

# Range Management Theses 1961-1965

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Research by graduate schools in Range Management represents a large portion of the current work in the range field. Unfortunately, this material is not widely distributed and is sometimes slow in finding its way into print. Kinsinger and Eckert (1961, 1962) published titles of theses and dissertations from the range schools from 1955-1961. Since that time, there has been no published annual list. The Range Management Education Council voted in February, 1966 to compile the thesis titles annually. This list represents theses completed in the years 1962-1965. Theses titled for 1966 will be published next year.

Theses and dissertations may be obtained through interlibrary loan from the schools indicated. Some are available on microfilm. Asterisk indicates Ph.D. thesis.

## UNIVERSITY OF ARIZONA

- Al-Rabbat, Mohamad Fouad. 1962. The effect of moisture, depth of planting, and compaction on seedling emergence of winterfat and crested wheatgrass.
- Anklam, George L. 1962. The effect of commercial fertilizers on the forage production of chaparral lands in central Arizona following burning, reseeding, and herbicide treatments.
- Asare, Ebenezer, Okae. 1963. The germination of certain introduced African grasses as influenced by different temperature and moisture stresses.
- Bales, Robert Lee. 1965. Ecology of a cleared chaparral site under different nutrient treatments.
- Bentley, R. Gordon, Jr. 1964. The effects of three moisture levels applied to lehmann lovegrass grown on a fertilized desert grassland soil.
- Claveran A., Ramon. 1965. Survival and spreading ability of endemic and exotic grasses on a desert grassland site.
- Follett, Edson Roy. 1962. The increase of cholla (*Opuntia ful-*

*gida* Engelm.) in relation to associated species on a desert grassland range in southern Arizona.

Little, David E. 1965. Factors affecting the susceptibility of snakeweeds to herbicides.

McRae, Rulon G. 1962. Factors affecting the absorption and translocation of 2,4-D in tarbush (*Flourensia cernua* DC.).

\*Martin, Samuel Clark. 1964. Some factors affecting vegetation changes on a semidesert grass-shrub cattle range in Arizona.

Saunier, Richard E. 1964. Factors affecting the distribution of Shrub Live Oak (*Quercus turbinella*).

\*Schmutz, Ervin M. 1963. Factors affecting the absorption, translocation, and toxicity of herbicides on Creosotebush.

Sissay, Bekele. 1963. The effects of fertilizers applied to a chaparral soil on the emergence, growth, yield, and nutrient content of lehmann lovegrass.

Tapia, Carlos Jasso. 1965. Root nodule studies of a desert browse legume Guajilla (*Calliandra eriophylla* Benth.).

Tiedemann, Arthur R. 1965. Recovery of burned-reseeded and chemically treated oak-chaparral in Arizona.

\*Tschirley, Fred M. 1963. A physiological study of jumping cholla (*Opuntia fulgida* Engelm.).

Warskow, William L. 1965. Factors affecting stomatal opening of Creosotebush (*Larrea tridentata*) (DC.) Cov. and their combined effect on herbicide activity.

Wheeler, Jack H. 1964. Pellet seeding of lovegrasses on southern Arizona rangelands.

White, Larry D. 1965. The effects of a wildlife on a desert grassland community.

Williams, Christopher P. 1964. Lehmann lovegrass-velvet mesquite invasion relationships in the desert grassland.

## BRIGHAM YOUNG UNIVERSITY

- Barnett, L. Bruce. 1964. An ecological study of waterfowl habitat at Powell's Slough, Utah Lake.
- Coles, Floyd H. 1965. The effects of big game and cattle grazing on Aspen regeneration.

Dastrup, Bernard Curtis. 1963. Vegetational changes of the Uinta Basin since settlement.

Hanna, Marian Lucy. 1962. Differential salt tolerance of (*Hordium jubatum*, *Agropyron trachycaulum* and their natural hybrid *Elymus macounii*).

Hanson, Craig A. 1962. Perennial *Atriplex* of Utah and the northern deserts.

Holt, Elvis J. 1964. Distribution patterns of pocket gophers in the Hobbie Creek area, Utah County.

Johnson, Hyrum B. 1964. Changes in the vegetation of two restricted areas of the Wasatch plateau as related to reduced grazing and complete protection.

Matthews, Verl B. 1965. An ecological life history of tall bluebell in Utah.

Papenfuss, Herbert D. 1964. A study of growth rates in seedlings of Douglas fir ecotypes.

Pitts, Laval M. 1963. Cytological evidence for reciprocal introgression in *Agropyron trachycaulum* and *Agropyron spicatum*.

## UNIVERSITY OF CALIFORNIA

Carnegie, David M. 1965. Herbage growth of four California annual range plants in response to frequency and time of clipping.

Hooper, Jack Frederick. 1962. Influence of soils and deer browsing on vegetation after logging redwood-Douglas fir, near Korb, Humboldt County.

\*Pieper, Rex D. 1963. Production and chemical composition of arctic tundra vegetation and their relation to the lemming cycle.

Squires, Edward Martin. 1962. Changes in soil characteristics induced by manipulation of natural mulch in a California annual grass community.

Tamir, Raphael. 1962. Infiltration rates under grass and brush vegetation.

## COLORADO STATE UNIVERSITY

Beck, R. M. 1965. Pocket gopher relations in mountain rangelands in Colorado.

Geist, Jon M. 1965. Site-vegetation relationship in the montane zone of northern Colorado.

Gierisch, R. K. 1963. Effects of herbicidal spray on a grass-forb type.

Kayasta, B. P. 1965. Soil factors affecting ponderosa-pine.

Robertson, P. A. 1964. Growth responses of several cool season grasses to nitrogen and phosphorus levels in the soil.

- Segura, Mariano. 1962. Effect of nitrogen and phosphorus fertilization on the growth characteristics of crested wheatgrass.
- Smith, D. G. 1964. Factors affecting response of rubber rabbitbrush to 3,4-D.
- Smith, E. L. 1963. Effects of petroleum mulch on emergence, development and survival of bluegrama grass seedlings.
- Steninger, Alvin. 1962. Effects of sagebrush treatments on beef production.
- Wilson, N. L. 1965. Cattle preference for warm season grass mixtures grown alone and in association with alfalfa.
- Zabala, N. A. 1965. Nitrogen and phosphorus fertilizer effects on growth responses of sand blue-stem.

#### FT. HAYS STATE COLLEGE

- Ankle, David D. 1963. Vegetation and soil comparisons among three areas: mowed, relict, and moderately grazed.
- Bergman, Paul. 1964. Distributional patterns of vegetation on a small hillside, using the ordination technique of analysis.
- Donart, Gary B. 1963. Influence of soil moisture stress at various stages of development on total available sugars of three prairie grasses.
- Jeffers, Marvin Lee. 1964. A comparison of the epidermal pattern of some grasses of northeast Kansas.
- Johnsten, Thomas D. 1963. Translocation of radioactive 2,4-D in western ragweed.
- Lunsford, Larry Dean. 1963. Comparison of soils and vegetation on several limy upland range sites.
- Miller, Samuel Martin. 1963. Influence of season and intensity of grazing on vegetative composition and yields.
- Nagel, Harold G. 1964. Some considerations in the use of point quadrats in the analysis of mixed prairie vegetation.
- Noller, Gary Lee. 1962. A study of vegetation and soil in relation to intensity of grazing in North Central Kansas.
- Rahimian, Hossein. Wilting coefficient, water infiltration and textural analysis of soils on five different range sites near Hays, Kansas.
- Reinert, Kenneth F. 1962. Forecasting wheat and grass yields from factors in the climate.
- Roy, Girija Prasad. 1964. Leaf anatomy of some common grasses of northwest Kansas.

- Singh, Ram Prashad. 1962. Behavior of prairie plants during winter months.
- Smith, Charles Ray. 1963. The variations in soil and vegetation on the three limestone break sites in Ellis County.
- Van Amburg, Gerald L. 1965. The effect of soil depth upon basal cover and production of mixed prairie vegetation.
- Watson, Donald Leon. 1962. The epidermal characteristics of the first seedling leaves of certain grass seedlings.
- Wolters, Gale Leon. 1962. Competitive effects of Japanese Brome on native perennial grasses.
- Young, S. Emory. 1965. The effect of *Yucca glauca* leachate on germination of six native grass seeds.

#### UNIVERSITY OF IDAHO

- Campbell, John D. 1962. Grasslands of the Snake River drainage in northern Idaho and adjacent Washington.
- Heller, Thomas Hubert. 1962. Studies of medusahead and cheatgrass.
- Marchand, Leonard Stephen. 1965. An ecological study of sagebrush in interior British Columbia.
- McIlvain, Bill Gardner. 1963. Effects of grazing intensities on cattle gains and crested wheatgrass ranges in southern Idaho.
- Nelson, Devon O. 1964. A comparison of forb-grass sites with sagebrush sites in the centennial mountains of southern Montana.
- \*Roché, Ben Francis, Jr. 1965. Ecologic studies of yellow star-thistle (*Centaurea solstitialis* L.).

#### THE UNIVERSITY OF NEBRASKA

- Baysal, Ismet. 1965. A study of certain practices in the production and improvement of intermediate wheatgrass.
- Feldman, Israel. 1966. Some ecological and control studies on musk thistle in eastern Nebraska.
- Sall, Ray. 1963. Stand establishment of certain perennial grasses in relation to rate and date of planting.
- Streeter, C. L. 1964. The effect of stage of maturity, method of storage and storage time on the nutritive value of Sandhills upland hay.

#### NEW MEXICO STATE UNIVERSITY

- Buffington, Lee A. 1964. Vegetational changes on a semi-desert grassland range from 1858 to 1963. Ecol. Monog. 35: 139-164.

- Donaldson, Byron. 1965. Abundance and distribution of javelina in southwestern New Mexico.
- Gerard, Jesse B. 1965. Factors and treatments affecting fruit fill, seed germination and seedling emergence of fourwing slabush (*Atriplex canescens* (Pursh) Nutt.).
- Green, Geary R. 1965. Chromic oxide in paper as an indicator in digestion trials with steers.
- Hill, Kenneth R. 1965. Estimated intake and nutritive value of range forage grazed by Hereford and Santa Gertrudis cows.
- Lohmiller, Robert G. 1963. Drought and its effects on condition and production of a desert grassland range.
- Moir, William H. 1963. Vegetational analyses of three southern New Mexico mountain ranges.
- Parker, Eugene E. 1963. Estimating grass herbage production on desert plains grassland range.
- Singh, Surendra P. 1964. Cover, biomass, and root-shoot habit of *Larrea divaricata* on a selected site in southern New Mexico.
- Weaver, John W. 1964. Effects of pH, osmotic pressure and buffer solutions on germination of *Drymaria pachyphylla* and *Drymaria arenarioides*.

#### UNIVERSITY OF NEVADA

- Brown, Lyle Lewis. 1962. Establishment of forage plants on difficult salt-desert range sites.
- Heinze, Donald H. 1964. The response of herbaceous species to differing grazing management schemes on crested wheatgrass seedlings.
- Holbo, H. Richard. 1964. The characterization of seven species of sagebrush (Genus *Artemisia* L., Section *Tridentatae* (Rydb.) Beetle) by paper chromatography.
- Neal, Donald Lee. 1962. Changes in vegetation of seeded rangeland in relation to various grazing practices.

#### OREGON STATE UNIVERSITY

- Bailey, Arthur Wesley. 1963. Characterization of selected plant communities within the Tillamook Burn in northwestern Oregon.
- \*Bailey, Arthur Wesley. 1966. Forage production and utilization in a mixed conifer forest in the Willowa Mountain foothills.
- \*Bedell, Thomas Erwin. 1966. Seasonal cattle and sheep diets on *Festuca arundinacea-Trifolium subterraneum* and *Lolium per-*

- enne-Trifolium subterraneum* pastures in western Oregon.
- Bunch, Thomas R. 1965. Forage production on range sites in east central Malheur County, Oregon.
- \*Crouch, Glenn Leroy. 1964. Forage production and utilization in relation to deer browsing of Douglas-fir seedlings in the Tillamook Burn, Oregon.
- Culver, Roger Norman. 1964. An ecological reconnaissance of the *Artemisia* steppe on the east central Owyhee Uplands of Oregon.
- \*Driscoll, Richard Stark. 1962. Characteristics of some vegetation-soil units in the juniper zone in central Oregon.
- Sanders, Kenneth Dwayne. 1965. The seasonal yield, quality, and utilization of *Trifolium subterraneum* mixture with *Festuca arundinacea* and *Lolium perenne* in western Oregon.
- \*Tueller, Paul Teuscher. 1962. Plant succession on two *Artemisia* habitat types in southeastern Oregon.
- Volland, Leonard Allan. 1963. Phytosociology of the ponderosa pine type on pumice soils in the Upper Williamson River Basin, Klamath County, Oregon.
- Walton, Richard L. 1962. The seasonal yield and nutrient content of native forage species in relation to their synecology.
- \*Young, James Albert. 1965. Forage production and utilization in a mixed conifer forest in the Wallowa Mountain foothills.
- TEXAS A & M UNIVERSITY**
- Bernardon, Abel E. 1965. Effect of clipping at several stages of growth of first year plants of cane Bluestem (*Andropogon carbinodis* Lag.) on subsequent development.
- Capps, Robert Curtis. 1965. The characteristics of the woody vegetation on three soil series in Brazos County, Texas.
- \*Grumbles, Jim Bob. 1963. A technique for evaluating the grazing relationships between steers and white-tailed deer in the coastal bend area of Texas.
- Homesley, Wylie Buress. 1963. The relationship of understory vegetation to stand composition, stand structure and soil series in the San Jacinta experimental forest of Texas.
- Hughes, Eugene Earl. 1962. Effects of rootplowing and aerial spraying on microclimate soil conditions, and vegetation of mesquite areas.
- \*Kapadia, Zqrir J. 1962. Dynamics of variation in the *Bouteloua curtipendula* (Michx.) Torr. complex with special reference to *B. curtipendula*, var. *caespitosa*.
- Phillips, Philip Joe. 1963. An evaluation of high viscosity, crowded phase emulsions as herbicide carriers when applied through the bifluid spray system.
- Reardon, Pat Orman. 1964. The effect of fertilization on a native little bluestem grass community.
- \*Ryerson, Donald E. 1965. The woody associates, distribution, and chemical control of Coyotillo (*Karwinskia humboldtiana* (R & S) Zucc.).
- \*Schuster, Joseph Lawrence. 1962. Composition and yields of understory vegetation in an east Texas pine-hardwood type as related to timber stand and habitat factors.
- Steger, Robert Emmett. 1965. Radial growth of mesquite (*Prosopis glandulosa* var. *glandulosa* Torr.) as affected by certain environmental factors in Brazos County in 1963.
- \*Waldrip, William J. 1962. Utilization of side-oats grama *Bouteloua curtipendula* (Michx.) Torr.) and its value as an indicator of grazing intensity in the rolling plains of Texas.
- Wright, John Allen. 1962. The utilization of tobosa (*Hilaria mutica* (Buckl.) benth.) in relation to various grazing systems on the Texas range station.
- TEXAS TECHNOLOGICAL COLLEGE**
- Dee, Richard F. 1965. The effect of fertilizers on the yield and protein content of high plains grasses.
- Mathis, Gary W. 1963. The extent of root development of plains bristlegass (*Setaria leucopila*) as measured by soil placement of radiophosphorus.
- Pettit, Russell Dean. 1965. Root development of two native grasses using radiophosphorus and soil-block techniques.
- Robertson, Truman Edwin, Jr. 1965. Interseeding abandoned cropland with sideoats grama grass, *Bouteloua curtipendula* (Michx.) Torr., on the High Plains of Texas.
- UTAH STATE UNIVERSITY**
- Bonham, Charles'D. 1965. The effect of data and rate of application of 2,4-D on control of big and little rabbitbrush.
- Bowns, James E. 1963. The effects of grazing on the root system of seacoast bluestem.
- Brun, Jorge Maria. 1962. A comparison of line interception, point frame, and distance measurement methods of analyzing desert shrub vegetation.
- \*Currie, Pat O. 1963. Food habits of the black-tailed jackrabbit and forage competition between jackrabbits and domestic livestock on native range in northwestern Utah.
- Forbes, Lynne Mackenzie. 1965. An analysis of the relationship between sales value of public grazing leases and sales value of comparable private range lands in southern Alberta.
- \*Gonzalez, Martin H. 1964. Patterns of livestock behavior and forage utilization as influenced by environmental factors on a summer mountain range.
- Gifford, Gerald Fredrick. 1964. Aspen root and top growth: Field observations of roots; response of roots and tops to moisture, temperature, light intensity, and soil type.
- \*Harris, Grant A. 1965. Some competitive relationships between seedlings of bluebunch wheatgrass (*Agropyron spicatum*), cheatgrass (*Bromus tectorum*), and medusehead (*Elymus caput medusae*).
- \*Houston, Walter R. 1963. Effects of grazing intensity on range vegetation and beef cattle production in the northern Great Plains.
- \*Ibrahim, Kamal M. 1963. Ecological factors influencing plant distribution in the shadscale zone of southeastern Utah.
- Jefferies, Ned W. 1962. The effect of 2,4-D and nitrogen fertilizers on forage production of northern Utah mountain ranges.
- Kothmann, Merwyn M. 1963. The effect of grazing upon the daily intake and nutritive value of the diet of sheep on summer ranges of northern Utah.
- Leonard, Paul D. 1964. The influence of *Chrysothamnus nauseosus* on production and vigor of *Agropyron cristatum* and *Agropyron elongatum*.
- Leonard, Robert J. 1963. The influence of fatty alcohols upon infiltration and soil cohesion.
- Magid, Elrasheed Abdel. 1962. Some range management aspects in Darfur province of the Sudan.
- \*Marston, Richard B. 1963. Some comparative hydrologic characteristics of aspen and mountain brush communities on steep mountain watersheds in northern Utah.

Meiners, William R. 1965. Some geologic and edaphic characteristics useful to management programming within the pinyon-juniper type.

Mitchell, John E. 1965. Relationship between soil mineralogy and plant distribution within two communities of the shadscale zone in Utah.

Nelson, Kendall L. 1965. Status and habits of the American buffalo (*Bison bison*) in the Henry Mountain area of Utah.

Scotter, George Wilby. 1962. Effects of forest fires on the winter range of barren-ground caribou in northern Saskatchewan.

Singh, Teja. 1963. A comparison of the Rocky Mountain and tube infiltration meters on high elevation watersheds.

Stelfox, John G. 1963. Some effects of harvesting coniferous forests in western Alberta on big game range.

Sturges, David L. 1963. The use of fatty long chain alcohols to reduce evaporation from soils.

Taylor, Jarrell Kent. 1962. The effect of range condition upon the production, nutritive intake, and digestibility of desert range forage in southwestern Utah.

Wright, Henry A. 1962. Influence of fire on important bunchgrasses of the sagebrush-grass region of southern Idaho.

\*Wright, Henry A. 1964. The evaluation of several factors to determine why *Sitanion hystrix* is

more resistant to burning than *Stipa comata*.

### UNIVERSITY OF WYOMING

Balleh, Adnan Hasan. 1965. Potential of dryland plants of the world for Syria.

Blankenship, James O. 1964. Indirect estimation of standing crop for selected Alpine species.

Cattrell, Edward B. 1964. Some effects of chemical control of big sagebrush. *Artemisia tridentata* Nutt., on wild animal populations in Wyoming.

\*Everson, A. C. 1964. The effects of frequent clipping at different intensities on western wheatgrass.

\*Fisser, Herbert G. 1962. An ecological study of the *Artemisia tripartita* subsp. *rupicola* and related shrub communities in Wyoming.

Hamner, Robert W. 1964. An ecological study of *Sarcobatus vermiculatus* communities of the Big Horn Basin, Wyoming.

\*Hyde, Robert M. 1964. Vegetation in Sunlight Basin, Park County, Wyoming.

Jones, Webster B. 1964. A study of some livestock and big game enclosures in northwestern Wyoming.

Langston, Richard F. 1964. Observations of sheep and cattle grazing behavior in large and small pastures on the shortgrass region of eastern Wyoming.

Miller, William B. 1964. An ecological study of the mountain-

mahogany community and related biotic associations of the Big Horn Mountains.

\*Nichols, James T. Soil-vegetation relationships of the 15-mile drainage, Washakie County, Wyoming.

Severson, Kieth E. 1964. A description and classification, by composition, of the Aspen stands in the Sierra Madre Mountains, Wyoming.

Smith, Blake T. 1963. Factors affecting the distribution of cattle and sheep on shortgrass range in Wyoming.

Statler, Glen D. 1965. *Eruotia lanata* establishment trails.

Sylvester, Donell D. 1962. Variations in morphological characteristics, germination, and seedling vigor of Nebraska materials of *Calamovilfa longifolia* (Hook.) Scribn. in Hack.

Vosler, L. Christian. 1962. An ecological study of *Atriplex nuttallii* in the Big Horn Basin of Wyoming.

\*Williams, Clayton S. 1963. Ecology of bluebunch wheatgrass in northwestern Wyoming.

### LITERATURE CITED

KINSINGER, F. E., AND R. E. ECKERT. 1961. Range management theses since 1955. J. Range Manage. 14:51-54.

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