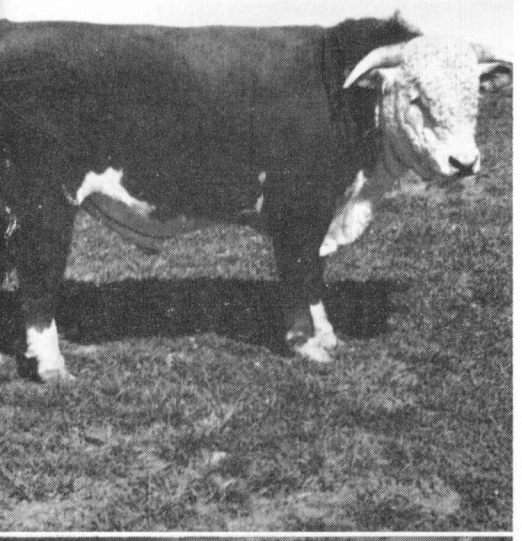
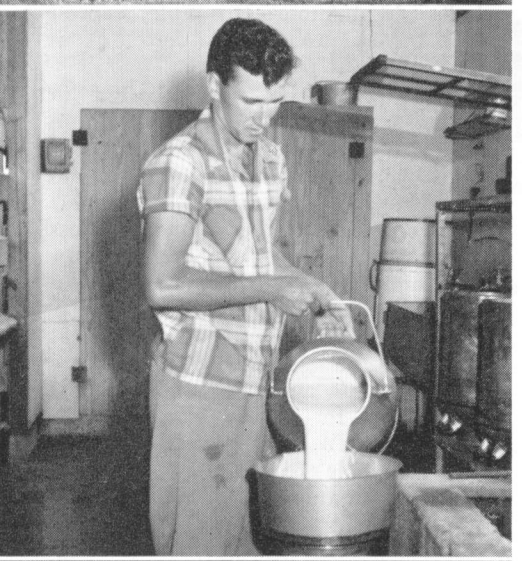




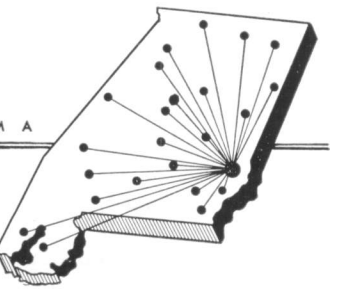
VOL. 4 NO. 3 FALL 1957

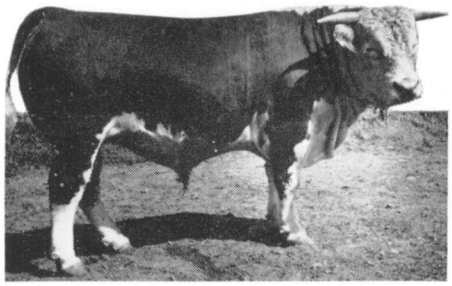
HIGHLIGHTS of AGRICULTURAL RESEARCH

In this issue—Which—Cattlemen Keep Sharp Eyes On Performance Tests . . . Save It—Why Haul It? . . . Milking Parlor Designed with Pocketbook in Mind . . . Pasture or Concrete for Growing Hogs . . . Control Soil Insects with Insecticide-Fertilizer Mixtures . . . More Molasses for Alabama . . . Saint or Sinner

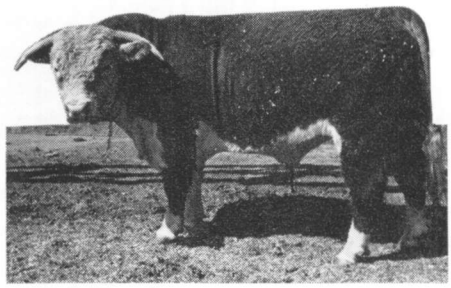
AGRICULTURAL EXPERIMENT STATION SYSTEM
of the ALABAMA POLYTECHNIC INSTITUTE

SERVING ALL of ALABAMA





—WHICH—
Cattlemen keep sharp eyes on performance tests



W. M. WARREN, *Head, Department of Animal Husbandry and Nutrition*

PERFORMANCE TESTING is an important yardstick in buying purebred bulls!

At Auburn sales of performance-tested sires, cattlemen paid more money for bulls that showed ability to convert feed into rapid and efficient gain than for slower gainers. This ability is passed from sire and dam to offspring and is an important factor in building profitable beef herds.

We know that a number of things influence bidding at public auctions. Strength of demand, number of animals offered, age, color markings, breed, and blood lines all contribute to affect price. We now also know that cattlemen are keeping peeled eyes on performance testing.

Program Started in 1951

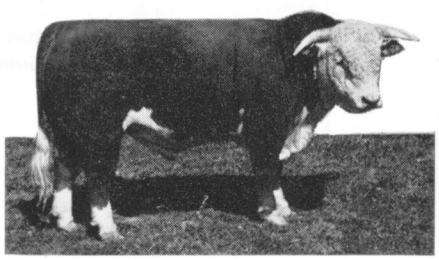
The API Agricultural Experiment Station began its performance testing program in the fall of 1951 as a service to Alabama cattlemen. Since then, a large number of purebred bulls has been performance-tested for gainability by the Station.

The influence of performance testing on buyer preference is quite evident when we study results of bull sales following testing at Auburn. At five Station auctions, 226 bulls of Angus, Hereford, polled Hereford, polled Shorthorn, Shorthorn, and Santa Gertrudis breeds have been sold. These animals averaged $352 per head. At the 1957 sale, the high-selling bull brought $915, whereas the low-selling animal sold for only $145. Performance records of the two bulls were:

	Daily gain on test	Lifetime daily gain	Conformation score
High	3.25 lb.	2.03 lb.	124
Low	2.43 lb.	1.51 lb.	74

The high-selling bull was much better than the low-selling animal in gain factors and in conformation. The fact that beef cattle producers recognize the value of a beefy, rugged, balanced bull with proved ability to gain rapidly is reflected in the price spread between the two bulls.

The two Hereford bulls compared in the title pictures were on test in 1955-56 and were sold in the 1956 sale. Both bulls were scored about the same for conformation, 93 and 91. Yet the bull on the left sold for $440 whereas the other brought $255. The high-selling bull gained 2.71 lb. per day on test and compiled a lifetime gain of 2 lb. daily. The average daily gain of the $255 bull was 1.56 on test and a lifetime gain of 1.69 lb. per day.



This bull had an average daily gain on test of 3¼ lb. and sold for the top price of $915 in Auburn's 1957 auction.

Summary of Results

These data show that conformation and gaining ability are not related. When conformation differences are small, gaining ability becomes an increasingly important factor in determining price.

Performance records and sale prices of the 226 bulls reveal:

(1) There was no consistent relationship between gain on test or lifetime gain and conformation. Plain bulls can gain rapidly, typy bulls can gain equally well, and either kind can gain very slowly.

(2) Within year and breed, neither lifetime gain nor conformation was consistently associated with sale price.

(3) When conformation, lifetime gain, and gain on test were combined into a total score, sale price was influenced by the combination of all three factors.

(4) When conformation, gain on test, and lifetime gains were combined into total score, these three factors accounted for 74% of the total differences in sale price.

A study of relationship between total score and sale price of one breed of bulls sold at Auburn (see table) showed that buyers prefer bulls that are superior in total performance.

This preference was reflected in higher prices for top performing animals. It also showed that purebred bulls with poor conformation and inability to gain satisfactorily sell for little more than beef prices and at a loss to the owner. Producers of top-performing bulls will find a strong demand for their surplus.

Performance testing requires that breeders do a good job of record keeping. Accurate age and weight records are needed for a performance test to be useful. To the buyer of purebred bulls, reliable testing for gainability provides an additional important measure of the bull's worth.

RELATIONSHIP OF TOTAL SCORE AND PRICE OF ONE BREED OF BULLS SOLD AT AUBURN

Bull no.	Average daily gain		Conformation score	Total score	Sale price
	On test	Lifetime			
	Pounds	*Pounds*			
1	2.69	2.32	93	86	$500
2	2.66	2.45	73	81	$475
3	2.37	1.84	84	74	$410
4	2.53	1.83	69	71	$325
5	2.40	1.68	40	58	$155

H. S. SWINGLE,
Fish Culturist

SAVE IT!

Photo by Pat Peacock, The Progressive Farmer

These five ponds save much of the water running off from a 38-acre watershed in the North Auburn research area. The ponds store about 40 acre-feet of water annually and can be used for watering livestock, irrigating, and fishing.

AN ABUNDANCE of good water is a blessing usually taken for granted in the eastern half of the United States, and especially in the Southeast.

Even in some parts of the Southeast, however, severe drought is experienced every 3 to 5 years. During such periods, crops are lost, stream flows run dangerously low or dry up, and many wells go dry. Farmers may then be forced to haul water from considerable distances for livestock. Industry dependent upon water must slow down or stop and domestic usage of water in cities and towns must be sharply curtailed.

Our complex civilization has increased the daily amount of water required per person from about 10 gal. in colonial times to 200 to 500 gal. in modern towns and cities. Looking ahead, increasing population and heavier demands for water by agriculture and industry in the future point to diminishing per capita supply. All of this is a gloomy outlook that is fully justified by fact provided nothing is done to conserve and manage our water resources.

Research

In 1934, the API Agricultural Experiment Station began a long-range study of water storage on farms for irrigation, for fish production, and for stock.

Low soil fertility in the Southeastern States is the result of two major factors – high temperatures and heavy rainfall. Results of studies show that down-hill, down-stream movement of rain water carries with it soil particles and soluble nutrients. It is estimated that about half of the total plant nutrients released into solution each year is carried by surface and underground water to creeks, rivers, and seas. Erosion and leaching are estimated to cause a net yearly loss to Alabama of 56,000 tons of nitrate nitrogen.

In Alabama annual rainfall averages 54 in., and a little more than a third of it, 20 in., moves as run-off into small branches, down creeks, into rivers and on to the Gulf of Mexico. More than 50 million acre-feet of water, or 16,875 billion gal., move as run-off from Alabama downstream to the Gulf. This is enough water to supply 27 times the present population of Alabama (based on 500-gal. per capita daily requirement for domestic, industrial, and agricultural uses). It is for these reasons that Auburn research has been directed at conservation and storage of water on the farm.

The Experiment Station has pioneered in learning how best to save these run-off waters. This research has involved study of ponds for impounding waters . . . use of such waters for fish production . . . methods of constructing dams and ponds . . . watershed requirements for level maintenance . . . kinds of fish for stocking . . . pond management and fertilization . . . weed control.

Resulting from this long-range program are 15,000 farm ponds in Alabama having a total area of 60,000 acres and a total watershed of more than 1 million acres of land. Thousands of ponds have also been built by other states that have drawn on the farm pond research in Alabama.

Ponds serve many purposes. On the farm they make water available for stock without need for pumping, supply water for irrigation, water for fire control, and water for sewage disposal. Large ponds supply domestic and industrial water for towns and cities. Ponds also stabilize water levels in nearby wells, help stabilize stream flows, and provide food and recreation for thousands of people.

Any logical system of permanent land use in Alabama and the Southeast must include a system of controlling and using surface and subsurface drainage waters. The well-managed farm in the future may be expected to be one not with a planned water disposal system but one with a planned system of storage and use of water falling on the farm.

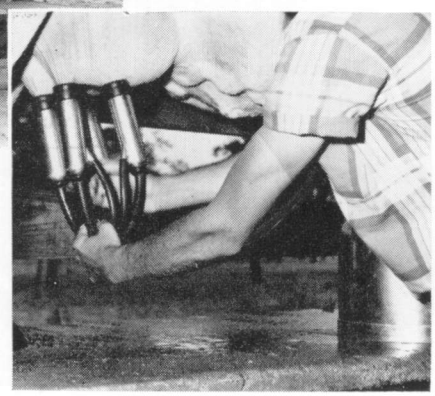
By an adequate system of soil protection and water storage in wet seasons for use during dry periods, soil nutrients can be conserved and the long growing season in this section can be used to the greatest advantage. Such a system, if extensively developed, would prevent floods and stabilize and improve streams and underground water supplies.

The farmer with a good pond doesn't have to haul water – he saves it!

EDITOR'S NOTE. How to build a farm pond and how to manage one are fully described in Experiment Station Cir. 95, "Construction of Farm Ponds," and Experiment Station Bul. 254, "Management of Farm Ponds." You may get a copy of each from your county agent or by writing Dr. E. V. Smith, Director, API Agricultural Experiment Station, Auburn, Ala.

MILKING PARLOR *designed with* POCKETBOOK *in mind*

WALTER GRUB
Associate Agricultural Engineer



Designed for manufacture-grade dairy, this low-cost parlor eliminates stooping and much heavy work of milking.

AN EFFICIENT milking parlor that is cheap enough for farmers producing milk for manufacture is no pipe dream.

Such a unit has been developed by the Agricultural Engineering Department, API Agricultural Experiment Station. It's simple in design and can be erected by unskilled labor at a cost as low as $500.

The structure can be built in the corner of an existing barn or shed or as a separate small shed-type building.

A pit for the operator and an excessively high ceiling are not required. The stalls can be constructed outside the building and protected by a small overhanging roof. If built in a barn, the milking parlor can be separated from the rest of the barn by conventional frame walls. These walls can be finished with a hard surfaced wall board that is moisture resistant.

Features of Parlor

The milking parlor has two elevated stalls, milk cooling tank, can racks, water heater, wash vats, storage cabinet, feed storage bin, can hoist, and milk loading ramp.

Stooping, squatting, and heavy lifting are eliminated. There are no steps to climb because the work area is on one level. Cow stalls are elevated 30 in. above the floor to permit milking without the usual stoop and squat. Stall height can be varied if desired to conform to height of operator. The can for straining is only a few feet from the milking machine. When full, it is lifted into the cooling vat with a hand operated can hoist mounted on a track. The same hoist is used to lift the full cans from the tank to a loading ramp. A small feed storage bin is convenient to the stalls.

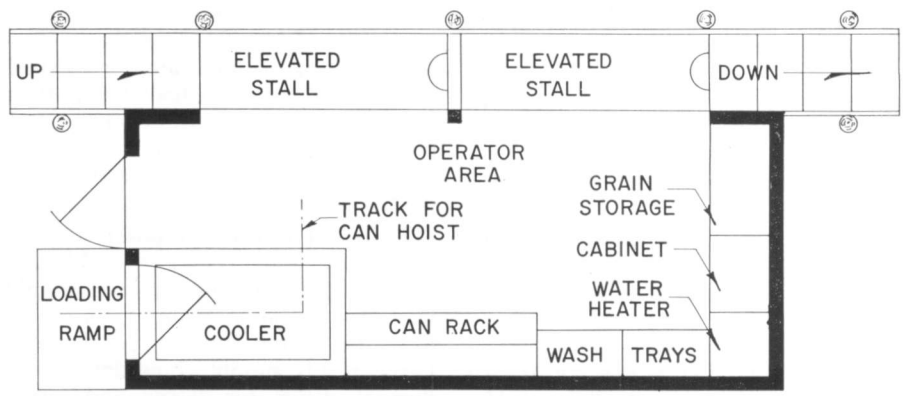
Construction

The milking parlor is 8 by 20 ft. The concrete slab floor slopes to a gutter or drain under the stalls. Side walls are built of treated lumber and are covered on the inside with a durable, hard finish building board that is moisture resistant, such as asbestos-cement. Framing members are exposed on the exterior. Work space and stalls are covered with a low pitch shed roof, which provides ample shelter.

Elevated stalls, steps, and ramps are supported on pressure treated poles and fence posts. The floor, steps, and ramps are framed with treated lumber and surfaced with a 4-in. slab of reinforced concrete. The walk-through stalls are constructed of treated lumber and provide a low-cost substitute for commercial stalls. If desired, the elevated stalls and steps can be made of concrete and surfaced with a 4-in. reinforced concrete slab.

The open front of the building faces south to take advantage of the warmth of the winter sun and to protect the operator from north and west winds. For comfort during cold days, two heat lamps are directed toward the areas in which the operator works most of the time.

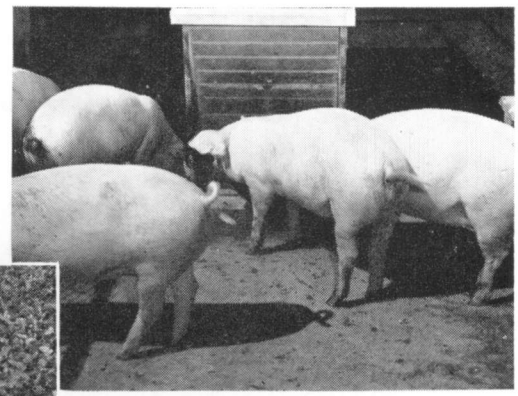
This low-cost manufacture grade milking parlor provides a practical way to reduce milking labor. The plan can be obtained from the API Agricultural Extension Service, Auburn, by requesting Plan No. BH-36.

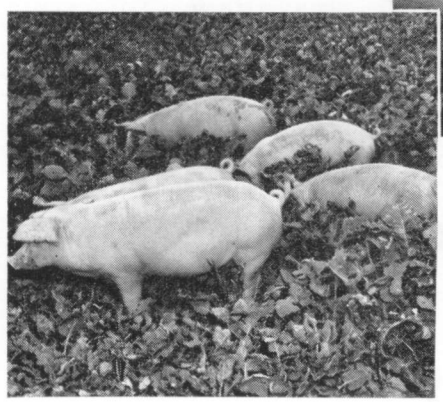


Above is the floor plan of a separate, shed-type milking parlor. A similar facility can be built in the corner of an existing barn or shed.

PASTURE *or* CONCRETE *for growing* HOGS?

HOWARD F. TUCKER, *Associate Animal Husbandman*





Growing hogs on pasture (left) has been standard practice in the South. Many years of research has shown grazing and supplemental feeding to be practical and economical. Something new in the hog business is growing them on concrete (above). This, likewise, can be an economical operation if correct feeding, management, and sanitation practices are followed.

Hogs on pasture . . . hogs on concrete . . .

If you are a good manager, either system is practical for growing and finishing swine.

Some Alabama producers adopted concrete dry lot feeding when rations were developed that would perform as efficiently in dry lot as on pasture. The API Agricultural Experiment Station made a contribution to dry lot feeding when studies showed that additions of zinc to rations prevented a skin disease (parakeratosis) among pigs and resulted in faster gains.

While concrete dry lot feeding has made some inroads in Alabama, pasture feeding will continue to have an important place in growing and finishing hogs. Data in the tables are an evaluation of the benefit of better pasture crops on growth of hogs fed modern rations. Comparisons are also made between pasture and dry lot feeding.

Study of Gains

Data in Table 1 show that pigs grazing alfalfa in the summer gained at the most rapid rate. Rates of gain and cost of feed to produce a pound of gain were similar for millet, sudan grass, and rations fed in concrete dry lot. Hogs on all tests were fed corn and a protein supplement.

During the winter and spring, grazing crops resulted in slightly faster rates of gain than those from pigs on concrete, Table 2. Feed costs for hogs grazing crimson clover or ryegrass were similar to those for hogs in concrete-floored pens. Feed cost per lb. of gain was highest on oats. It is pointed out that there was little difference in cost per lb. of gain on concrete and on pasture during the summer, winter, and spring seasons.

Pigs grazing alfalfa during the summer of 1956 made gains at 1-1/10 cents less per lb. than pigs fed in concrete-floored pens during the same season, not including cost of alfalfa production. At the rate of 20 pigs per acre of alfalfa and 175-lb. gains, the gross return would be $38.50 per acre from alfalfa for grazing during the summer. These data were obtained under management conditions and stocking rates that would assure adequate quantity and quality of forage.

Table 1. Gains and Costs of Growing Hogs, Summer, 1956 and 1957

Pasture	Pigs	Daily gain	Feed per 100 lb. of gain	Feed cost per lb. of gain[1]
	No.	*Lb.*	*Lb.*	*Cents*
None[2]	18	1.41	330	11.0
Alfalfa	18	1.49	306	9.9
Starr millet	18	1.42	325	10.7
Sweet sudan	18	1.37	329	11.0

[1] Does not include cost of pasture.
[2] Fed in concrete-floored pens.

Table 2. Gains and Costs of Growing Hogs, Winter and Spring, 1956 and 1957

Pasture	Pigs	Daily gain	Feed per 100 lb. of gain	Feed cost per lb. of gain[1]
	No.	*Lb.*	*Lb.*	*Cents*
None[2]	17	1.38	322[3]	9.7[3]
Alfalfa	17	1.41	332[3]	9.0[3]
Oats	18	1.42	339	10.0
Crimson clover	18	1.46	329	9.4
Ryegrass	18	1.44	335	9.4

[1] Does not include cost of pasture.
[2] Fed in concrete-floored pens.
[3] Only 1957 seasons included for alfalfa and only 1956 seasons for concrete dry lot feeding.

If the grower uses the pasture program, he must restrict the pig in its ration, either quality-wise or quantity-wise, before it will consume a large amount of forage. Proteins, minerals, and vitamins, which make quality, must be reduced in the ration or the quantity of feed offered to the hog must be limited. On the other hand, sows will consume and use a much greater quantity of pasture than will growing-finishing hogs.

Alfalfa and Starr millet offer the best possibilities for forage quality and length of grazing season during the summer. For winter and early spring, oats, alfalfa, and crimson clover can be used satisfactorily. Alfalfa can be used to bridge the grazing gap between oats and millet in the spring or millet and oats in the fall.

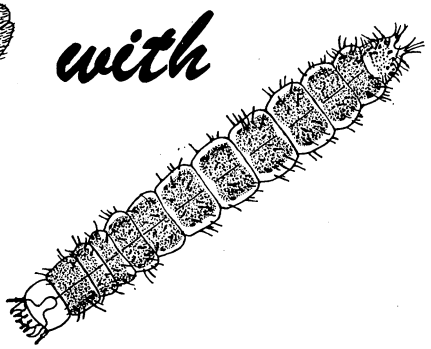
Choice for Producer

This report is not an attempt to show a preference either for the forage system or the concrete dry lot system for producing pork. It does introduce certain facts on rate of gain and feed efficiency that are of great interest.

Two questions as to pasture feeding are posed: (1) Can forage crops be produced and grazed by hogs for the difference of feed costs reported herein? (2) Would land be more profitable in another crop?

On the other hand, concrete dry lot feeding presents this challenge — only producers who are willing to apply modern management, feeding and sanitation practices can expect success from the new program.

Control SOIL INSECTS *with*



INSECTICIDE FERTILIZER *Mixtures*

W. G. EDEN
Entomologist

TWO BIG JOBS in one operation . . . That is the chief reason for increased use of insecticide-fertilizer mixtures. It is just one more way to cut farming costs.

Introduced more than 25 years ago, the idea of putting the two products in one bag caught on in recent years. Other pesticides—fungicides, herbicides, and nematocides—are also used in mixtures with fertilizer, but in only 5% of the cases. The other 95% contain insecticides.

Research has been done on the job for many years with studies of mixtures and their practical use in the field. However, much remains to be done. More work is needed in control of soil insects, especially in pastures and sod crops.

Extensive studies have been made by the API Agricultural Experiment Station to determine best uses of insecticide-fertilizer mixtures in Alabama. As a result of this research, recommendations can be made.

Recommendations

Station recommendations are based on pounds of actual toxicant per acre. For example, 1 lb. of heptachlor is equal to 4 lb. of 25%, 10 lb. of 10%, or 20 lb. of 5% granular or powder material.

Controls for pests in corn, sweetpotatoes, Irish potatoes, pastures, and lawns are given here.

CORN. For control of root worms and wireworms in corn, 1 lb. per acre of aldrin, dieldrin, or heptachlor, or 2 lb. of chlordane is recommended. The general fertilizer recommendation for corn is 250 lb. of 4-12-12 per acre. When insecticide-fertilizer mixtures are used, 4-12-12 contains per ton 8 lb. of aldrin, dieldrin, or heptachlor, or 16 lb. of chlordane. The mixture may be broadcast or put in the drill.

SWEETPOTATOES. Two lb. of aldrin, dieldrin, or heptachlor, or 4 lb. of chlordane per acre will control wireworms, white grubs, ants, or flea beetles in sweetpotatoes. The fertilizer recommendation at planting time is at least 500 lb. of 4-12-12 per acre. Thus, the fertilizer contains per ton 8 lb. of heptachlor, dieldrin, or aldrin, or 16 lb. of chlordane.

IRISH POTATOES. Wireworms, flea beetles, and imported fire ants may be controlled in Irish potatoes with the same insecticides and rates as given for sweetpotatoes. The recommended fertilizer at planting time is 1,500 lb. of 4-12-12. To follow these recommendations, the fertilizer should contain per ton 2.6 lb. of dieldrin, heptachlor or aldrin, or 5.2 lb. of chlordane.

PASTURES. Imported fire ants and other soil insects are pests and frequently problems in pastures, other sod crops, and small grains. Two lb. per acre of dieldrin or heptachlor, or 4 lb. of chlordane is recommended for control. A general recommendation for maintenance of established permanent pastures (perennial legume-grass mixtures) is 400 lb. of 0-16-8. Thus, the fertilizer for pasture maintenance must contain per ton 10 lb. of heptachlor or dieldrin or 20 lb. of chlordane.

LAWNS. Ants, chinch bugs, and other insects are pests in established lawns. These pests may be controlled by use of insecticide-fertilizer mixtures. Two lb. per acre of aldrin, dieldrin, or heptachlor, or 4 lb. of chlordane will control the ants and chinch bugs. The rates are too low for heavy infestation of white grubs. Five to 8 lb. of aldrin, dieldrin, or heptachlor, or 10 to 16 lb. of chlordane is necessary for white grub control. Any of these insecticides may be mixed with lawn fertilizers. In the case of white grubs, the treatments are more effective if washed into the soil.

Control of white-fringed beetles must be considered separately from the foregoing general recommendations, because this insect is under state and federal quarantine regulations. Infested soils are first treated with 10 lb. of DDT followed by annual applications of 2 lb. of DDT per acre. Dieldrin or heptachlor is also affective. These insecticides may be applied in fertilizer mixtures.

Precautions

Precautions must be used in handling fertilizers containing insecticides. In general, concentrations are so low that normal operations offer no hazards to handlers. Insecticide treatments near bee hives or water sources must be carried out with care to prevent drift into these areas. Insecticides are harmful to bees and fish. From the standpoint of drift, granular formulations are safer to use than dusts.

More MOLASSES *for* ALABAMA

J. T. COPE, JR., *Associate Agronomist*

Field of stripped C.P. 36/111 cane ready to be topped, cut, and hauled to mill.

USE OF DISEASE RESISTANT varieties and good production practices may reclaim some of the lost sugar cane acreage in Alabama.

In 1939, there were 30,000 acres in sugar cane for sirup in this State. By 1954, the acreage was only 5,000. Diseases were a major factor in this decrease in acreage because they produced serious damage and loss of stands to such old canes as C. O. 290, Louisiana Purple (old blue cane), Cayanna, and the P. O. J. varieties.

C. P. 29/116 and C. P. 36/111, both of which are resistant to mosaic and red rot, are now recommended for this State. Results of research at the Brewton Experiment Field, a unit of the API Agricultural Experiment Station System, have shown that the two varieties are superior to cane used in Alabama for years. Sugar cane studies have been conducted at Brewton continuously since 1931 by J. W. Richardson, superintendent, and since 1948 in cooperation with the U. S. Sugar Crops Field Station, USDA Agricultural Research Service, Meridian, Miss.

Description of Varieties

The two recommended disease resistant varieties can be grown on the same land year after year. Sites for planting old varieties often had to be changed every year. At Brewton, C. P. 29/116 and C. P. 36/111 are grown through the second stubble crop. After one year of fallow or some summer crop, the land is planted again to cane.

Both varieties are green in color. C. P. 36/111 develops a purplish color after it has been stripped. It also is more resistant to lodging than C. P. 29/116.

Sirup production from both varieties at Brewton has been consistently above 500 gallons an acre. These varieties are particularly outstanding in their yields from stubble crops. Yields from first and second year stubble have, in most cases, been as good as or better than those from first year plantings (see table).

Fall Planting Recommended

Around October 15 is the best time to plant sugar cane in Alabama, according to Brewton studies. Results of studies of fall versus spring planting are presented in the table. Production has been about the same from the two seasons of planting. However, fall planting is recommended because it eliminates the need for bedding cane and is more convenient.

Cane is planted in 4- to 4½-ft. rows at double rate by placing unstripped stalks end to end with a whole stalk at each union. Furrows are 2 to 4 in. deep and the cane is covered 8 to 10 in. deep during the winter to prevent the planted cane from freezing. Beds are dragged or harrowed down in the early spring leaving the cane covered 2 to 4 in. deep. Two years' results of depth of planting studies at Brewton are given in the table. They show no difference between planting depths of 1½, 3, and 4½ in.

Fertilization

Experiment Station recommendations call for cane to be fertilized with 60 lb. each of N, P_2O_5 and K_2O per acre. These amounts may be supplied as 500 lb. of 4-12-12 per acre applied beside the row in an off-bar furrow in the early spring plus a side-dressing of 40 lb. of nitrogen in June. They also may be supplied from 750 lb. of 8-8-8 per acre at the first cultivation. On land that has been well fertilized in the past, a soil test may indicate the need for less P_2O_5 or K_2O.

Cultivation, Harvest

Cane is barred-off in early spring when the soil begins to warm. Frequent shallow cultivation is done to control weeds until the cane shades the middles. Soil is moved in toward the row, forming a ridge 8 to 10 in. high by the last cultivation.

In the fall, seed cane is cut without stripping and planted before the regular harvest is begun. Cane is stripped, topped, cut, and sirup made before freezing weather. Cane may be held in storage as long as one month without reducing yield or quality of sirup. Storage of cane for as long as three weeks reduces the tendency of sirup to sugar.

YIELDS OF CANE AND SIRUP FROM DIFFERENT VARIETIES, TIMES AND DEPTHS OF PLANTING SUGAR CANE, BREWTON EXPERIMENT FIELD, 1949-56[1]

Variety	Planting time, depth	Planted cane, yield per acre		First year stubble, yield per acre		Second year stubble, yield per acre	
		Cane	Sirup	Cane	Sirup	Cane	Sirup
		Tons	*Gal.*	*Tons*	*Gal.*	*Tons*	*Gal.*
C.P.29/116	Fall	27.8(6)	538(4)	29.7(6)	614(5)	26.6(6)	556(5)
C.P.29/116	Spring	28.5(6)	572(4)	33.6(6)	692(5)	29.0(6)	603(5)
C.P.36/111	Fall	26.9(3)	550(2)	36.5(3)	866(2)	30.3(3)	754(2)
C.P.36/111	Spring	28.5(3)	606(2)	36.8(3)	906(2)	29.4(3)	712(2)
C.O.290	Fall	30.8(3)	440(2)	19.6(3)	339(3)	12.9(3)	250(3)
C.O.290	Spring	29.6(3)	453(2)	14.2(3)	256(3)	11.0(3)	208(3)
AVERAGE	Fall	28.3(12)	516(8)	28.9(12)	582(10)	24.1(12)	504(10)
	Spring	28.8(12)	551(8)	29.6(12)	604(10)	24.6(12)	506(10)
C.P.36/111	1.5"	24.6(2)	488(2)	34.8(1)	630(1)	----	----
C.P.36/111	3.0"	24.2(2)	469(2)	35.1(1)	702(1)	----	----
C.P.36/111	4.5"	22.7(2)	436(2)	31.9(1)	622(1)	----	----

[1] Numbers in parentheses are the number of years for which data are available.

SAINT *or* SINNER?

JAMES H. DAVIS, *Biologist*
Alabama Dept. of Conservation
ARNOLD O. HAUGEN, *Leader*
*Alabama Coop. Wildlife Research Unit**

Is the bobcat a saint or a sinner?

Studies at the Cooperative Wildlife Research Unit* indicate he is both. While he has been known to feast on livestock and poultry, the bobcat also eats such farm economic pests as rats and mice.

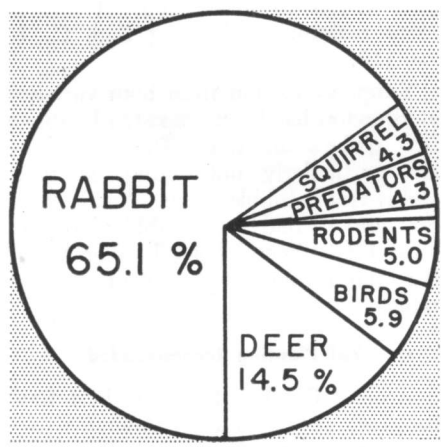
Often called the "wildcat," the bobcat probably occurs in all of Alabama's 67 counties. It lives in mountain areas, swamps, fields, and forests. Trapping, hunting, and poison campaigns have failed to exterminate this cunning creature.

Food recovered from stomachs of 145 bobcats between 1947 and 1954 provide a clue as to the cat's eating habits. As shown on the accompanying chart, rabbits provided 65.1% of the volume of food for bobcats during the year. The rabbit was the bulk of food for the cat in every month of the year.

Deer provided 14.5% of the food. Deer are eaten most frequently in January and February. No deer meat was found in bobcats' stomachs from May through August. Most of the deer eaten by the bobcat may consist of dead or wounded animals, since this food item was usually consumed during and following the hunting season.

Contrary to expectations, wild turkey was found in only one stomach. Quail were found in only two stomachs and made up less than 2% of the diet. Domestic chickens were found in three stomachs, for a total percentage of 3.5. Remains of one mallard duck, several song birds, and one hawk were found. Squirrels made up 4.3% of the bobcat's food and were eaten most frequently in December, January, and February. Rodents, including rats and mice, made up 5% of the diet. These were eaten in the greatest numbers from June through August. Raccoons and possums constituted 4.3% of the diet.

These eating habits put the bobcat in both good and bad brackets. Certainly, he is not as "black" as often painted.



Percentages of foods comprising the annual "take" by the bobcat in Alabama are shown above. The blank segment represents snakes, which make up 1% of the bobcat's total food.

* Jointly sponsored by Ala. Dept. Conserv., API Agr. Expt. Sta., U.S. Fish and Wildlife Serv., and Wildlife Mangt. Inst.

New and Timely PUBLICATIONS

Listed here are timely and new publications reporting research by the Agricultural Experiment Station.

Bul. 306. Consumption of Poultry Products is a study of per-capita consumption of eggs, poultry, and turkey by surveyed Alabama Piedmont families.

Bul. 307. Use of Dairy Products reports a market study among 502 families in the Anniston market area.

Cir. 120. Bulk Milk Tanks answers 32 important questions about bulk tanks.

Cir. 121. Acceptance of an Improved Frozen Sweetpotato Puree by customers of 5 commercial cafeterias and 12 school lunch rooms.

Leaflet 52. Building a Pole Barn describes how to locate and build a pole barn.

Free copies may be obtained from your county agent or by writing the API Agricultural Experiment Station, Auburn, Alabama.

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