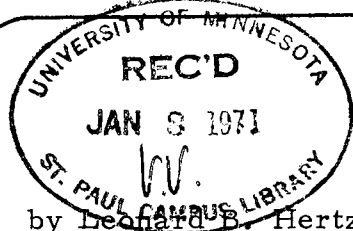


FRUIT GROWERS' LETTER



by Leonard B. Hertz, extension horticulturist

January 1971

ANNUAL MEETING OF APPLE ASSOCIATIONS

The annual meeting of the Minnesota-Wisconsin apple associations will be held on January 12, 13, and 14, 1971, at Holiday Inn No. 2, Madison, Wisconsin. A copy of the program is printed below. Plan now to attend this annual event and support your apple industry.

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WISCONSIN APPLE AND HORTICULTURAL COUNCIL AND MINNESOTA FRUIT GROWERS ASSOCIATION STATE APPLE CONVENTION

January 12, 13, 14, 1971
Holiday Inn No. 2
Madison, Wisconsin

Theme--"Together for Mutual Assistance"

Tuesday, January 12

- 3:00 - 5:00 p. m. -- Set up exhibits
- 3:00 - 7:00 p. m. -- Plate and Apple Contest
- 7:30 p. m. -- Commercialmen's Night

Wednesday, January 13

Chairman -- Don Rawlins, president of WAHC

- 8:00 - 9:30 a. m. -- Registration
- 9:45 a. m. -- Welcome -- announcements
- 10:00 a. m. -- "Apples and Agriculture in the 70's" -- Secretary Donald E. Wilkinson, Wisconsin Department of Agriculture
- 10:50 a. m. -- Annual meeting of the WAHC and MFGA
- 11:50 a. m. -- Luncheon -- View exhibits -- Board of Directors meetings

Chairman -- Marlon Schwier, Wisconsin Department of Agriculture

- 1:30 p. m. -- "As I See It," Competitive position of Wisconsin, Minnesota apple industry -- Dr. Ben Dominick, Cornell University
- 2:45 p. m. -- Quiz the report

This archival publication may not reflect current scientific knowledge or recommendations.
Current information available from University of Minnesota Extension: <http://www.extension.umn.edu>.

Wednesday, January 13 (cont.)

- 3:00 p.m. -- Processing Potentials
Moderator -- Dr. Joachim Von Elbe, University of Wisconsin
Panel -- Bill Wilson, Wisconsin Foods
Andrew Redmann, Fruit Growers Cooperative
Walton Frisch, A. T. Hipe and Sons
Bill Aeppler, Aeppler's Orchards
- 4:30 p.m. -- Apple Social, Ladies Auxiliary
- 6:30 p.m. -- Convention Banquet and Program
Emcee -- Donald Rawlins
Guest Speaker -- J. Robert Zinn, Doctor of Divinity, Congregational Church, Waukegan, Illinois
Apple Contest Awards
Honoree Awards
Alice in Dairyland Remarks

Thursday, January 14

- Chairman -- Tom Aamodt, president, Minnesota Fruit Growers Association
- 9:00 a.m. -- "Thoughts on Orchard Heating" -- Dr. Richard Hayden, Purdue University
- 10:00 a.m. -- "Apple Varieties for Wisconsin" -- Prof. George Klingbeil, University of Wisconsin
- 10:30 a.m. -- "Collar Rot of Apples, Threat to Apple Industry" -- Dr. D. L. McIntosh, Canada Department of Agriculture
- 12:00 -- Luncheon and Program
Chairman -- Dr. Warren Gabelman
Guest Speaker -- Dr. Andrew Duncan, University of Minnesota

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TRAY-PACKS FOR GOLDEN DELICIOUS APPLES

About a third of a million dollars a year could be saved if Golden Delicious apples were shipped entirely in deep-cup tray-packs instead of corrugated cell-packs, the U. S. Department of Agriculture reports.

Studies by USDA's Agricultural Research Service spanning about 5 years show that the major saving results from reduced labor and material costs. Also, storage and transportation costs are lower for tray-packs.

Complete results of the studies including description of shipping containers, procedures, costs and charges tables, and trade reaction are in an 11-page report prepared by James B. Fountain and Roy M. Hovey, ARS agricultural economists, Yakima, Washington.

Copies of the publication, Marketing Research Report 873, "Feasibility of Shipping Golden Apples on Tray-Packed Boxes," are available for 15 cents each from the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20420. Please use zip codes. (From Horticultural Notes, September 1970)

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THE POCKET GOPHER IN MINNESOTA

The pocket gopher, a destructive and troublesome wild mammal, affects Minnesota's agriculture. His tunneling damages many crops by cutting or exposing the root systems; death or reduced vigor of the plants occurs. In hilly areas, these tunnels are often the starting points of damaging soil erosion. The mounds of dirt which are pushed up cover small plants and make the mowing of alfalfa and harvesting of other crops difficult.

The extent of the problem is indicated by results of a questionnaire sent to several Minnesota county agents. Pocket gophers were noted and recognized in 81 counties; they were abundant enough to be considered a problem in 64 counties. In about 40 counties, the county and/or the township paid bounties on pocket gophers.

Trapping and distributing poisoned bait by hand have given mediocre control results. A burrow builder, a machine that makes an artificial burrow and automatically dispenses poisoned bait, gives the best control results when the area is large enough for its use.

To properly evaluate the problems involved in controlling the pocket gopher, we must understand its habits. This animal spends almost its entire life underground in a system of burrows which it digs. These tunnels, usually about 2 1/2 inches in diameter, may be barely under the surface of the soil or 6 feet deep. Most burrows are about 8 inches deep with occasional dips to 18 inches. The shallow burrows are feeding tunnels; deeper burrows usually lead to their nests.

The pocket gopher feeds entirely on vegetation, primarily the fleshy roots of plants such as bluegrass and alfalfa. Although the quantity of tree roots taken annually is not great, gophers may extensively damage young orchard trees and Christmas tree plantations. They find the roots by random digging. While burrowing, they push the dirt up to the surface, forming the characteristic mounds. Sometimes they push the dirt into unused tunnels.

During the spring and early summer, pocket gophers dig only enough to satisfy their daily food requirements. At this time they may plug old burrows and go several weeks without putting up a mound. But during the late summer they start gathering and storing roots for winter. You generally can see a sharp increase in the number of new mounds about the first of September. This activity continues until the soil freezes, but at a decreased rate after the middle of October.

The pocket gopher stores roots in chambers near the soil surface. Individual storage chambers usually contain from 2 to 4 quarts of roots. When chambers are filled, they are sealed off from the tunnels by an earth plug.

The pocket gopher remains active throughout the winter in his burrows and does some digging below the frost line. He packs the dirt into shallow tunnels.



Not being a social animal, the pocket gopher tends to live alone. Occasionally, several gophers may be found in a single burrow system. This social intolerance probably forces the young to leave the home burrow and travel above ground in quest of a new home. They are known to travel over a quarter of a mile in this manner.

This movement of young starts in late summer but is most prevalent in fall. After finding a suitable area, the young animal establishes a burrow system in which it spends the rest of its life. These burrow systems or home areas usually are not more than 200 feet across. Once a pocket gopher is established, his chances of survival are good. The survival rate runs from about 50 to 80 percent per year for females and from about 25 to 45 percent for males. Some females live at least 4 or 5 years.

Unless large areas are systematically worked, control methods give short-lived results. Since it is often not practical to cover large areas completely, you have to think in terms of a continuing program. Control methods usually are most effective in the late fall when: 1) the presence of pocket gophers is most easily determined, 2) soil conditions are often suitable for use of the burrow builder, and 3) animals are gathering food.

By eliminating pocket gophers in the fall, no reproduction will occur in the area the following spring. But the area will be reinvaded the next fall. During the second spring, some moderate reproduction will occur. With further invasion of outside animals, a nearly normal breeding population will be established by the second fall. At this time control methods are again necessary. (From Minnesota Science, July 1967. The author, J. R. Beer, Department of Entomology, Fisheries, and Wildlife, University of Minnesota.)

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EARLY N FOR STRAWBERRIES

Fall fertilization of strawberry plants is not necessary provided the plants are healthy and vigorous, and the soil is fertile, says a Michigan State University horticulturist.

Strawberry growers in Michigan have traditionally fertilized their crops in the fall, assuming that fertilizing them will stimulate flower growth and result in a better yield the following year.

But a four-year study of plant nutrition and fertilization revealed that the nutritional level of the plant in July had the greatest effect on yield the following spring. Fertilizing after July had little or no beneficial effect on plant growth when early fertilization and plant vigor had been adequate.

Nitrogen was the only nutrient studied that had a notable effect, and it had little effect when applied after July. Phosphorus applications had no beneficial effect throughout the study, and its use probably could be discontinued on healthy plants. The optimum amount of actual nitrogen per acre appears to be between 50 and 100 pounds. (From Vegetable Crop Management, October 1970. The author, J. Hull, Michigan State University.)

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