

For administrative purposes, the entire state of Oklahoma is under quarantine, even though pink bollworms have not been found in several of the counties.

In Oklahoma the infestation, although light, is now rather general, says R. W. White.

Louisiana is winning its fight against the pink bollworm. Only a slight infestation was reported last year in eight parishes, and none outside the quarantined area. In the regulated area, some parishes were infested for the first time.

Cooperation of farmers in plowing under all cotton stalks and other cotton debris, he added, was responsible for the definite improvement. Mandatory stalk destruction program in all infested states, similar to the requirement of the new Arkansas order, has been urged.

Arizona in Good Shape

Last year the situation changed very little in Arizona, where five counties are under quarantine. During the 1953 season, bollworms were found only in Graham and Greenlee counties, but Cochise, Graham, Greenlee, and Pima were infested again in 1954.

Since 1947 pink bollworm infestation in Arizona has been so low that no special control measures have been necessary. Arizona's pink bollworms are adequately controlled by the normal cultural methods; deep plowing and winter irrigation kills the majority of the over-wintering larvae. Application of insecticides for other insects takes care of the emerging pink bollworm. Sterilization of cottonseed and cotton gin trash prevents further spread of the insect.

Drought Killed Texas Bollworm

Texas now has 239 regulated counties, 15 nonregulated counties in the extreme panhandle. The USDA recently placed these 15 counties under quarantine to facilitate movement of cotton and its by-products into and through the area. Since very little cotton is grown in these counties, and pink bollworms have not been found there, the Texas Department of Agriculture has not placed these counties under State quarantine.

The current situation is generally satisfactory, indicated Charlie Chapman, chief, Division of Plant Quarantine. "Each year we expect, and generally have, isolated areas of rather heavy pink bollworm infestations," he said. This always follows an attempt by some farmers in certain areas to harvest a top crop of cotton, hence they do not practice early and thorough stalk destruction. Such an area developed last spring during bloom inspection. At a recent meeting of area leaders of those counties, all agreed to abide by a voluntary stalk destruction

date. With favorable weather conditions the percentage of infestation may be expected to decrease in direct proportion to the cooperation of farmers in their voluntary program.

Infestations in the southern part of the state, which in previous years has been the location of extensive damage, was generally much lighter, particularly in the Coastal Bend section. Some counties in the Winter Garden area were more heavily infested than the year before.

Counties along the Louisiana border showed little change either way from the previous year. Some counties in central-west Texas showed decreases; others showed increases. On the South Plains an increasing trend was apparent. In the irrigated valleys of western Texas marked increases were noted.

Inspection Stations Help

Traffic leaving the lower Rio Grande Valley was checked at Falfurrias and Riviera during the rush periods (part of July and the entire month of August). During the latter part of August and in September, spot checks were made at or near crossings of the Brazos River.

The Louisiana-Arkansas traffic inspection work was set up early in August. Eight of these stations were located at points on the Louisiana-Texas border and three near the Arkansas-Texas border. Large numbers of migratory pickers pass through these stations, and interceptions of material containing live pink bollworms have been rather frequent, particularly at the Arkansas stations. All cotton picking sacks are fumigated before being released.

The Pink Bollworm Control Project also assisted in setting up stations which the State of Mississippi established at Natchez, Vicksburg, and Greenville on Sept. 1. Even tourists are checked, because they pick up souvenir cotton. Commissioner of Agriculture Si Corley said the halting of one car with souvenir cotton from Texas may have justified all of Mississippi's expense in manning its inspection stations; the cotton contained at least 10 living full-grown pink bollworms.

The Ohio car was halted at the Greenville station and tourists indicated the stalks were picked up near Austin, Tex. Public reaction to being stopped for inspection has been very gratifying, says Ross E. Hutchins, state entomologist. "We have had many favorable comments and almost no criticism." He has requested other southeastern states to cooperate in halting the pink bollworm spread by establishing inspection stations.

Chemical Control Helpful

The pink bollworm is spread by flight or drift of the moths, says Fred C. Bish-

opp, coordinator of the Pink Bollworm Research Project. In fact, he adds, wide dispersion of the pest in the southwestern United States has been due to natural dissemination and not to man's actions.

Highly successful cotton production in pink bollworm infested areas can only be carried on where the boll weevil, bollworm, aphids, thrips, fleahoppers, and other cotton insects are kept under control. The object, he explains, should be to get a heavy set of fruit and hold it on the plants so that the crop may be harvested early; the stalks and remaining bolls can then be destroyed early in the fall.

The pink bollworm can be controlled with the proper use of insecticides; DDT is best suited for this purpose, says Bishopp. Such control, however, in the absence of good cultural control practices is bound to be expensive. It means frequent application of DDT throughout the season; this often upsets the biological balance and results in the appearance of other cotton pests in injurious numbers.

Farm Program

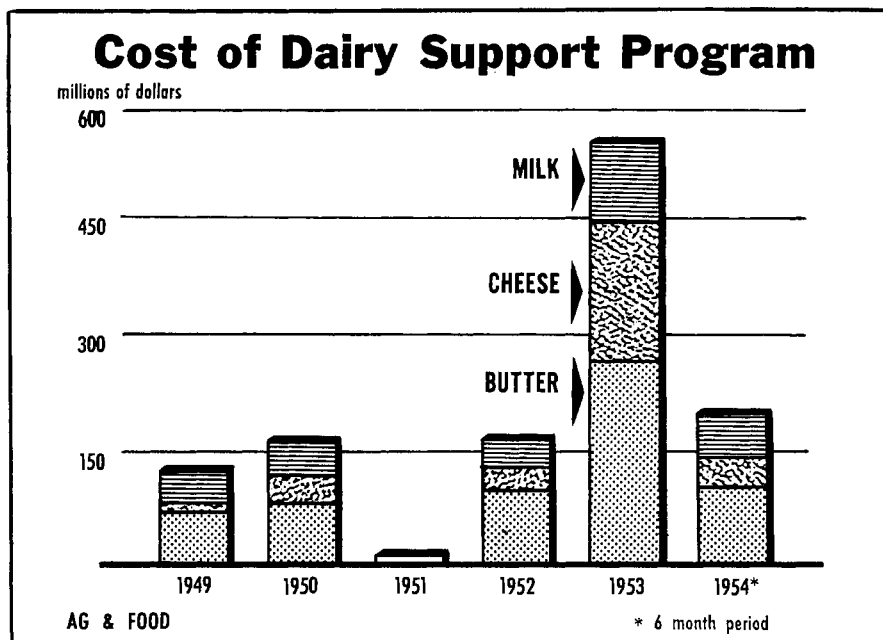
Flexible supports expected. Surplus solutions include direct subsidies, production and marketing controls, Iron Curtain trade

AMERICAN AGRICULTURE must decide soon whether to accept the Administration's new policy of flexible price supports or go back to the days of a firm 90% of parity.

The new system was officially put into operation at the beginning of the year. Farmers have yet to live long enough under flexible supports to form firm opinions—where firm opinions had not been formed before. There are determined supporters on both sides, but no huge ground swell from the farms has developed yet.

In Congress, there is a prevalent feeling that the Benson Plan will be put on a trial basis for a year, perhaps two. Farmers and their representatives will keep a sharp eye on wavering farm prices and any major softening may bring action.

Democratic control of Congress does not mean that the high supports will come back automatically. The supports were initiated by past Democratic administrations, but their chief function was to stimulate wartime food production. After the war, supports became a prop for agricultural readjustments and were looked upon as stop-gap measures.



Congress must face the fact that the American public is becoming concerned over farm surpluses. Farmers are getting lower prices for their crops while consumers continue to pay high prices for food. This goes on while warehouses bulge with surplus crops acquired in former years.

Surpluses could shape farm legislation for years to come. Potatoes and eggs were removed from price support lists after a series of scandals. Dairy products might suffer a similar fate unless ways can be found to reduce present surpluses and to keep them low.

Secretary Benson suggested to Congress three courses of action to relieve the dairy surplus problem in a report presented on the opening day of Congress. In the report he did not single out the method he thought best, but rather submitted them for Congress' study. Clearly, Benson was throwing some of the responsibility for solving the surplus problem right in the lap of Congress.

The first method is the current plan of a flexible support price ranging from 75 to 90% parity. In addition to supports, there would be an "educational program" designed to raise consumption of dairy products, particularly fluid milk. This is in reality the Benson Plan, but the Secretary did not stress it above the other two alternatives.

The "Brannan Plan" would be revived in substance by the second proposal, which calls for direct subsidies to farmers. Dairymen would sell their products on the open market at prevailing prices. Any deficits beyond certain levels would be made up by payments from the Government to the farmers. Wool already is supported in this manner, but extension of the system to other crops

would cause a stiff fight in Congress. The original Brannan Plan was rejected by the lawmakers when it was first proposed.

The third method of getting rid of large dairy surpluses entails production and marketing controls. Benson has been opposed to controls on dairy products before and there is no reason to believe he has changed his mind. He admits they might be successful to some extent, adding, however, that their disadvantages may outweigh their advantages. In any event, it would be difficult matter to patrol the farms of the nation's 1.5 million dairymen to make sure each is getting his fair share.

In the report, Benson indicates that one solution may not be the answer to all problems. The problems of the dairying industry vary from section to section, sometimes even from farm to farm.

Dairy surpluses are but one of Benson's worries. He may find himself in the middle of foreign trade negotiations with Russia or her representatives. The proposal has been made that some of the surpluses be sold to Iron Curtain countries. From present indications these countries will buy when the prices are right. Caution will be the watchword in these dealings because of the potential resentment of American housewives who might have to pay more for domestic butter than their Russian counterparts.

The price "squeeze" on farmers will give the Administration another cause for concern. Farm prices have been dropping faster recently than production costs, which could mean disaster for farmers in bad years. USDA also will extend more help to the low income farmer, in line with the President's State of the Union Message.

On the other hand the price "spread"

will get its share of attention, too. Some farmers are grumbling that they are getting sometimes less than 40 cents out of every food dollar spent. They want this price spread which occurs between the farm and the dinner table to be "realistic." There are some factors working against the farmer's reasoning, though. Much of the spread is taken up by improved processing and marketing techniques. These factors, although costly, may mean more money to the farmer because of increased sales and a longer selling season.

All in all, the Administration's farm program looks much stronger now than it did a year ago. Then Benson was fighting for flexible supports and the rest of his program. Now these programs are working. The big question is how well will they work. On this point will Benson's work be judged.

Waxy Maize Starch

New multimillion dollar grain industry fostered by nongelling cereal starch from misnamed corn variety

A NEW CROP, waxy maize, is making itself felt commercially. Prospects for its future importance—in terms of million-dollar markets—are more than theoretical. Two years ago the crop was estimated at 2.1 million bushels and it is being pushed hard by corn products processors, who admit that they have behind them a decade of steady growth. The future looks promising as the number of farmers planting waxy maize is increasing. Amioca, the primary product, has earned itself a raw materials position.

The grain of waxy maize looks so much like that of ordinary yellow corn that the two are indistinguishable to any but an expert. Unstained starch granules from the two types appear nearly identical under the microscope. Yet few starches are actually so dissimilar as ordinary corn starch and amioca, the starch from waxy maize.

The basic difference lies in molecular structure. Amioca is 100% amylopectin consisting entirely of branched-chain molecules. Corn starch also contains amylopectin, but about 27% of corn starch is straight-chain amylose molecules. The familiar iodine test gives a reddish-brown color with amioca gran-