Forestry Kaimin, 1955

Forestry Student Association

Follow this and additional works at: https://scholarworks.umt.edu/forestrykaimin

Let us know how access to this document benefits you.

Recommended Citation

This Yearbook is brought to you for free and open access by the University of Montana Publications at ScholarWorks at University of Montana. It has been accepted for inclusion in Forestry Kaimin, 1915-2015 by an authorized administrator of ScholarWorks at University of Montana. For more information, please contact scholarworks@mso.umt.edu.
THE FORESTRY CLUB

of

MONTANA STATE UNIVERSITY

Presents Its

40th ANNUAL

FORESTRY KAIMIN

1955
The following resolution was passed unanimously by the Board of Education at its meeting in Billings on April 18, 1955:

RESOLVED, that upon the occasion of his retirement from the faculty of Montana State University, the State Board of Education expresses its appreciation of the long and faithful services of Fay Goodcell Clark. When the veterans of the first World War entered the School of Forestry a need was felt for someone specially qualified to help meet the educational demands of this group. Fay Clark, then with the U.S. Forest Service was invited to join the staff of this University to help with the teaching. Thirty-three years of teaching and association with students have produced a record which demanded industry, independent thinking and practical understanding of the field of forestry by graduates of the School of Forestry. He will be long remembered as one who has given color and distinction to Forestry education at Montana State University. We are appreciative of his service to Montana and the University.

The students of the Forestry School take great pleasure in being able to dedicate the 1955 Forestry Kaimin to him.
Another year—another graduating class, new Frosh, and another Forestry Kaimin. Perhaps a little later than usual this year, but problems always seem to mount up. The publication date was changed this year so as to include the entire school year—from Fall to Spring. Because of this, the Spring quarter activities of 1954 were lost in the shuffle.

A few of the high-lites: Jack Chamberlain received the annual alumni award for the year; both a Spring hike and dance were held; Senior rangemen and timbermen went on their respective trips, while the Forestry Club was ably represented at the A.W.F.C. Conclave in Oregon. We even “WON” a prize—“The Royal Order of the Rusty Pulsaski.” The Sophomore class attended numerous Saturday picnics, and even our softball team won a couple of games.

My thanks to all for being patient with us, and especially to our advertisers. Thanks also to Al Crozer for all his time and gas, to the other staff members for their time and energy, and to the ad chasers.

The work is done and mostly forgotten, but the Kaimin will be around to bring back stories, good times and memories.

Ye Olde Ed.

KAIMIN STAFF

Left to right—Joanne Golden, Feature Writer; Jean Campbell, Feature Writer; Dick Johnson, Editor; Jack Duke, Advertising; Allen Crozer, Business Manager; Pete Stofle, Advertising Manager; Mary Meagher, Feature Writer. Not pictured: Paul Bruns, Faculty Advisor; Glenn Freeman, Photo Editor.
ROSS WILLIAMS
Dean of the Forestry School
Director of the Montana Forestry and Conservation Experiment Station
Professor of Forestry
B.S.F.—Montana State University—1921
M.F.—Yale University—1923
Survey of Forestry and Farm Forestry

FAY CLARK
Professor of Forestry
B.A.—University of Michigan—1912
M.S.F.—University of Michigan—1914
Menuration and Valuation

PAUL BRUNS
Associate Professor of Forestry
B.A.—New York University—1937
M.F.—Yale University—1940
Forest Management, Silviculture and Regional Silviculture

MEL MORRIS
Professor of Forestry
B.S.—Colorado A. & M. College—1930
M.S.—1932
General Range Management, Conservation Economics, Big Game Management, Big Game and Wildlife Management and Regional Range.

CHARLES WATERS
Professor of Forestry and Botany
B.S. and B.L.—Berea College—1919
M.A.—Ohio State University—1921
Ph.D.—University of Michigan—1927
Dendrology, Wood Technology, Forest Pathology and Silvics.

JOHN KRIER
Assistant Professor of Forestry
B.S.—University of Idaho—1947
M.S.—1948
Ph.D.—Yale University—1951
Forest Utilization
Forest Policy
Sawmilling & Lumbering
Seasoning & Preservation
Mechanically Derived Wood Products

GENE COX
Associate Professor of Forestry
Soils, Silvicultural Methods, and Seeding and Planting

JAMES KLEMMEDSON
Instructor of Forestry
B.S.F.—University of California—1950
M.S.—Colorado A. & M. College—1953
Range Management, Range Forage Plants

JAMES FAUROT
Instructor of Forestry
B.S.F.—Montana State University—1949
Engineering, Logging, and Timber Mechanics
Faculty

BEN HUEY
Assistant Professor of Forestry
B.A. in Economics—Kansas University—1938
B.S.F.—Colorado A. & M.—1942
M.S.F.—Montana State University—1951
Forest Economics

LOUIS POWELL
Instructor of Forestry
B.S.F.—Oregon State College—1950
M.F.—Duke University—1951
Surveying, Aerial Photo Interpretation, Mapping

DON DRUMMOND
Instructor of Forestry
B.S.F.—Utah State Agricultural College
M.F.—Louisiana State University—1939
Forest Fire Control

MRS. HELEN ETTINGER
Librarian

DORA RATZBURG  MARY ANN KOCAR
Secretaries
The movement of mule and white-tailed deer from summer to winter range is a normal characteristic of these game animals in western Montana. The winter range is generally limited in size and results in the concentration of game animals. In open winters the area is much larger than that when the winters are severe. Whatever causes an earlier, longer, and a more concentrated condition of animals on the winter range contributes to heavy or excessive use of winter feed and to abnormal use of a typical food materials. Good forage species lose vigor, coniferous reproduction is damaged and in some years heavy die-offs of animals take place.

Commonly build-ups in deer population, severe winters, or artificial feed are the principle contributing causes to excessive concentrations of game. Severe winters are natural and expected and would probably, with normal populations of game, present no special problem in game management. However, due to under-hunting of deer populations, and by unwise feeding of game, concentrations are of more frequent occurrence, more intensive, and aggravate the effect of severe winters.

A situation of excessive concentration due to the above named causes and subsequent damage to forage and trees as well as heavy die-offs exists in the vicinity of Salmon Lake in the Blackfoot valley of western Montana. It is the purpose of this study to measure the effect of deer concentration, as a result of winter feeding, on the amount and condition of both forest reproduction and natural forage species.

Review of Literature

In a study of the effect of deer browsing on ponderosa pine and Douglas-fir reproduction in northwestern Montana, Adams (1949) found ponderosa pine showing more past use than Douglas-fir. He also found a higher mortality in ponderosa pine than he did in Douglas-fir.

Davenport (1939) shows in a controlled diet study in Michigan that from a nutritional standpoint it is entirely possible to carry deer on artificial diets where the natural winter food is insufficient. However, maintaining by artificial feeding a herd that is already so large that the increase cannot be harvested under present hunting regulations can readily be seen to be impractical.

Doman and Rasmussen (1944) in their study on supplemental winter feeding of mule deer in northwestern Utah, believe it impractical as a welfare program. They also consider it impractical from the standpoint of both cost and range management. Artificial feeding serves to concentrate deer in small areas year after year causing irreparable damage to native forage species, and eventually severely reducing the carrying capacity of the much needed winter range. Carhart (1943), along with other game technicians, believes winter feeding has limitations.

Methods

Location of the Study: The study is located in the Clearwater drainage. Area I is located north of Placid Lake, and is on a south facing slope. Area II is located north of Owl Creek, and is also on a south facing slope. Area III is located west of the Shishler ranch adjacent to the Clearwater River. See Fig. 1.

Description of Vegetation: The vegetation on which the study was made is typically montane forest. The principle coniferous species are ponderosa pine (Pinus ponderosa), Douglas-fir (Pseudotsuga menziesii) rocky mountain juniper (Juniperus scopulorum), some lodgepole pine (Pinus contorta) and western larch (Larix occidentalis).

Deciduous shrubs found are chokecherry (Prunus demissa), serviceberry (Amelanchier alnifolia), rose (Rosa spp.), willow (Salix spp.), ceanothus (Ceanothus velutinus), kinnikinnik (Arctostaphylus uvi-ursi), and a few aspen (Populus tremuloides).

Sampling Procedure: In each study area three sample lines were run up the slope and radiated 20 degrees from a feeding center. The lines were located by means of a hand compass. Sampling plots, one-tenth acre in size, were established along the control lines at intervals of at least two chains. Plot centers were established by pacing and plot area determined by chaining.

Method of Plot Analysis: Both physical and vegetative characteristics were tabulated on special data sheets. The physical characters tabulated for each plot were aspect, position on slope and slope percent. The trees were enumerated by the following size classes: seedling, trees below 2 feet tall; sapling, 2 to 7 feet tall; pole, 7 feet tall to 6 inches dbh; and mature, over 6 inches dbh. Trees over seven feet high were measured for height of highline. Trees under seven feet and the deciduous browse were enumerated by degree of use classes. The classes consisted of six categories of use, no browsing, lightly browsed (1-25% of tree browsed), moderately browsed (26-50% of tree browsed) (Continued on page 22)
The following men worked towards their Masters Degree during the 1954-1955 school year:

EDWARD C. BARKMAN—FOREST ENGINEERING
VOLLRAT (FRED) DEICHMAN—FOREST FIRE CONTROL
JOHN H. LOWELL—WILDLIFE MANAGEMENT
WESLEY MORRISON—FOREST FIRE CONTROL
HOWARD S. NELSON—RANGE INSECTS
ARTHUR L. ROE—FOREST MANAGEMENT
ANTHONY E. SQUILLACE—FOREST GENETICS
ROBERT STONE—FOREST MANAGEMENT
DAVIS A. WEISTANER—FOREST PATHOLOGY

---

PSALM OF A SAMPLE PLOT
by Elmer W. Shaw

My boss is head chainman; I shall not rest.
He maketh me to survey the deep forest; he leadeth me through the peat bogs: I am buried in mud.
He leadeth me in paths of wilderness in the name of research.
We stake out the plot centers: We tag trees by the thousand.
Yea, though I’m lost amid hemlocks and fir trees, I will fear no evil for thou art with me. Thy compass and jake staff they guide me.
Thou preparest a pathway before me through wet salmon berry, vine maple, and skunk cabbage.
I anointeth my skin with repellent, yet mosquitoes swarm o’er me.
Surely insects and statistics shall follow me all the days of my life, and sample plots haunt me forever!

(With humble apologies to all other psalmists, I remain a bug-bitten, rain-soaked, timber beast.)

Copyrighted 1953—by Elmer W. Shaw, "Green Pastures," Lacey, Washington
Jack Chamberlain

Jack is a timber management major from Spokane, Washington. He attended Northern Idaho College of Education before coming here. Jack has been very active, serving as chairman of the 1952 Fall Dance, Ass't. Chairman of Gym Decorations, and Chairman and Advisor of the Tree Cutting for the Foresters' Ball. He has played touch football, softball, volleyball, intramural golf. He has been vice-president of the Druids and a member of the A.S.M.S.U. Budget and Finance Committee. Jack is also a member of the Delta Tau Chapter of Alpha Tau Alpha. In 1952, '53 and '54, he worked for the Forest Service in Pierce, Idaho, as a scaler and dispatcher.

Charles T. Coston

Charles hails from Oak Ridge, Tennessee, and is another timber management major. He attended the University of Tennessee before coming here. In 1951, he worked as a lookout-smokechaser at Nine Mile R.S. 1952 and 1953 he did cruising and timber marking on the Lolo National Forest. In 1954 he worked as a fire control aide at the Seeley Lake R.S.

J. Russell Dahl

A timber management major, Russ comes to us from Hot Springs, Arkansas. He attended Arkansas Polytechnic College before coming here. Russ has been very active in the Forestry Club, serving as advisor for Tickets and Favors Committee of the Foresters' Ball. He was a manager of the 1954 Forestry Kaimin. He is a proctor at South Hall and is a member of A.P.O., serving as vice-president for one quarter. In 1952, he worked at the Priest River Experiment Station on the Soil Infiltration Project. 1953 saw him working on the Nez Perce. In 1954, he worked at the Missoula Research Center.

Francis E. Dunning

Frank is a forest management major from Billings, Montana. He attended Eastern Montana College of Education before coming here. In 1952 and 1953, he worked for the Forest Service in Gardiner, Montana, at F.C.A. In 1954, he worked as a timber management aide in Powell, Idaho.

Ralph A. Emerson

A forest engineering major, Ralph comes all the way from Juneau, Alaska. He has been very active here, being a member of Druids, serving as president of Forestry Club, working on Gym Decorations for the Foresters' Ball, and ad-chaser for the Kaimin. He has also played intra-mural football for the club. 1947-48, he worked as a lookout-smokechaser on the Flathead National Forest. In 1949, he did timber marking on the Coeur d'Alene N.F. 1950 and 1953, he worked for Potlatch Forests, Inc. as a compassman. 1954, he worked as an engineer helper on the Potlatch Forests, Inc.

Norman Garrick

Robert S. Gibson, Jr.

Another forest management major, Bob comes to us from Butte, Montana. He is a member of the Forestry Club, has worked on the Foresters' Ball and has been Circulation Manager for the Kaimin. He is a member of Sigma Nu. In 1950, he worked for the Empire Millwork Corp. in Nykomish, Wash. In 1951, he worked on the Deerlodge N.F. 1952, he worked for the Poleline Construction Co. In 1953, he worked on the Lolo N.F. and in 1954, he worked on the Beaverhead N.F.

John J. Gilliam

John hails from Lincoln, Montana. He is a member of the S.A.F. and attended Metropolitan J.C. in March-May of 1951. He is a member of the Forestry Club and has worked on the Foresters' Ball. 1952 saw him working as a lookout and 1953 and 1954 saw him working as dispatcher in Lincoln.
ROBERT GREENAN
Bob is from Chicago, Illinois and is a timber management major. Bob is another active member of the Forestry Club; he has been A.W.F.C. Veep, worked on the Foresters’ Ball in connection with sound and lighting, publicity, gym decorations (chairman and advisor). He has been layout editor of the Kaimin. He is a member of the Druids and has played intra-mural football. Bob worked for the Kingston R.S. for two years; the Western Montana Sawmill in Missoula; and for the school forest for one year.

HAROLD E. HANSON
Another forest management major, Bud is from Longville, Minnesota. He attended S. Dak. State and Cornell University before coming here. He is a member of the Forestry Club, serving as Junior delegate to Executive Board; has worked on the Foresters’ Ball, and has been Honor Council Chairman. He is a member of Druids. Harold has played I.M. bowling, softball and basketball, serving as coach for the latter. 1952, 1953 and 1954 saw him working for the Forest Service in Forest Surveys.

JOHN L. HAUTZINGER
John is from Omaha, Nebraska and is a forest management major. He attended Omaha University in 1950-51. He is a member of the Forestry Club, has worked on the Foresters’ Ball, and has been business manager for the Kaimin. He has been captain of the varsity rifle team, and is a member of the A.F.R.O.T.C. rifle team. 1952, he worked for the Forest Service as a smokejumper. 1953, he worked for the Forest Service as a scaler in Juneau, Alaska. 1954, he worked for the Forest Service in Lima, Montana as alternate ranger.

LARRY HELWIG
Larry is a wildlife management major from Waubay, S. Dakota where he attended Northern State Teachers College before coming here. He has been athletic manager for the Forestry Club, Chairman and advisor of the Foresters’ Ball chow hall, and asst. layout manager of the Kaimin. He has played I.M. softball, volleyball and basketball. He has had a Range Management Problem published in the Journal of Range Management. In 1953, he worked on the Medicine Lake National Wildlife Refuge and in 1954; he worked for the South Dakota Fish & Game Dept.

JOHN D. HOLDEN
John hails from Van Nuys, California. He is a forest management major and he attended Los Angeles Valley J.C. and Oregon State College before coming here. John has been active in the Forestry Club, serving as delegate to A.W.F.C., senior delegate to Executive Board, editor of the Montana Foresters’ Book, and a member of the bar committee of the Foresters’ Ball. In 1950, he worked on the Kaniksu N.F. in B.R.C. 1951 and 1952, he worked on the Angeles N.F., as F.C.A. and Tank Truck Operator. 1953, saw him working for the Coos Bay Lumber Co. 1954, he worked for the Missoula Research Center, Forest Management Division.

RALPH T. JASZKOWSKI
Ralph is from Missoula, Montana and is a timber management major. He attended the University of Illinois before coming here. Ralph is the winner of the 1954 Silas Thompson Award. He is a member of the Druids and is very active in the Forestry Club; he has been sophomore delegate to Executive board, chairman and advisor for the doorway and bar committees of the Foresters’ Ball. He has also worked on Kaimin photography and Spring Hike committee, Conservation committee, and A.W.F.C. Conclave in 1954. Ralph has played I.M. football and softball. In 1951, he worked on the Kaniksu N.F.; 1952 was also spent on the Kaniksu N.F. In 1954, he worked on the Lolo N.F.

ALLEN F. KELLEY, JR.
Another timber management major, Al hails from Greenfield, Massachusetts. Al has served as chairman of the Home Ec.-Forester Dance; worked on the check room and gym decorations committees of the Foresters’ Ball; and layout manager for the 1954 Kaimin. He is also a member of the Druids, Phi Kappa Phi, and Kappa Tau. Athletically, Al has played I.M. swimming, track, and volleyball. He is also a member of Royalists, Independents, and the Ski Club. In 1952, he worked as a lookout in Condon, Montana and in 1953 and 1954, he worked as a smokejumper.

GENE L. KUHNS
Gene is from Milwaukee, Wisconsin and is a wildlife management major. He attended the University of Wisconsin. He is vice-president of A.W.F.C., chairman of the Spring Dance, and chairman of the Music Committee of the Foresters’ Ball. Gene is a member of the M Club and has been in varsity swimming, has played I.M. swimming, basketball, football, softball, and volleyball. In 1951 and 1952 he worked on the St. Joe N.F. in B.R.C. In 1954, he worked for the Inland Empire Research Center, Pole Blight Project.
DAVID H. LARKIN
David is a forest engineering major from Buffalo, Wyoming. He is a member of the Forestry Club and has worked on the Foresters' Ball. He has played I.M. basketball. In 1948, he was a lookout in Buffalo, Wyoming. In 1949, he worked as mill hand in Buffalo, Wyo. In 1950, he worked as a smokejumper. In 1954, he worked in Cheyenne, Wyoming.

HOWARD R. MOORE
"Bob" hails from Trenton, New Jersey, and attended Trenton J.C. before coming here. He has served as athletic director for the Forestry Club and as a member of the Foresters’ Ball Special Effects Committee. Bob is a member of the M Club and the varsity swimming team. In 1952 and 1953 saw him working in Mercer County, New Jersey in Mosquito Control work. In 1954, he worked for the State of New Jersey on a state timber purchase survey.

WILLIAM R. OVERDORFF
Another forest engineering major, Bill is from Grand Island, Nebraska. He has been secretary of the Forestry Club, chairman and advisor of the Wood Butchers, and photo editor of the Kaimin. He is also a member of the Druids. In 1951, he worked for the National Park Service. In 1952, he worked for the Forest Service in Kingston, Idaho. In 1953, he worked for the J. Nels Lumber Co. In 1954, he worked for the Forest Service in Juneau, Alaska.

ROBERT POULSON

THEODORE I. RIEGER
Ted is a range management major from Plevna, Montana. Ted is a member of the Forestry Club, serving as bull cook, and on the athletic board. He was chairman and advisor of the Dining Hall committee for the Foresters’ Ball. He was also photo editor for the Forestry Kaimin. Ted has played I.M. basketball, softball, football, and volleyball. He is a talented member of the Royales, belongs to the Methodist-Wesley Foundation, and S.C.A. In 1951-52, he worked on the Parachute project in Missoula. 1953 saw him working at the experiment station in Alder, Montana. 1954, he worked for the Inland Empire Research Center in Spokane.

ROBERT L. ROGERS

CHARLES E. ROUSE
Charles is from Lakeview, Oregon and is a forest engineering and management major. He attended Oregon State College before coming here. "Chuck" is a member of the Forestry Club and has helped on the Foresters’ Ball. He is a member of the Independents and Royales. In 1951, saw him working on the Fremont N.F. and in 1952, worked on the Ochoco N.F. 1953, he worked on the Lolo N.F., and in 1954, he worked for the Bureau of Land Management in Roseburg, Oregon.

JAMES R. SCHOENBAUM
Jim is another range management major and hails from Missoula. He is a member of the Forestry Club and worked on the Foresters’ Ball. Also, he was a member of the former Rodeo Club. 1950 and 1951, he worked on the Shoshone N.F. 1952, he worked on the Beaverhead N.F., and at present, works for the White Pine Sash Co.
ADRIAN D. SWENSON
Adrian is a timber management major from Superior, Wisconsin. He attended Superior State College before coming here. He is a member of the Forestry Club and has worked on the Foresters' Ball. He is a member of Iota Delta Chi, A.F.R.O.T.C. rifle team, and is the social chairman for the Newman Club. In 1952, 1953 and 1954, he worked at the Coram R.S. on the Flathead N.F.

ZANE G. SMITH
Zane is a timber management major from Missoula. He attended the University of New Mexico before coming here. He is a member of the Forestry Club and has worked on the Foresters' Ball; serving also as editor of the Kaimin. He was president of South Hall, and is a member of S.C.A. In 1952, he worked for the Forest Service in Overgard, Arizona. In 1953 and 1954, he worked for the Forest Service in Wallace, Idaho.

KENNEDY A. WANNER
Ken hails from Jamestown, North Dakota and has attended Jamestown College and North Dakota State College. Ken is majoring in utilization and engineering. He is a member of the Forestry Club and has worked on the Foresters' Ball. He is also a member of the Society of American Foresters. In 1949, he worked for the Soil Conservation Service. 1950, he worked for the Forest Service in St. Regis, Montana and in 1952, he worked there again. 1953, he worked for the Great Plains Experiment Station at Madison, North Dakota. In 1954, he worked for Koki Radio & T.V.

DON V. WILLIAMS
Don is a forest management major from Hamilton, Montana. Don is a member of the Forestry Club and was on the Executive Board. He was Chief Push for the 1955 Foresters' Ball. He is also a member of the Hellgate Ski Club and the Druids. Don played I.M. softball, volleyball, and was ski team captain. 1944-45 and 1949-50, he worked on the Moose Creek District, Bitterroot N.F. and in 1951-52, 1953 and 1954, he worked on the Sula District, Bitterroot N.F.

DAVID OWEN
Dave is a range management major and comes from Madison, Wisconsin. He attended the University of Wisconsin in 1949-50. Dave is a member of the Forestry Club and has been treasurer for the group. He has worked on the Foresters' Ball and has done numerous cartoons, posters, and covers for the Foresters. Dave has been secretary of the Druids and is also a member of Alpha Phalphy. Dave served for four years as a string changer on the yo-yo team. 1950 saw him working in B.R.C. on the Cabinet N.F. 1951-54, he worked for the Forest Service in Aerial Fire Control.
Ralph Emerson and Mary Meagher preside at Club Meeting—
Shape-up you bums!
Coffee break—I think it’s coffee.

Kelsey coughs up.
Intramural loot.

EXECUTIVE BOARD
Sitting left to right—Moore, Meagher, Emerson, Patterson, Holden.
Standing—Johnson, Crozer.

FORESTRY WIVES CLUB
Seniors...
Back row—Larkin, Moore, Chamberlain, Williams, Kelley, Rouse.
Middle row—Hanson, Rieger, Emerson, Olson, Owen.
Front row—Helwig, Holden, Greenan, Meuchels.

Juniors...
Back row—Sandman, Johnson, Royce, Hayes, Patterson, Venable
Middle row—Freeman, Poole, Phelps, Johnson, Campbell, Smith, Crozer
Front row—Ortengren, Heinz, Choong, Stofle, Ryan
Club

Sophomores...
Back row—Egerman, Baker, Daniels, Uphill, Neufelder, Schmitt.
Middle row—Cardwell, Bond, Loscar, Grandy, Wineholt.
Front row—Leveque, Kovalicky, Meagher, Davis.

Freshmen...
Back row—Knapp, Johnston, Jehnigan, Nelson, Emerson
Middle row—Comstock, Dale, Steucker, France.
Front row—Stoleson, Kalkowski, Bohl.
Fall

Jim McLean pulled off a successful Fall Smoker.

Charge of the Light Brigade!

Smokey on Parade.

The Footballers tried but lost out in the championship game to Jumbolaya.

Our swimming team came home with the bacon for the second consecutive year.
Quarte

Arne looks lost.
Paul tells all...
Take away Rundle's can opener and he'd be lost.

but "my DAD says," and Lou agrees.
Check the China.
How'd that ear taste, Dick?
DICLJOHNSON received the Silas R. Thompson, Jr. Scholarship award for the year, presented for a combination of scholarship and activity in Forestry Club affairs.

The annual Alumni Award of $25.00 was given to RALPH RUNDLE for being the outstanding Junior in Forestry.

MONTANA DRUIDS

Front row—Prof. Krier, Overdorff, Greenan, Dahl, Emerson, Chamberlain, Ryan, Meuchels.
Back row—Inst. Powell, Dean Williams, Prof. Waters, Inst. Drummond, Williams, Royce, Johnson, Venable, Morisson, Johnson, Kelley, Smith, Prof. Bruns, Prof. Clark, Hanson.
Winter Quarter

The Home-Ec. Dance livened up one of the meetings.

Rundle lays in 'Z' as Foresters whip Lawyers in a double overtime.

Ski team sweeps intramural skiing for the second year in a row.

Basketball team looks happy before the game.
After umpteen years in the men's gym, the Foresters Ball was moved into the new field house. Don Williams had himself a real chore, but as usual, the ball ended up a big success.

Wes and Mrs. took the costume prizes—Fay thinks he should have won. Seitz applies final touch to the doorway.

Bartenders were drunk as usual—on Root beer of course, and the Ball wouldn't be complete without the Honky-Tonk "pianer." Don Stagg beat out a mean tune. Beards were all over the place, but at judgment time, Kels presented first prize, an electric razor donated by the Schick Co., to Bob Stanley.
THE EFFECT OF DEER CONCENTRATIONS AND ARTIFICIAL FEEDING

(Continued from page 7)

browsed), heavily browsed (51-75% of tree browsed) and very heavily browsed (75% or more of tree used). Trees dead from browsing and other causes of death were also recorded.

Results

Data from each location are presented in Tables I and II. The amount of damage to each species in each size class is given in number and percentage for each condition class.

By examination of the tables there appears to be no evident mortality in the seedling size class of any of the species. There was little mortality in the sapling stage for most species except Douglas-fir. The mortality for this species and age class was 36% on study area III. As the tree reached pole size, however, the mortality was again of no significance.

Preference by deer for certain coniferous species was evident. Ninety-two percent of the

<table>
<thead>
<tr>
<th>Condition and Size Classes</th>
<th>PONDEROSA PINE</th>
<th>DOUGLAS FIR</th>
<th>JUNIPER</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Browed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>seedling</td>
<td>52</td>
<td>57</td>
<td>46</td>
</tr>
<tr>
<td>sapling</td>
<td>11</td>
<td>42</td>
<td>28</td>
</tr>
<tr>
<td>pole</td>
<td>77</td>
<td>17</td>
<td>45</td>
</tr>
<tr>
<td>Browed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Light to Moderate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>seedling</td>
<td>32</td>
<td>36</td>
<td>42</td>
</tr>
<tr>
<td>sapling</td>
<td>44</td>
<td>33</td>
<td>52</td>
</tr>
<tr>
<td>pole</td>
<td>17</td>
<td>36</td>
<td>45</td>
</tr>
<tr>
<td>Browed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heavy to Very Heavy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>seedling</td>
<td>16</td>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td>sapling</td>
<td>23</td>
<td>19</td>
<td>16</td>
</tr>
<tr>
<td>pole</td>
<td>6</td>
<td>47</td>
<td>12</td>
</tr>
<tr>
<td>Dead from Browsing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>seedling</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>sapling</td>
<td>11</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>pole</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Dead from Other Causes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>seedling</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>sapling</td>
<td>11</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>pole</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>No.</td>
<td>No.</td>
<td>No.</td>
</tr>
<tr>
<td>seedling</td>
<td>31</td>
<td>28</td>
<td>106</td>
</tr>
<tr>
<td>sapling</td>
<td>9</td>
<td>33</td>
<td>92</td>
</tr>
<tr>
<td>pole</td>
<td>35</td>
<td>58</td>
<td>118</td>
</tr>
</tbody>
</table>

*Area I has had no or very little artificial feeding of hay to the deer.
Area II has had intermittent artificial feeding of hay to the deer.
Area III has had consistent artificial feeding of hay to the deer.

<table>
<thead>
<tr>
<th>SERVICEBERRY</th>
<th>CHOKECHERRY</th>
<th>WILLOW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location</td>
<td>No Use</td>
<td>Light to Heavy</td>
</tr>
<tr>
<td>I</td>
<td>1 7 2 13 11 73 1 7 0 3 2 148 82 28 16 0 0 1 3 29 85 4 12</td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>0 0 4 7 46 79 8 14 0 4 6 42 61 23 33 0 0 0 0 0 0 0 0</td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>0 0 14 11 92 76 15 13 0 0 0 0 5 100 0 0 0 0 0 0 0 0</td>
<td></td>
</tr>
</tbody>
</table>

(Continued on page 29)

That's no Aquamaid—that's "you name it I've got it" Stoie.

They didn't grow—no green thumb here.
"Cellar dwellers" with mascot. Well, you can't win 'em all.

Probably the first gal Stoleson's ever kissed.

SENIOR MANAGEMENT TRIP

Front row—Deichman, Holden, Dahl, Hanson, Smith, Williams, Jaszkowski, Poulson, Dunning.


Password for the day was confusion, as Kelley checks to see if that blonde is still there.
"Chancellor" Royce really makes out as Dal dances off the page.

At Washington School, Ryan demonstrates aerial photo equipment during Conservation Week.

"Charlie" Egerman works at normal speed.

Guess who will flunk the next test, or, see you next year, Lou.

This picture was taken "B. P."
Forestry School Roster

A
Abbott, Donald E.—Frosh...Missoula, Mont.
Addor, Eugene E.—Jr...Missoula, Mont.
Anderson, Gerald D.—Soph...Eleva, Wis.
Anderson, R. J.—Frosh...Palisades, Idaho
Austin, LeRoy—Frosh...Gilby, N. Dak.

B
Backlin, Harvey L.—Soph...Corvallis, Mont.
Baker, Edward D.—Frosh...Harlem, Pa.
Baker, Bill—Soph...Rental, Wash.
Barkman, Ed—Grad...Missoula, Mont.
Beckman, Glenn—Soph...Gallatin Gateway, Mont.

Bednorz, Joseph C., Jr.—Frosh...Sioux Falls, S. Dak.
Behan, Richard W.—Soph...Indianapolis, Ind.
Belcher, Fitzroy A.—Jr...Missoula, Mont.
Bergland, Robert J.—Soph...Great Falls, Mont.
Betts, Marion—Frosh...Silverton, Idaho
Blake, Cliff—Soph...Missoula, Mont.
Boe, Deen E.—Frosh...Hays, Mont.
Boll, Louis A.—Jr...Winona, Minn.
Bond, Douglas C.—Soph...Missoula, Mont.
Bremer, Gilbert T., Jr.—Jr...Berwyn, Ill.
Brause, Jack F.—Frosh...Polson, Mont.
Bryant, Don—Soph...Missoula, Mont.
Burk, Donald W.—Frosh...Sioux Falls, S. D.
Burns, Robert—Frosh...Valparaiso, Ind.

C
Campbell, Myra J.—Jr...Missoula, Mont.
Carman, Ed B.—Frosh...Lyndhurst, N. J.
Chamberlin, Jack L.—Sr...Missoula, Mont.
Choong, Elvin—Jr...Djakouta, Indonesia
Christian, Peter Dale—Jr...Butte, Mont.
Clark, M. D.—Soph...Missoula, Mont.
Comstock, Don—Frosh...Lincoln, Ill.
Craven, Daniel—Frosh...Glendale, Calif.
Crawford, Allen—Frosh...Lom bard, Ill.
Crozer, E. Allen—Jr...Trenton, N. J.
Coston, Charles T.—Sr...Oak Ridge, Tenn.

D
Dahl, J. Russell—Sr...Hot Springs, Ark.
Dale, Robert T.—Soph...San Luis Obispo, Cal.
Daley, Edward M.—Soph...Claymont, Del.
Daniels, Dan—Jr...Helenville, Mont.
Daniels, Jess D.—Soph...Houston, Texas
Daniels, Terry L.—Frosh...Palmeton, Pa.
Davis, John T.—Frosh...Missoula, Mont.
Davis, John—Soph...Missoula, Mont.
Dawson, Charles D.—Jr...Kodiak, Alaska
Day, Allen—Frosh...Overland Park, Kan.
DeBruine, Gordon—Soph...West Allis, Wis.
Deichmann, V.—Grad...Kablen, Germany
Dillingham, Richard—Frosh...Valparaiso, Ind.
Duff, Joseph F.—Soph...Morris, Minn.
Duhamel, Eugene—Jr...East Providence, R. I.
Duke, John—Frosh...Helena, Mont.
Dunkelberger, William—Frosh...Olympia, Wash.
Dysius, Ken—Soph...Dixon, Mont.

E
Eakland, James—Sr...Missoula, Mont.
Egan, Louis—Frosh...Missoula, Mont.
Egerman, Kenneth J.—Soph...Big Timber, Mont.
Emerson, James C.—Frosh...Juneau, Alaska
Emerson, Ralph A.—Sr...Juneau, Alaska
Erickson, Hal—Frosh...Sioux Falls, S. Dak.
Estey, William R.—Sr...Missoula, Mont.
Evans, Warren L.—Frosh...Oroville, Calif.

F
Fahey, William—Frosh...Green Forks, N. Dak.
Fisher, Donald—Soph...Evansville, Ind.
Fioh, Don L.—Sr...Hamilton, Mont.
Ford, Bob—Soph...Lincoln, Nebr.
Foster, John R.—Frosh...Springfield, Ohio
Fouts, William—Frosh...Livingston, Mont.
France, Nevil—Frosh...Randolph, N. Y.
Frazer, Thomas—Soph...Billings, Mont.
Freeman, Glenn—Jr...Dillon, Mont.

G
Galea, John—Jr...Missoula, Mont.
Gallup, R. D.—Soph...Fayette, Ohio
Garrett, Norman—Sr...Missoula, Mont.
Gibson, Richard L.—Soph...Blue Island, Ill.
Gibson, Robert—Sr...Butte, Mont.
Gilliam, John J.—Sr...Lincoln, Mont.
Gjernes, Ellef—Soph...Oklee, Minn.
Golden, Joanne—Sr...Manchester, Conn.
Graves, Delbert—Soph...Polson, Mont.
Gray, Robert—Soph...Gallatin Gateway, Mont.
Green, Jackson—Frosh...Thompson Falls, Mont.
Greenan, Bob—Sr...Missoula, Mont.
Guaridipee, Francis X., Jr.—Frosh...

H
Hankins, William—Jr...Billings, Mont.
Hanson, Harold E.—Sr...Missoula, Mont.
Harriman, William—Soph...Billings, Mont.
Hautinger, John—Sr...Omaha, Neb.
Hayes, Harlan L.—Jr...Missoula, Mont.
Heckerman, A. L.—Soph...Missoula, Mont.
Heinz, Paul—Jr...Shawano, Wis.
Heidiebaugh, Rex—Frosh...Col. Grove, Ohio
Helwig, L. L.—Sr...Waubay, S. Dak.
Hendzel, L.—Frosh...Pulaski, Wis.
Hoffman, Harry—Frosh...Fort Atkinson, Wis.
Hoffman, John—Soph...Rapid City, S. Dak.
Hoffmeister, William—Soph...Cincinnati, Ohio
Holden, John D.—Sr. Missoula, Mont.
Holleywell, Art.—Soph. Drummond, Mont.
Holzweiss, Henry—Frosh.
...East Williston, N. Y.
Humes, Hubert R.—Soph. Missoula, Mont.

J
Jaszkowski, Ralph—Sr. Missoula, Mont.
Jehrmigan, Frank—Frosh. Corvallis, Mont.
Johnson, Dallard—Jr. Milwaukee, Wis.
Johnson, John—Soph. Missoula, Mont.
Johnson, L. E.—Jr. Ozone Park, N. Y.
Johnson, Robert W.—Frosh. Harlowton, Mont.
Johnston, Dempsey T.—Frosh.
...Columbia Falls, Mont.
Jukka, Art.—Soph. Lead, S. Dak.
Jackson, James—Jr. Missoula, Mont.

K
Kalkoshe, Gene—Frosh. Neenah, Wis.
Kirschen, Frank—Sr. Baker, Mont.
Knapp, George—Frosh. Elmira, N. Y.
Knuudsen, Gary—Frosh. Highwood, Mont.
Kovalicky, Tom—Soph. Clifton, N. J.
Kolm, Harvey—Jr. Missoula, Mont.
Kull, Glen C.—Jr. Missoula, Mont.
Kytonen, Everett—Sr. Missoula, Mont.
Laber, Alfred—Soph. Newport, N. H.
Lambe, Michael—Frosh. Bethesda, Md.
Larkin, David—Sr. Hardin, Mont.
Laux, James—Soph. Milwaukee, Wis.
Lawn, Thomas D.—Jr. Eau Claire, Wis.
Leat, Merlin—Sr. Winner, S. Dak.
Lee, Oliver—Soph. Oeburn, Idaho
Lix, Robert—Frosh. Los Angeles, Calif.
Lorang, Carrol—Frosh. Lead, S. Dak.
Loscar, Donald—Soph. Mesa, Arizona
Lowell, John—Grad. Sioux Falls, S. Dak.

M
McCullough, William G.—Frosh.
...Missoula, Mont.
McDonald, William B.—Frosh.
...Hill City, S. Dak.
McGee, Troy—Frosh. Missoula, Mont.
Mading, Wallace—Jr. Springfield, Mo.
Mann, William A.—Sr. Winnetka, Ill.
Martin, Dave—Frosh. Pasco, Wash.
Mathison, Robert D.—Frosh. Chasewig, Wis.

McMeagher, Mary—Soph. Spokane, Wash.
Meuchel, Joe—Sr. Hamilton, Mont.
Moore, H. Robert—Sr. Trenton, N. J.
Morris, Alan A.—Soph. Missoula, Mont.
Morris, Tom—Soph. Valparaiso, Ind.
Morrison, Gary G.—Frosh.
...Colorado Springs, Colo.
Morrissey, Donald T.—Soph. Wilkes-Barre, Pa.
Murphy, William C.—Frosh. Missoula, Mont.
Murray, Roger S.—Soph. Helena, Mont.

N
Nelson, Donald W., Jr.—Frosh.
...Livingston, Mont.
Nelson, Gerhart H.—Grad. Miles City, Mont.
Neufelder, Carl—Soph. Butte, Mont.

O
O'Hara, Melvin—Frosh. Waterville, Ohio
Ortenzien, Richard—Sr. Missoula, Mont.
Overdorf, William R.—Sr. Minocqua, Wis.
Owen, Dave—Sr. Grand Island, Nebr.
Palmer, Ronald J.—Soph. Sandpoint, Idaho

P
Patten, Richard—Soph. Missoula, Mont.
Patterson, Tom—Jr. Minocqua, Wis.
Paul, Glen—Soph. Edmonton, Alberta
Pertman, R. A.—Frosh. Drummond, Mont.
Pettifinger, Darwin—Frosh. Hampshir, Ill.
Pfefferkorn, Bernard—Frosh. Brooklyn, N. Y.
Pinter, John—Soph. Whitefish Bay, Wis.
Poole, Robert B.—Jr. Missoula, Mont.
Poulson, William L.—Sr. Missoula, Mont.

R
Rabone, Howard—Frosh. Leonardo, N. J.
Rannow, Ted—Frosh. Athens, Ohio
Rhodes, Charles—Frosh. Stultton, Ind.
Rice, William—Frosh. Pampa, Texas
Rider, John W.—Frosh. El Paso, Texas
Rieger, Ted—Sr. Plevna, Mont.
Roeller, C. Ray—Soph. Sidney, Ohio
Rogers, Robert—Sr. Sacramento, Calif.
Rounds, John—Sr. LaFayette, Calif.
Rouse, Charles—Jr. Lakeview, Ore.
Royce, Arnold—Jr. Belfry, Mont.
Roylance, John F.—Fr. Columbus, Mont.
Rubel, R. F.—Soph. Poillon, Mont.
Rubins, C. Thomas—Frosh. Kenton, Ohio
Rundle, Ralph—Jr. Chicago, Ill.
Rundle, Ronald J.—Soph. Chicago, Ill.
Ryan, Patrick P.—Jr. Trenton, N. J.
Prunus demissae in a typical browsed condition. Picture was taken in early winter, so all the new growth very likely will be taken before the coming spring.

(Continued from page 22)
Juniper saplings were in the heavy to very heavy use class, and leads all other species in degree of use where it is present on the sample plots. Also, 99% of the poles were in the heavy to very heavy use class. There appears to be a shift in preference between size classes of Douglas-fir and ponderosa pine from location to location.

The relative use of coniferous browse by areas was apparently associated with amount of feeding as well as snow conditions, as has been previously indicated. Area I has had no or very little feeding of hay and moderate snow. Area II has had some hay feeding and light snow. Area III has had the longest period of feeding.

Table I, Area I suggests that the least use was incurred by coniferous browse on this area. It is noted that there was 11% mortality to ponderosa pine saplings, but there were so few

**LITERATURE CITED**


**FIG. 1.** Map of Clearwater drainage showing the extent of highlining (cross-hatched area) by deer and location of study areas I, II and III.
A browse line on conifers is prominent throughout the winter range. Note the browsing on some of the younger conifers in the background.

of these trees present that the figure is considered insignificant. The date for Area II shown in Table I indicates that severe use was inflicted on coniferous browse, highlining was prevalent, but as of this date little mortality has occurred on these species in this area. The greatest use and mortality occurred on Area III as indicated by the data. In the sapling size class of Douglas-fir only 10% of the trees escaped use and 36% were dead as a result of over-browsing.

Table II shows a summary of the possible damage done to the deciduous browse species. Only the three main browse species found in the study were tabulated. Mortality was greatest for both serviceberry and chokecherry on Area I. Willow was found only on Area II and 12% of the bushes examined were dead.

On Area II the main use was found on chokecherry with heavy damage and mortality resulting. The serviceberry found on this area was also used severely, but did not suffer much mortality.

On Area I a different situation exists. Serviceberry was used the heaviest on this area, however, chokecherry suffered the highest mortality.

Area III contained the most serviceberry. The use and possible damage to this species was also the greatest. Except for one plant, all of the deciduous browse species found on all the plots showed evident signs of use.
Discussion

Although a preliminary survey was made to get as similar areas as possible within the study location, physical and vegetative differences were present as well as the differences in artificial feeding.

Data compiled from this study indicates that there is very little mortality in the seedling stage of any of the major tree species found on the study areas. Seedlings are the first tree size to be covered by snow in winter and the last to be exposed by melting snow in the spring. It is felt that protection by snow is an outstanding factor in high survival of seedlings. The record on seedling survival does not consider any seedlings that are pulled out of the soil by the deer. It is recognized that this possibility may exist.

Sapling trees on the study location received the most use and possible damage, and consequently sustained the highest mortality. The 2 to 7 foot high saplings were the trees most exposed during the winter and readily accessible to the feeding deer. High mortality resulted in areas where deer concentrated. It is evident that once a tree is over this size class its leader and many of the growing tips are out of reach of the deer and hence it will survive as indicated by the lack of mortality in the pole size tree.

When using the amount of crown taken by deer as a criterion of preference, juniper was found to be the most palatable of the coniferous browse. Although the use on juniper was high the mortality to the species was low, indicating that juniper may be more resistant to browsing than the other coniferous species studied.

The order of preference between the Douglas-fir and ponderosa pine is different in the seedling stage from the order in the sapling stage. In the seedling stage ponderosa pine is preferred over Douglas-fir, and in the sapling stage Douglas-fir is preferred over ponderosa pine. Any attempt to explain the different order of preference would require further study.

Breaking the data down by areas it is seen that on Area II, considerable use occurred on both the deciduous and coniferous browse species. However, little mortality occurred on this area. This is thought to be due to the type of growth found on the area. The canopy is open allowing a maximum of light and a minimum of competition to take place. Trees that would normally succumb to low light intensities and heavy grazing in other locations, survived on this area.

Area III had the longest period of feeding and also the densest vegetative cover. Mortality to saplings was high on this area. This was thought to be caused by several factors. Among these were the density of growth and the over-browsing by the deer. The death seemed to be caused by a combination of browsing and shading. If there were adequate light and the competition decreased, it is thought that these trees might have survived the heavy grazing use. Deciduous browse found on this area was in very poor condition with 75% of the browse found in the very heavy use class.

The results of the study would indicate that the degree of use on the coniferous browse species is proportional to the factors that encourage white-tailed deer concentration on a winter range. These factors may be snow depth, vegetative composition, slope, aspect or conditions created by artificial factors such as winter feeding of the deer.

Summary

Extensive use of coniferous browse by deer on their winter range was studied by a line plot method. This study took place on a typical montane forest of western Montana in the Clearwater drainage.

Three areas were studied for comparison. While they differed somewhat in their physical characteristics, they were essentially different due to the amount of winter feeding sustained. Area I, north of Placid Lake, had little or no feeding history. Area II, north of Owl Creek road, had hay supplied along the road at the lower end of the line sample plot. Area III, west of the Shishler ranch and adjacent to the Clearwater River, had had a long period of hay and grain feeding.

The extent of heavy conifer use is indicated on the general map of the area. Some 4000 acres of forest growth has received heavy use by deer so that the high-line on the conifers can be readily observed.

Results indicate that pole size trees escape excessive damage due to their size, and seedlings are protected by the snow covering during the winter. The sapling sized tree receives excessive use. The areas having a longer period of artificial feeding show a heavier use and higher mortality than did areas of no feeding or of lighter artificial feeding.

The results also would indicate that the amount of use by deer on a winter range tends to be proportional to the factors that contribute to the concentration of these deer. This includes artificial feeding, vegetative composition, snow depth, and exposure, with slope having a less important but possible effect.

Acknowledgment

The authors are grateful to Professor Melvin S. Morris of the Forestry School, Montana State University, for his assistance and interest in the problem studied.
Since the fabled days of Paul Bunyan, logging methods have been developed into highly technical, mechanized operations . . . such as those made possible today by tractor equipment manufactured by the Hyster Company. Hyster Winches, Logging Arches, Yarders and Donkeys, are the result of more than a quarter century of pioneering leadership in new methods and equipment.

Today, Hyster also manufactures a complete line of lift trucks and other industrial trucks with capacities ranging from 1,000 to 30,000 lbs.

More than 700 dealers sell and service Hyster Tractor Equipment and Materials Handling Industrial Trucks throughout the world.

Hyster Company
Four Factories
Portland, Oregon
Peoria, Illinois
Danville, Illinois
Nijmegen, The Netherlands
FORESTERS NEEDS
FAMOUS BRANDS

FILSON
MALONE
WOOLRICH
PENDLETON
STETSON
CURRIN SHOES
BLACK BEAR

MISSOULA
MONTANA

FORESTRY SUPPLIES, Inc. is in business to supply YOU with tools, equipment or services. Our inventory of specialized forestry equipment is the largest in the world. YOU CAN GET WHAT YOU WANT FROM FORESTRY SUPPLIERS — QUICKLY.

Wouldn’t you like to have your own compass, diameter tape, increment borer, tally book or other personal use item? You can get them all from FORESTRY SUPPLIERS, Inc. Remember we are always as close as your nearest mail box.

"We supply forestry—goods and services"
Here's how advanced design Allis-Chalmers equipment helps to mechanize nearly every phase of lumber production.

Allis-Chalmers logging equipment includes four powerful crawler tractors, 50 to 175 hp; three tandem drive motor graders, 50 to 104 hp; matched Allied equipment such as bulldozers, winches, Tractor Shovels, arches, lift tongs.
"I Love You"

are just words until you say it with a gorgeous engagement and wedding ring from

B & H JEWELRY

J. M. LUCY & SONS, Inc.
Home and Office Furnishings
Established 1889
Missoula, Montana
PHONE 2-2179

KRAMIS HARDWARE COMPANY
Missoula, Montana
DURABLE EQUIPMENT for RUGGED USE
1865 to 1955

Shop the New

PENNEY'S ALWAYS FIRST QUALITY
Always First Quality

ORVIS MUSIC HOUSE
428 North Higgins
HAMMOND ORGANS
STEINWAY PIANOS
CAPEHART RADIO-TV
Everything Musical
Since 1897 Phone 9-2261

ALWAYS BUY BON TON
Bread at It's Best

Compliments of IDAHO POLE COMPANY
SANDPOINT, IDAHO
BOZEMAN, MONTANA

Compliments of ZIP BEVERAGE CO.
Missoula, Montana
Timber cruising is completely practical from the air and is now being carried on by Hycon Aerial Surveys, Inc., of Pasadena, California. With an airplane and a camera, a complete and accurate estimate of the timber region may be made.

Aerial timber cruising produces a permanent photographic record of the types of trees, density, height and logging problems. The development of infra-red photography has made it possible to specifically define the different types of trees. Contrasting shades of foliage reveal many different growths of trees and vegetation.

The accompanying infra-red illustration, made from an airplane operated by Hycon Aerial Surveys, Inc., at 15,940 feet shows a portion of the forested area of Vermont. Light tree areas are hardwood, dark areas are softer wood.

A bipack system of partial color photography, coupled with infra-red, can be used to detect and chart blighted areas.

In two years Hycon Aerial Surveys, Inc., has grown from an idea to one of the three largest photogrametric services in the country.

Recent association with Varian Associates of Palo Alto, California, has given Hycon Aerial Surveys, Inc., exclusive worldwide rights to the famed Varian Earth's Field Magnetometer, one of the new wonder instruments of science for the exploration of minerals that lie beneath the ground.

It’s Hycon Aerial Surveys, Inc., for modern analysis of forested areas and geophysical exploration of remote areas.

HYCON AERIAL SURVEYS, Inc.
1020 South Arroyo Pkwy. Pasadena, California
JOHN R. DAILY, Inc.
Wholesale and Retail Distributors of
Meat and Meat Products
PACKERS OF
DAILY’S
MELLO-TENDER
HAMS, BACON, SAUSAGE
AND LARD
Western Montana’s Buyers of
FAT CATTLE, CALVES, LAMBS, HOGS
and POULTRY FOR HOME
CONSUMPTION

DIEHL
LUMBER CO.
PLAINS, MONTANA
PONDEROSA PINE    FIR    LARCH
Lumber, Building Materials,
Millwork,
Sherwin-Williams Paint

A Better Mark for You!
Southern Glo Tree Marking Paints
• Ready Mix • Paste • Boundary Paint
With the Stay-Mixed Formula No. 71020

Manufactured by
SOUTHERN COATING &
CHEMICAL CO.
SUMTER   SOUTH CAROLINA

CURRIN’S
HAND MADE LOGGERS

Currin’s Loggers have been the standard of comparison for over fifty years. Made in all height tops . . . from fly weight to heavy-weight . . . lace to toe or plain toe.

Manufactured by
SOUTHERN COATING &
CHEMICAL CO.
SUMTER  SOUTH CAROLINA

Currin’s Loggers Are Sold by Over 1,000 Dealers in the Pacific Northwest

CURRIN-GREENE
SHOE MANUFACTURING CO., Inc.
2700 Block Western Ave.  Seattle 1, Wash.
FORESTERS have found a Carco winch with Carco crawler or rubber-tired arch and tractor the most versatile rig in the woods for harvesting and conserving timber. That's true on tree farms or elsewhere, whether you're clear cutting or selective logging. Because of its great maneuverability, this smooth-working tractor equipment operates with minimum damage to standing trees and minimum expense for access roads. It efficiently and economically bunches and yards large or small timber. It reaches out for isolated logs and winches them in from inaccessible spots.

Wherever you may practice forestry, you'll find Carco winches and arches used by leading loggers and sold and serviced by prominent tractor dealers. You'll find, too, that Carco logging equipment is rugged and dependable with unusual staying power.

COMPLIMENTS OF

MONTMARTRE

MISSOULA HOTEL

YOU’LL LIKE . . .

Highlander
PREMIUM BEER

MISSOULA BREWING CO.

DAVENPORT LUMBER CO., Inc.

Custom Milling — Custom Air Drying

P. O. Box 724
Office: 1633 Russell St. Phone 9-0252 Missoula, Montana

HANSEN’S ICE CREAM

Factory and Fountain at 519 South Higgins
OPEN EVERY DAY UNTIL 10:00 P.M.

The Sportsman

MISSOULA’S COMPLETE SPORTING GOODS CENTER
Headquarters for Skiing, Hunting, Fishing and Athletic Equipment, Clothing and Supplies
123 W. Spruce Phone 9-7451
BEST WISHES
to
MONTANA’S
FUTURE FORESTERS
from
J. NEILS LUMBER CO.

MILLS:
KLICKITAT, WASHINGTON
TROY, MONTANA
LIBBY, MONTANA
MONTANA CONCRETE PIPE CO.
Building Blocks, Sewer, Culvert and Irrigation Pipe
MONTANA
P. O. Box 613, Missoula, Montana

SAVE ON DRUG
MISSOULA'S LEADING DRUG STORE
No One Buys for Less — No One Sells for Less
MISSOULA
Phone 3-3888
MONTANA

INTERMOUNTAIN LUMBER COMPANY
P. O. Box 1443
Phone: 9-2385
Teletype: MS7
MISSOULA, MONTANA

...FOR THE MOST WORK, LEAST UPKEEP
...FOR LONGEST LIFE, GREATEST MANEUVERABILITY,
POWER AND RUGGEDNESS!

GERLINGER Material Carriers and Fork Lift Trucks have
proved for over 30 years to be the answer to loading, hauling,
stacking and delivery problems of logging, lumber mills and
yards, and wood product factories the world over. Feature-
for-feature, Gerlingers consistently prove their flexibility to
meet the exacting standards of material handling require-
ments of all heavy industries.

GERLINGER CARRIER CO., DALLAS, OREGON
Please Patronize These Advertisers

ATTEND THE 1956 FORESTER’S BALL

Feb. 24th and 25th

M.S.U. Field House
The West's Best FORESTER’S
CLOTHING LOGGERS FURNISHINGS

That have stood the test of time—37 years in outfitting Foresters and Lumberjacks with WOOL-RICH, MALONE and WHITE STAG Cruisers and Pants; PENDLETON Wool Shirts; FILSON and HIRSCHWEIS Water Repellants; WRIGHT’S Wool Underwear; WHITE Loggers and Packers, have given DRAGSTEDT’S a wide reputation for guaranteed customer satisfaction.

WHITE LOGGERS AND PACKERS

<table>
<thead>
<tr>
<th>No.</th>
<th>Style Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>75</td>
<td>8” Black Kip Lumberman’s or Driver’s Loggers, Best Quality</td>
<td>$28.00</td>
</tr>
<tr>
<td>335</td>
<td>8” Brown Elk Summer Logger, Uskidoe Sole and Rubber Heels</td>
<td>$24.50</td>
</tr>
<tr>
<td>690</td>
<td>Brown Elk “Packer,” Light Weight, Stitchdown for Riding or Walking</td>
<td>$27.00</td>
</tr>
<tr>
<td>1432</td>
<td>8” Black Kip, Light Weight, Hand Sewed Stitchdown</td>
<td>$26.50</td>
</tr>
</tbody>
</table>

Widths B, C, D, E, EE. Best selling width is E. Calking $2.00 and Hobbing $1.50 extra. There is no “Breaking in” period for a White Arch-Ease Logger. They are the most comfortable shoe of its kind made.

No. 335 is Logger used by “Smokejumpers” in U.S.F.S. Region No. 1.

“FILSON” WATER REPELLANTS

- CRUISER, Double Front, Back and Sleeves $12.45
- FIELD VEST, Cruiser Pockets, 4 Outside and 2 Inside Pockets, No Sleeves $6.95
- PANTS, Double Construction $10.45
- PANTS, Single Construction $8.45

“CONQUEROR” UNIFORM SHIRTS

Best Grade Poplin, Forest Green, Grey, Sun Tan, Navy Blue $4.50
Regular Broadcloth, Grey, Tan Only $3.50

Size 14, 18, and Sleeves 32, 33, 34, 35

Day’s IRON DUKE

Same as Ranger Whipcord, only 19-oz. (heaviest wt.); 2-ply Nylon Blend; Scratch-free Comfort; Stain and Spot Resistant; Permanently Crease Resistant. Pants...$8.95
Zipper Jacket...$10.95  Cruiser, Double Back...$12.95

Available in Forest Green and Sage Grey.

MAIL ORDERS Appreciated

DRAGSTEDT’S WE PAY POSTAGE

EVERYTHING MEN WEAR ON CIRCLE SQUARE

MISSOULA, MONTANA