—has virtually dried up with the introduction of synthetics. From 1947 to 1964, tallow-based soap production declined some 2 billion pounds.

But concern over environmental pollution, particularly from detergents, has rekindled interest in natural-based soaps. And scientists working with USDA's Science and Education Administration have been successful in creating (but not yet marketing) completely biodegradable soaps

(Turn to Page D15)

Lycoming Co. DHIA

(Continued from Page D13)

Franklin J Finck				
Bonnie	8 7	21,582	845	305
Ginger	4 2	18,543	664	292
Suella	4 0	17 213	667	305
Fay	3 11	19,400	679	305
Brooke	3 0	22,029	731	305

BOOTH INSULATION COMPANY

"THERMAL INSULATION SPECIALISTS"

Residential • Agricultural • Commercial • Industrial

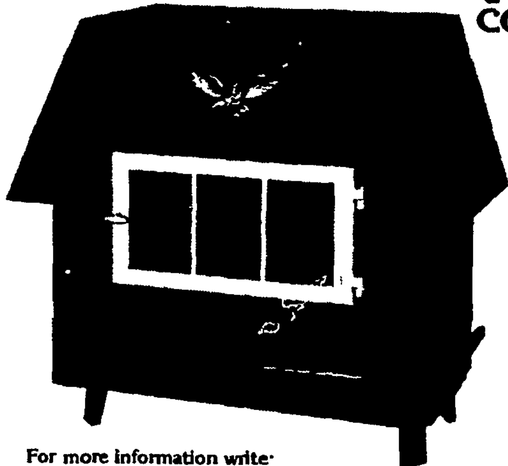
SPRAY ON — BLOWN IN — FOAMED IN PLACE

1167 Snapper Dam Road
Landisville, PA 17538

Call Collect
717-898-2760

The Warmth of Tradition...
With a Modern Flair.

VICTORY 700 COAL STOVE



• 100% American Cast Iron
• Holds fire up to 30 hrs. per loading
• Thermostatically controlled
• Free standing, or fireplace installation.

For more information write·

PEQUEA WOODWORKING
2704 BACHMANTOWN ROAD, RD 1, RONKS, PA 17572
Phone (717) 687-6763
Located ¼ mile south of Rt. 30, Just off of Ronks Road
Open Daily Mon. thru Sat. 8 AM to 4 PM; Fri. 8 AM to 8 PM

JOIN TODAY
AND I'LL DELIVER A VACATION CLUB CHECK TO YOU IN
1982

Put yourself on our Vacation list! Open your high interest Vacation Club now...enjoy the extra cash later!

THE FARMERS NATIONAL BANK OF QUARRYVILLE
SMALL ENOUGH TO KNOWN YOU.
LARGE ENOUGH TO SERVE YOU.
TWO CONVENIENT SOUTHERN LANCASTER COUNTY LOCATIONS
★ QUARRYVILLE Phone: (717) 786-7337 ★ PENN HILL
An Equal Opportunity Lender • Member F.D.I.C. • Each Account Insured To $100,000