

injury soon after freezing is the presence of crystals of the glucoside hesperidin in the septa between the segments. These crystals are very commonly found in frosted oranges. They form within two or three days after the fruit is frozen and can easily be distinguished. The presence of these crystals, or the discoloration and wrinkling of the tissues which sometimes accompanies freezing, afford a reliable test as to whether oranges have been injured so that they will deteriorate while being marketed.

It is sometimes said that oranges which have been frozen are unwholesome. Although they are not as attractive and may not be as palatable as sound oranges, the conclusion that they are actually injurious has little, if any, foundation.

LON A. HAWKINS.

OUTLOOK Re- ports—Their Preparation

The growing feeling among farmers of need for complete and up-to-date economic information led the Department of Agriculture in 1923 to begin preparing and issuing statements on the outlook for the production and marketing of the principal agricultural commodities. These reports met with such a favorable reception that the work has been expanded and made a regular part of the program of the Bureau of Agricultural Economics. In the preparation of the reports this bureau has the assistance of other bureaus which have information that needs to be considered, and it collaborates with the extension service in the distribution of the reports.

In January of each year a comprehensive report is prepared covering the outlook for all the commodities on which sufficient information is available. During the summer of each year special reports on the outlook for hogs, sheep, and cattle are prepared and a report on the outlook for wheat production is issued each year just prior to the time of planting winter wheat. The general report on the agricultural outlook for 1926, issued in February, contains statements on 31 different commodities in addition to statements on the domestic and foreign demand situation, agricultural credit, and farm labor and equipment. This report covers a greater number of commodities than any of the reports that had been issued up to that time.

The reports are designed to give to farmers prior to planting and breeding time information as to what the probable conditions will be when their products are ready for market. The statement on every commodity is based on all available information which will be of assistance to producers in planning their production programs and balancing their different lines of production so as to obtain the greatest returns and avoid as far as possible the overproduction or underproduction of any commodity.

Committee for Each Crop

For each of the agricultural products, a committee composed of those in the bureau who are most familiar with the production and marketing of the commodity assembles all available information on the present supply of the product and the demand for it, and on the trends of production and consumption. The committee, assisted by

representatives of other bureaus of the department interested in the production and marketing of the commodity in question, studies the information carefully and makes a tentative judgment as to the outlook for its production during the coming year. The commodity committee then presents its analysis of the situation and its judgment as to the outlook to a larger committee consisting of one member at least of each of the commodity committees, with the chief of the bureau as presiding officer.

This larger committee makes a critical review and appraisal of the findings of each commodity committee so that the statements when made public represent the consensus of opinion of the entire staff of the Bureau of Agricultural Economics and of the assisting members of other bureaus.

The preparation of the reports on cotton illustrates the many points that are considered and the varied sources of information on which the statements are based. Something like half our cotton is exported and careful attention must be given to the foreign demand. The foreign representatives of the department furnish special reports on the trend of conditions in the cotton industry in the countries where they are stationed.

Production from other countries supplies a considerable part of the world's cotton, and trends and conditions in foreign-producing countries must be studied by the committee.

When the prospective domestic demand is under consideration the many ways in which cotton is utilized are reviewed and the trends of general business activity and industrial conditions are appraised with regard to their probable effect on the demand for finished goods.

The supply of old cotton remaining unused when the new crop begins to move has a marked influence on the returns to growers, and the committee must estimate the probable carry-over of old cotton into the new crop year. The likelihood of damage by the boll weevil during the coming season is stated in so far as it can be foretold from the conditions during the previous season and the winter temperatures in the cotton belt. The committee also considers the probable costs of fertilizer, labor, machinery, feed for work stock, and poison for weevils.

Corn Conditions Complex

The outlook for the production of a commodity such as corn depends upon conditions almost entirely different from those which determine the outlook for cotton. Almost all our corn is consumed by livestock and the demand for corn is determined to a large extent by the number and kind of livestock to consume it. Here a judgment must be made as to the probable numbers of hogs, beef cattle, dairy cows, and other livestock that will be on hand when the corn crop not yet planted is matured and ready for consumption. Consideration must also be given to the fact that oats, barley, and other feed crops can be used as a partial substitute for corn. If corn should be scarce and high in price while the supplies of other feed crops are plentiful, livestock producers who must buy feed will be inclined to use less corn. Likewise in arriving at a sound judgment as to the outlook for livestock production, the prospective supply of feeds must be given considerable weight.

The statements necessarily present the national point of view and should be carefully considered by producers in every region to determine whether the general suggestions apply to a greater or lesser extent to their conditions.

In making his plans each farmer must bear in mind not only the probable conditions of the market for the different commodities he can produce, but also the conditions under which he is farming and the characteristics of his own farm. Both the requirements for production and the probable returns from the product should be considered in making decisions as to what to produce and how much to produce.

Since conditions vary so widely in different parts of the country, no blanket recommendation applicable to all the producers of a given commodity can be made in statements which present the national point of view. If the outlook for the production of some commodity is good it does not necessarily follow that all the producers of that commodity would profit by increasing their production. Neither does it follow that it would pay all the producers of a commodity to curtail their production when the outlook is for a lower demand or increased supplies from foreign countries. On account of this, many of the State colleges, through their experiment stations and extension services, have adopted the plan of preparing and issuing statements for farmers within the State, these statements being based in part upon the department's report and in part upon the local conditions that affect the possible lines of production in which the farmers there may safely engage.

Useful to the Cooperatives

These reports have been of particularly great value to cooperative marketing associations and many of these associations have been very active in disseminating the reports among their farmer members. Frequent requests are received from these associations calling for more complete information or information on additional commodities.

The general outlook report issued in January is followed by a report on farmers' intentions to plant spring crops. This information gives producers an opportunity to make adjustments in their plants should there be a tendency to overplant or underplant particular crops. A report on intentions to plant fall crops is issued in August. Frequent surveys of breeding intentions with regard to specific classes of livestock are giving producers more information upon which to base their plans.

It is the intention of the Bureau of Agricultural Economics to expand this work so as to cover a larger number of commodities, to concentrate on the collection of economic information and the analysis of statistical data needed to furnish a better basis for subsequent reports, to obtain wide dissemination of the reports, and to assist the State colleges, cooperative organizations, and others in every way possible in preparing and disseminating localized statements that apply specifically to the farmers in different areas and regions.

When farmers in general come to base their production programs on a well-considered judgment as to the probable demand for their products when they are ready for sale and on the trends of produc-

tion in competing countries and in competing areas in this country, just as successful men in other businesses have been doing for years, farmers will have made marked progress in placing the agricultural industry on a parity with the other industries of the country.

H. R. TOLLEY.

PACKERS and Stockyards Act; How it is Administered

The livestock and meat-packing industry taken as a whole is probably larger than any other single class of business in the United States.

The remarkable growth and extent of livestock production developed certain agencies which came to be recognized as essential to the marketing and processing operations. The livestock markets, or public stockyards, have become the central points through which a large part of the livestock produced in the United States passes on its journey from the farms and ranches to the consumers of the meat and other animal products.

In sending his livestock to these central markets to be sold the shipper usually consigns it to a commission man, or cooperative agency, who make it their business to represent the shipper in caring for and selling the livestock. The buying side of the stockyard markets consists of packer buyers, order buyers, and dealers.

For some years before the passage of the packers and stockyards act there was a more or less general feeling among livestock producers that conditions in the livestock markets were such that general supervisory authority over the many phases of this important business should be exercised by the Federal Government. Specific defects were known to exist and there was much controversy concerning the facts as to the operation of the market machinery by which the value of livestock was established. Leaders in the industry came to realize the need for intelligent and impartial supervision.

The Packers and Stockyards Act

In August, 1921, after extensive hearings, Congress passed a law known as the packers and stockyards act, which vests in the Secretary of Agriculture certain regulatory authority over the packers, stockyard owners, market agencies, and dealers. This authority extends to the business of packers done in interstate commerce, whether carried on at a public stockyard, or elsewhere. Such packers are prohibited from engaging in unfair, unjustly discriminatory, or deceptive practices; or from doing anything to restrain competition; or from establishing a monopoly.

On June 30, 1926, 77 stockyards were within the provisions of the act. A stockyard is defined as a place commonly known as a stockyard, and conducted for compensation or profit as a public market, consisting of pens and inclosures for holding, selling, or shipment of livestock in interstate commerce, containing an area of 20,000 square feet or more. When the Secretary finds that a stockyard meets all these requirements, it is posted as a public market, and due notice is given to the public, and to the stockyard owner. Ordinarily facilities furnished by a stockyard owner are holding, feeding, weighing, or otherwise handling livestock in commerce.