ATTEND BARBECUE — Among the 300 Rotarian-cattlemen who attended the recent barbecue at the Malin Park were these officials. Left to right are Norman Jacob, president, Klamath Cattlemen Association; William Marshall, Klamath Falls, vice president of the state association, and Walter Schrock, Bend, president, Oregon Cattlemen's Association. — County Agent Photo

Nature Develops A Defense For Chemicals, Says Expert

Worried about possible hazards of the chemical age in which you live?

It's no wonder many people are, considering all the drugs, cosmetics, flavorings, preservatives, dyes, highway gases, and pesticides in addition to nature's own complex materials that a person comes in contact with every day.

However, an Oregon State University scientist says since these —and other — many and varied chemicals are here to stay, it's comforting to remember that humans and animals always have encountered dangerous chemicals in their environment, and nature has developed a defense against them.

Dr. Leon C. Terriere, OSU biochemist, explains that all living things are continually exposed to a wide variety of natural and synthetic chemicals not required for life. These things must be eliminated from the body whether they are poisonous or not. Whenever a foreign organic compound enters the body, right away it becomes involved in a series of biochemical reactions to remove it from tissues and cells. These reactions are called detoxication.

They're chemically simple—the kind of reactions nature uses to transform one nutrient into another, to activate hormones, or to build tissue. Detoxication transforms chemically inert, water insoluble compounds into water soluble compounds. In this state, they move to the excretory organs and pass out of the body.

Terrier says it's a rare compound that cannot be modified this way. The extent and speed of the reactions determines how long the foreigner remains in the tissues and how extensive its harmful effect may be.

In studies with animals, it has ben found that ability to detoxify compounds varies from species to species, individual to individual, and even with respect to sex and age.

Although detoxication has been studied for more than 100 years, it's only been within the past six or seven years that scientists have learned in which cells important steps in detoxication occur. This discovery has opened a new avenue of study.

Terriere, whose special interest is pesticides, says he's confident that progress toward selective pesticides—safe to man and wild life, livestock and benefical insects, but effective against insect pests—will come as a result of further comparisons of detoxication differences between species.

The OSU biochemist has done much work in studying how animals—particularly resistant insects—protect themselves against chemicals in their environment.

There aren't many instances where tests with humans have been used to study detoxication of pesticides. There are, of course, numerous examples with experimental animals, nearly always providing evidence that such processes do occur. And there's plenty of evidence that detoxication processes protect humans too.

In fact, doctors rely on detoxication when they prescribe drugs, anesthetics, and even simple aspirin. If such drugs weren't detoxified, they would remain in the body longer than desirable and might cause harmful side effects, Terrier explains.

Pesticides entering the human body by chance are detoxified just as are drugs, cosmetics, agents, etc. They don't remain in the body. Instead, they are metabloized and excreted.

Terrier believes that detoxication is a definite and reliable defense mechanism which protects animals from traces of toxic materials in their environment. As more is learned about detoxication, its importance as a protector will be appreciated even more greatly, he believes.

Grain Feed Industry Position Improving

The competitive position of Oregon's grain-feeding cattle and hog industries has improved during the past year and present prospects indicate the improved position should continue during the coming year, reports M. D. Thomas, Oregon State University extension agricultural economist.

Thomas makes his comments in the new Oregon Farm and Market Outlook circular just published by OSU. Copies are available from county extension officers or from the OSU Bulletin Clerk, Corvallis.

Figures on prices received for grains and livestock in Oregon and the Great Plains area show that Oregon cattle feeders and hog raisers recently could buy more local barley with money received from their animals than their corn - feeding Midwest counterparts, Thomas said.

A year ago, and frequently in the past, corn and milo feeders in the Midwest had a big price advantage over local producers, the economist noted.

The improvement in cattle and swine feeding could spread a year from now to include poultrymen and other potential wheat feeders in Oregon and the Pacific Northwest if the price spread between Northwest wheat and Midwest grains closes as much as now seems likely, Thomas observed.

Changes in competitive positions stem primarily from higher corn and milo prices east of the Rockies and lower wheat and barley prices in the Northwest during the past year, he explained.

These lower prices have adversely affected incomes of the region's cash grain growers, Thomas said, but added that these adverse effects have been partially or entirely offset by payments to those who participated in 1963 diversion programs.

For 1964, income - reducing effects of prospective lower wheat prices could be alleviated in part or entirely through the "voluntary" certificate plan recently introduced in the Senate or through some other version of the direct payment plan, Thomas added.

Other proposed federal grain legislation introduced since the May 21 national wheat referendum would tend to price wheat away from grain-feeders and aims to limit wheat production to domestic food uses and subsidized exports, he reported.

Recent and prospective changes in grain price relationships reflect, to a considerable extent, changes in federal grain programs during the past 19 months, Thomas continued. Recent federal grain legislation, administrative action and the May 21 vote have combined to improve the current situation and outlook for Northwest grain-feeding industries.

These developments are important to the region's grain growers, the economist said, because they improve chances for the Northwest to maintain and develop feeding outlets for local grains.

Continued over time, this would favor use of much of the region's good grain lands and related resources to produce more of the meat wanted by the Pacific Coast's growing population, he pointed out.

Whether recent regional gains in competitive position and prospects are retained will depend considerably on three factors, Thomas believes. These are:

1. Pacific Northwest grain producers, feeders and allied industry leaders recognizing their common interests in relationships between grain prices here and in the Great Plains.

2. Making their problems and preferences known to federal legislators and program administrators, and

3. On Congressional and administrative action, as long as grain price levels and relationships are largely manageable under federal grain programs.

Index Shows Farm Prices Declined From Year Ago

By BERNARD BRENNER
United Press International

WASHINGTON (UPI)—The Agriculture Department's monthly farm price report shows prices in terms of parity for mid-September were down five per cent from one year ago.

The report showed the average prices for crops and livestock down to 77 per cent of parity. In mid-September, 1962, farm products were selling for an average of 81 per cent of parity.

The report showed a squeeze on profits for cattle and hog producers. Prices for hogs and cattle dipped between mid-August and mid-September while the price of corn, the chief livestock feed, went up. The index for livestock feed prices was the highest for any September since 1956.

Corn was selling in mid-September for a national average of $1.21 a bushel. This price was up two cents from mid-August, and it was 14 cents above the price in mid-September of 1962.

Agriculture Department spokesmen pointed out, however, that corn prices normally begin to decline after September as the harvest season comes on.

Power Saws Can Cause Forest Fire

Power saws and tinder-like forest debris add up to forest fire danger unless proper precautions are taken, warns Charles R. Ross, Oregon State University extension forestry specialist.

Operators of power saws, tractors, trucks and other motorized equipment in the woods should be unusually careful of fire risks this year, the specialist stressed. Sparks from exhausts falling on dry materials can start fires and the woods have never before been so filled with tinder-like debris.

Chain saws are the most numerous equipment in the woods and the most potent in causing fires, Ross cautioned. Dried moss on downed trees and red slash of dried out twigs and needles make highly flammable material in blowdown debris.

A chain saw with muffler turned toward a log can start a slow fire on a dry, mossy log when the motor is held in about the same position for a half-minute. Oregon law requires that a fire extinguisher and shovel be kept with the saw to control any fire that may start, Ross reminded.

Realizing the unprecedented forest fire danger this season, the Keep Oregon Green Association and chain saw dealers are distributing free fire caution tags to be attached to saws. The tags, listing 11 fire prevention rules, were printed by a chain saw manufacturer, Ross said.

Key fire prevention rules for users of chain saws include using the proper oil and gasoline mixture, permitting a hot saw to cool for a few minutes before refueling, refueling only on a spot cleared to bare ground, cleaning all spilled gas from the engine before starting.

Spray Caution Advised

ALTURAS—The Modoc County agriculture commissioner, Loring White, warned this week that users of Ruelen, Co-Ral, and other livestock dips and sprays should practice certain precautions in applying to livestock.

"These sprays carelessly used, can be absorbed in dangerous amounts through the unbroken skin and may lead to serious illness and in many cases hospitalization for the person afflicted," White pointed out.

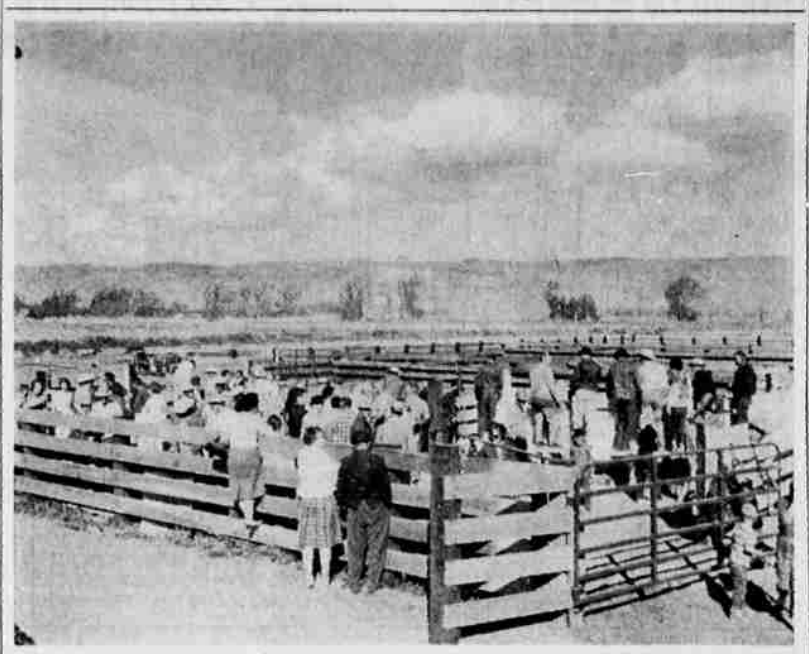
County health officer Dr. Lloyd Shannon and Farm Adviser Cecil Pierce joined White in suggesting these precautions

1. Do not splash the material on clothes.

2. Wear gauntlet type rubberized gloves (without knitted wristband.)

3. Wash and change clothes after using, or when material is accidently spilled on clothing.

Last year in Modoc County there were several serious cases of poisoning from use of the sprays and dips.



INSPECT FACILITIES — The working corral and dipping vat for the Ore-Cal feed lot were inspected by cattlemen during a tour that followed the cattlemen-Rotarian barbecue held in the Malin Park. About 300 in all attended the event. The tour also included the Pope feed lots. — County Agent Photo

Sagebrush Moth Activity Can Be Blessing To Range

Management plans are needed to take full advantage of the possibilities for range improvement being offered by the sagebrush defoliating moth now devastating sage throughout much of Eastern Oregon, reports Dillard Gates, Oregon State University extension range management specialist.

The moth (Aroga Websteri) is working on an estimated six to seven million acres of sagebrush rangeland. Areas badly infested in 1962 show evidence of an almost complete kill of sage, but it is still too early to determine the final effects, Gates said. Older, stagnated sage stands appear to be the most vulnerable.

However, he cautions, range owners, managers and users need to be ready to act to take full advantage of the situation, which is much like having large areas of the range chemically treated to kill sagebrush.

Gates urges that where sage has been killed, range managers take a serious look at the possibilities of seeding the area with adapted forage species, primarily crested wheatgrass.

In other areas, it will be necessary to set up a management plan which will encourage already existing perennial grasses to stage a comeback from sage domination, he continued. This will be particularly critical next spring.

When possible, Gates suggests that range users consider holding their livestock on feed for an additional two or three weeks or longer than usual before turning them on the range in the spring. Deferred use is needed in order to allow vigor to return to the native grasses, he stressed.

However, he added, seeding is a must in areas where no grasses exist under the killed or dying sage. Unless action is taken to seed these areas, undesirable range plants, such as Medusahead or rabbitbrush, will move in to fill the vacuum left by the moth.

The heaviest Oregon infestations are in Lake, Harney and Malheur counties. However, the insect is found throughout Eastern Oregon's sage and grass country as well as in Northern California, Nevada and Idaho.

This is the first time that such an outbreak of the Aroga has been recorded, Gates explained. Although native to rangeland, little is known about the insect.

Research conducted at the University of Idaho determined that eggs are laid by the moth in late summer on sage bark and small stems. The larvae, hatched in early fall, mine into sage leaves and overwinter there.

The leaf mining continues in the spring when the larvae pull small clusters of leaves together and cover them with a fine web. The larvae pupate within the webbing and emerge as adult moths in late June or July.

It now appears that elevation, moisture and plant vigor affect the work of the Aroga. Gates has noted that it does not affect young, vigorous plants and that the insect becomes less frequent at higher elevations. Sage growing in swales or other low spots where moisture accumulates also appears resistant.

Bulletins giving information on range management practices and forage species published by the OSU Agricultural Experiment Station and Cooperative Extension Service are available from county extension offices or from the OSU Bulletin Clerk, Corvallis.

OSU Plans Celebration

OREGON STATE UNIVERSITY —The School of Home Economics at Oregon State University will celebrate its Diamond Jubilee this coming academic year with a series of four conferences designated as Challenges to American Families.

Dr. Betty Hawthorne, professor of foods and nutrition, is chairman of the 75th year program. The four conferences will be from Nov. 15 to April 18. Meeting with two of the conferences will be the Oregon Home Economics Association and the Oregon Dietetic Association.

Theme of the conferences and the dates are Advances in Nutrition (Nov. 15-16); Textiles in Our Modern World (Jan. 17-18); The Family as Consumers (Feb. 21); and Changing Values and the Family (April 17-18).

Keynote speakers for the four conferences will be Dr. Hazel K. Stiebeling, former deputy administrator of the Agricultural Research Service, Nutrition and Consumer Use Research, U.S. Department of Agriculture; Dr. Milton Harris, vice president, the Gillette Company, Boston; Dr. Helen G. Canoyer, dean, College of Home Economics, Cornell University; and Dr. Jessie Bernard, Department of Sociology and Anthropology, Pennsylvania State University.

Canadians Hold Shipping Edge

PORTLAND (UPI) — Two-thirds of all Pacific Northwest cargo lumber shipments to the U.S. Atlantic Coast in August came from British Columbia mills, the Western Forest Industries Association announced today.

British Columbia mills also captured the entire Puerto Rican market in August, the association said.

The Canadian mills shipped 77,202,886 board feet to East Coast markets, and 5,361,602 board feet to Puerto Rico.

Washington, Oregon and Northern California mills shipped 40,328,347 board feet to Atlantic Coast states.

POTATO COMMITTEE MANAGERS' JOINT DISPOSITION REPORT, 1963 CROP SEASON WITH 1962 CROP SEASON COMPARISONS
CUMULATIVE FIGURES THRU September 30, 1963 COMPILED BY OREGON-CALIFORNIA POTATO COMMITTEE, P.O. BOX 788, REDMOND, OREGON
BULLETIN NO. 3 DATE 9-24-63

	Ore.-Calif. 1963	Ore.-Calif. 1962	Washington 1963	Washington 1962	Idaho-E.Ore. 1963	Idaho-E.Ore. 1962	Sanlucia,Col. 1963	Sanlucia,Col. 1962	No. Colo. 1963	No. Colo. 1962	Red River 1963	Red River 1962	Maine 1963	Maine 1962	Total & Areas 1963	Total & Areas 1962
	(CARLOTS - 100 cwt.)															
Fresh Market △																
1. By Carrier:																
Rail	6	2	5641	5220	1600	2697					1223	589			8472	8511
Truck	171	98	2061	2178	591	678					655	374			3478	3323
Total	177	100	7702	7395	2191	3376					1878	963			11918	11834
2. By Grades:																
U. S. 1	147	87	6570	6387	1762	2559					1291	536			9770	9569
U. S. 2	30	13	1122	1001	145	332					61	63			1358	1409
U. S. Com'l.			10	7							526	364			536	372
Mixed					284	485									284	485
Total	177	100	7702	7395	2191	3376					1878	963			11948	11834
3. By Variety:																
Reds	31	4	293	299	114	189					950	534			1388	1026
Whites	105	92	807	942	165	199					928	429			2005	1662
Russets	41	4	6454	5964	1840	2882									8335	8850
Mixed			148	190	72	106									220	296
Total	177	100	7702	7395	2191	3376					1878	963			11948	11834
	(75%)	(75%)	(72%)	(79%)	(52%)	(50%)					(90%)	(75%)			(70%)	(67%)
Other Outlets																
1. Seed/2	1		2								106	216			109	216
2. Export			35	4											35	4
3. Food Processing/3	1	3	743	730	1769	3038									2513	3771
4. Non-Food/4																
Starch			276	718	253										529	718
Livestock Feed/5	58	30	1899	559		338					97	101			2054	1030
Total	60	33	2955	2011	2022	3376					203	319			5210	5739
	(25%)	(25%)	(28%)	(21%)	(48%)	(50%)					(10%)	(25%)			(30%)	(33%)
TOTAL DISPOSITION	237	133	10657	9406	4213	6752					2081	1282			17188	17572

△ Certified as meeting M.O. fresh market requirements. Primarily table stock but may include few shipments to non-table stock outlets.
/2 Certified seed shipments only and reports from some areas incomplete.
/3 Many lots contain high percentage U.S. 1 and U.S. 2 grades. Includes chips, canning, freezing, flour and all types dehydrated products
/4 Lots contain lower percentage of U.S. 1 and U.S. 2 grades or fail to meet M.O. fresh market requirements.
/5 Includes diversion to livestock feed, farm use, seed used for planting within area, etc.