

## LITERATURE ON THE VEGETATION OF OKLAHOMA, 1964-1975

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Oklahoma vegetation has been studied extensively both in its role as a primary component of the environment and as it relates to animal life, geology, agriculture, and other aspects of the state's natural history and economy. These studies have resulted in a large and scattered body of literature. Two previous bibliographies have been published (371,389) dealing with Oklahoma vegetation, one in 1953 and the second in 1964. This third bibliography on Oklahoma vegetation is for the period 1964-1975 and adds 171 new titles to the two previous lists. Entries are arranged alphabetically by author and chronologically when more than one entry occurs by the same author(s). Numbering continues sequentially. Geographical regions used in the current list are the same as those used for the two precedent bibliographies and are illustrated by Fig. 1. Initials represent subdivisions within the state, except that OK is used to indicate papers dealing with the state as a whole and RE for those in which Oklahoma vegetation is considered as part of a larger region.

Since knowledge of the vegetation of an area is often basic and preliminary to other research activities, the list includes a number of papers in which the main objective is to report findings other than vegetational analysis or description. The inclusion of this collateral material enhances the value of the list for plant ecologists as well as makes it useful for taxonomists, agronomists, geographers, zoologists, and other scientists. All items included have been examined and verified bibliographically by the compiler in order to make citations on the list dependable and accurate. Publications, such as environmental impact studies, whether published commercially or by U.S. government agencies, have been excluded if copies have not been found in academic libraries in the state or if their description could not be verified in standard bibliographical authorities, e.g., *The National Union Catalog*. Abbreviations for periodical citations are those found in BioSciences Information Service of Biological Abstracts, *BIOSIS* 1975.

The amount of vegetational investigation continues to be unevenly distributed throughout the state. Areas studied most are the north central section with 86 papers and the south central with 113 papers; the Panhandle, with only 16 reports, has been studied least. (Table 1) This concentration is to be expected since both of the state's largest universities, at which most research is conducted, are located in these central regions. The increased amount of investigation in the north central section during the past decade reflects the attraction of the Adams ranch in Osage County as a research area. Fifteen research papers have been published during recent years from this large and representative prairie site. The impetus for research that such an area provides argues persuasively for the acquisition of additional natural areas throughout the state in the near future in which research may be conducted.

The literature searched in compiling the following list includes *Proceedings of the Oklahoma Academy of Science*, 1964-1975; *Biological Abstracts*, 1964-1976; *Science Citation Index*, *Permuterm Subject Index*; Xerox University Microfilms, *Comprehen-*

TABLE 1. *Research papers on Oklahoma vegetation by region.*

	Pre-1964	1964-1975	Total
Panhandle	5	11	16
Northwest	11	15	26
Southwest	28	12	40
North Central	34	51	85
South Central	70	43	113
Northeast	22	12	34
Southeast	15	12	27
Oklahoma	60	15	75
Regional	65	5	70

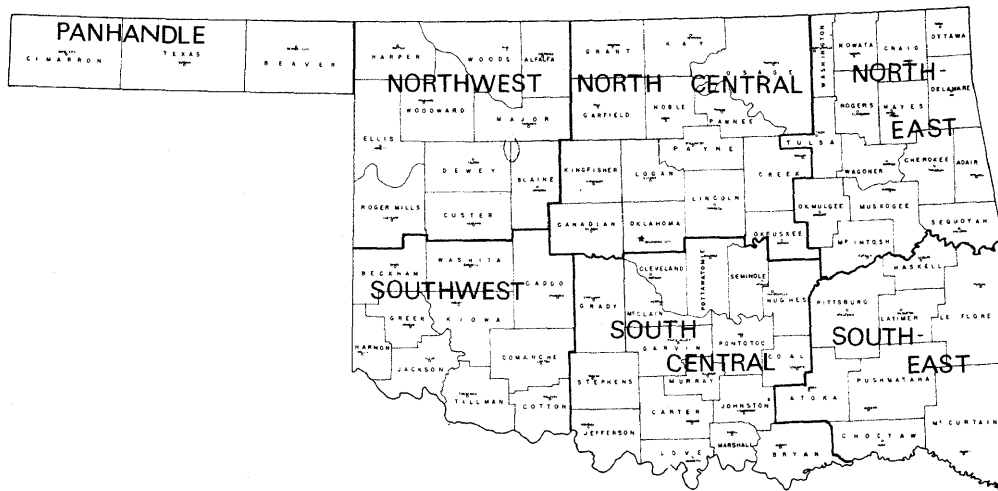


FIGURE 1. Map of Oklahoma showing the various regions cited in the bibliography.

sive Dissertation Index, 1891-1972, Supplements 1973, 1974; and the thesis catalogues of Oklahoma State University and of the University of Oklahoma. The latter two catalogues reveal the existence of a number of vegetational theses and dissertations not previously listed.

These three bibliographies on Oklahoma vegetation have been compiled to aid vegetational research and teaching throughout the state.

298. A. S. ABDUL-WAHAB and E. L. RICE, Plant inhibition by Johnson grass and its possible significance in old field succession. *Bull. Torrey Bot. Club* 94: 486-497 (1967) (RE) Inhibition of other pioneer plants in old fields may account for its persistence in the pioneer stage of succession.
299. D. B. ADAMS and P. G. RISSER, The effect of host specificity on the interspecific association of bark lichens. *Bryologist* 74: 451-457 (1971). (NC) Corticolous macrolichen species occurring in central Oklahoma upland forest determined and frequency per forest species and constancy per stand established.
300. D. B. ADAMS and P. G. RISSER, Some factors influencing the frequency of bark lichens in north central Oklahoma. *Am. J. Bot.* 58: 752-757 (1971). (NC) Precipitation is major factor in determining frequency behavior of bark lichens in area investigated.
301. F. P. ALLGOOD and F. GRAY, Ecological interpretation for small mounds in landscapes of eastern Oklahoma. *J. Environ. Qual.* 3: 37-41 (1974). (NE) Tall - and mid-grasses, sedges are main species on small mounds. Production of vegetation on well-managed site higher on mound than intermound soils.
302. F. A. AL-NAIB and E. L. RICE, Allelopathic effects of *Platanus occidentalis*. *Bull. Torrey Bot. Club* 98: 75-82 (1971). (SC)
303. R. J. BAALMAN, *Vegetation of the salt plains wildlife refuge, Jet, Oklahoma*, Ph.D. Dissertation, University of Oklahoma, Norman, 1965. (NW) Vegetation maps and photographs.
304. S. C. BARBER, *A floristic study of the vascular plants of the gypsum hills and redbed plains area of southwestern Oklahoma*, Master's Thesis, Oklahoma State University, Stillwater, 1975. (SW) Site descriptions include photographs.
305. H. G. BARCLAY, The Nature Conservancy's first Oklahoma Preserve. *Proc. Okla. Acad. Sci.* 50: 125 (1970). (NE)
306. S. R. BIGHAM, *The comparative utility of plant life-form and other vegetational characteristics in evaluating the habitat of the cottontail*, Ph.D. Dissertation, Oklahoma State University, Stillwater, 1970. (NC) Plant life-forms map of study area and vegetation description.
307. W. C. BLINN, *The short grass plains and post oak-blackjack woodland of Oklahoma in historical perspective*, Master's Thesis, Oklahoma State University, Stillwater, 1951. (OK)
308. UDO BLUM and E. L. RICE, Inhibition of symbiotic nitrogen fixation by gallic and tannic acid, and possible roles in old field succession. *Bull. Torrey Bot. Club* 96: 531-544 (1969). (RE)
309. D. E. BRYAN and W. A. DREW, A partial inventory of insect populations in tallgrass prairie pastures in north central Oklahoma. *Proc. Okla. Acad. Sci.* 42: 143-158 (1961). (NC) Includes vegetation maps of study plots.

310. K. O. BUTTS, *Life history and habitat requirements of burrowing owls in western Oklahoma*, Master's Thesis, Oklahoma State University, Stillwater, 1973. (PH) Vegetational description and maps.
311. M. G. CARMES and W. T. PENFOUND, Reproduction of woody plants in the absence of grazing. Proc. Okla. Acad. Sci. 47: 7-11 (1966). (SC) Vegetation changes in Oliver Wildlife Preserve in floodplain near Norman.
312. J. R. CARPENTER, *Seasonal aspects in certain prairie and savannah communities*, Master's Thesis, University of Oklahoma, Norman, 1934. (SC) Vegetation, fauna in prairie plot in McClain Co., Okla. correlated with comparative study in Champaign, Illinois. Two plates.
313. J. W. CARPENTER, Nesting of the mourning dove in northwest Oklahoma. Proc. Okla. Acad. Sci. 49: 163-169 (1968). (NW) Vegetation types described in Canton Public Hunting Area and correlated with frequency of nesting.
314. W. A. CARTER, Ecology of the nesting birds of the McCurtain Game Preserve, Oklahoma. Wilson Bull. 79: 259-272 (1967). (SE) Describes vegetation in upland forest within the preserve.
315. R. G. CASON, *A study of native grasses of Comanche County, Oklahoma*, Master's Thesis, Oklahoma A&M College, Stillwater, 1942. (SW) Photographs and maps.
316. T. W. CLARK, The life-form concept and mule deer habitat in Oklahoma. Proc. Okla. Acad. Sci. 48: 23-27 (1967). (PH) Life forms on mesa slopes and canyon walls similar to those of the southern Rocky Mountain foothills.
317. V. E. COLLINS and W. T. PENFOUND, The relation of stock pond vegetation to geological formations in Marshall County, Oklahoma. Proc. Okla. Acad. Sci. 47: 11-13 (1966). (SC)
318. SHELIA CONANT, *Vegetation structure in a tallgrass prairie*, Master's Thesis, University of Oklahoma, Norman, 1972. (NC) Adams Ranch in Osage County.
319. SHELIA CONANT and P. G. RISSER, Canopy structure of a tallgrass prairie. J. Range Manage. 27: 313-318 (1974). (NC) Adams Ranch in Osage County.
320. W. R. COYNER, *Insect distribution and seasonal succession in overgrazed and normal grassland*, Master's Thesis, University of Oklahoma, Norman, 1938. (NC) Vegetation described and photographed.
321. G. L. CRAMER, *Effects of various plant and environmental factors on post oak response to 2,4,5-T*, Master's Thesis, Oklahoma State University Stillwater, 1975. (SE) "Thirteen sites in the crosstمبر and Ouachita highland areas of Oklahoma..."
322. J. J. CROCKETT, Effect of mowing on a relict tall grass prairie. Proc. Okla. Acad. Sci. 46: 1-2 (1965). (NC)
323. R. L. DALRYMPLE, *Vegetational response following winged elm (*Ulmus alata* Michx.) and oak (*Quercus spp.*) control, winged elm browse and winged elm understory growth*, Master's Thesis, Oklahoma State University, Stillwater, 1964. (SE) Specific site of study not stated.
324. C. A. DAVIS, *Components of the habitat of the bobwhite quail in Payne County, Oklahoma*, Ph.D. Dissertation, Oklahoma State University, Stillwater, 1964. (NC) Vegetation on farmlands, grassland, and woodlands described and illustrated with map.
325. R. D. DeARMENT, *Evaluation of Payne County, Oklahoma farm lands and vegetation patterns for bobwhite quail*, Master's Thesis, Oklahoma A&M College, Stillwater, 1950. (NC) Photographic illustrations and colored maps representing the vegetational types within the study areas.
326. C. H. DERDEYN, *Manipulating central Oklahoma rangeland vegetation for bobwhite quail*, Master's Thesis, Oklahoma State University, Stillwater, 1975. (NC) Hulah Public Hunting area in Osage County. Photographs.
327. D. D. DONALDSON, Brush control and the welfare of lesser prairie chickens in western Oklahoma. Proc. Okla. Acad. Sci. 46: 221-228 (1965). (NW) Describes vegetation types which characterize habitats of lesser prairie chicken including most important plant species within the habitats.
328. D. D. DONALDSON, *Effects on lesser prairie chickens of brush control in western Oklahoma*, Ph.D. Dissertation, Oklahoma State University, Stillwater, 1969. (NW) Vegetational analysis.
329. R. L. DOWNING, *An evaluation of ground nesting by mourning doves in northwestern Oklahoma*, Master's Thesis, Oklahoma State University, Stillwater, 1957. (NW, PH) Correlates vegetational types with mourning dove nesting.
330. D. D. DWYER, *An annotated plant list for Adams Ranch*, Master's Thesis, Fort Hays Kansas State College, Hays, 1958. (NC) Describes vegetation of the range according to topography and soil types.
331. D. D. DWYER and P. W. SANTELMANN, *A comparison of post oak-blackjack oak communities in two major soil types in Stn. north central Oklahoma*, Okla. Agric. Exp. Stn. Bull. B-626, 1964. (NC) Four areas near Lake Carl Blackwell. Photographs.
332. LINCOLN ELLISON, Influence of grazing on plant succession of rangelands. Bot. Rev. 26: 1-78 1960. (RE)
333. H. M. ELWELL, Herbicides for release of short-leaf pine and native grass. Weeds 15: 104-107 (1967). (SE) Mixed short leaf pine and hardwood vegetation in southeastern Oklahoma described.
334. HEDI FAROUA, *Interseeding and paraquat effects on central and eastern rangeland vegetation*, Master's Thesis, Oklahoma State University, Stillwater, 1975. (NC, NE)
335. C. T. FOREMAN, *The cross timbers*, Star Printery, Muskogee, Oklahoma, 1947. (OK). Discusses the vegetational character, location and significance of the cross timbers in Oklahoma and Texas. Includes map.

336. W. J. FRANK, *Rodent populations and their reactions to grazing intensities on sand sagebrush grasslands in the southern great plains region*, Ph.D. Dissertation, Oklahoma State University, Stillwater, 1950. (NW) Describes sand dune and sagebrush vegetation. Photographs.
337. LEO A. GALLOWAY, The vegetation of an actively eroding canyon in Canadian County, Oklahoma. *Proc. Okla. Acad. Sci.* 45: 20-23 (1964). (SW).
338. R. G. GARDNER, *A vegetational analysis of the Phillips Agricultural Demonstration Project Ranch, Foraker, Oklahoma*, Master's Thesis, A and M College of Texas, College Station, Map. 26 photographs. 1958. (NC) Analyzes vegetation on the numerous discrete pastures of the 22,000 acre ranch. Species list and photographs.
339. C. W. J. GAY, *The effects of nitrogen fertilization on native vegetation under conditions of clipping, grazing and burning*, Master's Thesis, Oklahoma State University, Stillwater, 1964. (NC) Adams Ranch in Osage County. Color photographs.
340. C. W. GAY and D. W. DWYER, Effects of one year's nitrogen fertilization on native vegetation under clipping and burning. *J. Range Manage.* 18: 273-277 (1965). (NC)
341. J. W. GOERTZ, *The influence of habitat quality upon density of cotton rat population*, Ph.D. Dissertation, Oklahoma State University, Stillwater, 1962. (NC) Vegetation in site near Stillwater analyzed by computer.
342. J. E. GRAVES and W. E. McMURPHY, Burning and fertilization for range improvement in central Oklahoma. *J. Range Manage.* 22: 165-168 (1969). (NC) Vegetation on study plot was determined both before and after treatment.
343. M. T. HALL and C. J. CARR, Differential selection in Juniper populations from the Baum Limestone and Trinity Sand of southern Oklahoma. *Butler Univ. Bot. Stud.* 14: 21-40 (1964). (SC) Vegetation discussed in area where Juniper occurs.
344. S. HAMP, W. G. SORENSON, and E. L. RICE, A comparison of soil microfungi of two grassland areas in central Oklahoma. *Proc. Okla. Acad. Sci.* 52: 41-44 (1972). (SC) Soil micro-fungi of a midgrass and a tall grass prairie soil found to be similar.
345. W. R. HANSON, Plants for improving bobwhite habitat in northwestern Oklahoma, *Okla. State Univ., Biol. Ser. No. 7*, (1960). (NW) Descriptions and photographs of vegetation, natural and man-induced, characteristic of various quail habitats.
346. J. R. HARLAN, Production characteristics of Oklahoma forages: native range. *Okla. Agric. Exp. Stn. Bull. B-547*, 1960. (OK) General discussion of factors in production and potential of native ranges.
347. H. J. HARPER and L. W. REED, Effects of chemical composition of soil on micronutrients and other elements in Oklahoma forage plants. *Okla. Agric. Exp. Stn. Processed Ser. P-486*, 1964. (OK) Chemical composition of native and cultivated forage plants analyzed. Ninety-eight sites identified.
348. D. B. HAZELL, *Forage production, vegetative composition and plant vigor in relation to range conditions*, Ph.D. Dissertation, Oklahoma State University, Stillwater, 1964. (NC) Adams Ranch in Osage County. Photographs.
349. D. B. HAZELL, The claypan range site in northern Osage County, Oklahoma. *J. Range Manage.* 18: 94-96 (1965). (NC) Vegetational compositions of claypan site were determined.
350. D. B. HAZELL, Effect of grazing intensity on plant composition, vigor, and production. *J. Range Manage.* 20: 249-254 (1967). (NC) Adams Ranch in Osage County. Photographs.
351. JOYCE HEDRICK, Lichens from the state of Oklahoma. *Pap. Mich. Acad. Sci. Arts Lett.* 13: 101-110 (1931). (OK) Describes habitat and site location for 59 species of lichens found in 11 widely scattered counties of the state.
352. F. G. HINDMAN, *Retgression of native range vegetation in the sandy high plains*, Master's Thesis, Oklahoma State University, Stillwater, 1965. (PH) Photographs and maps.
353. W. W. HUFFINE and W. C. ELDER, Effect of fertilization on native grass pastures in Oklahoma. *J. Range Manage.* 13: 34-36 (1960). (NC)
354. H. L. HUTCHESON, *Vegetation in relation to slope exposure and geology in the Arbuckle Mountains*, Ph.D. Dissertation, University of Oklahoma, Norman, 1965. (SC) Photographs.
355. G. P. HUTCHINSON, *Mechanisms of secondary succession in a tall grass prairie*, Ph.D. Dissertation, Oklahoma State University, Stillwater, 1969. (NC) Site near Lake Carl Blackwell.
356. G. P. HUTCHINSON, R. K. ANDERSON, and J. J. CROCKETT, Changes in species composition of grassland communities in response to grazing intensity. *Proc. Okla. Acad. Sci.* 47: 25-26 (1966). (NC)
357. RON JARMAN, Eurasian watermilfoil - a new menace to Oklahoma waters. *Proc. Okla. Acad. Sci.* 49: 171-174 (1968). (CS, SW)
358. F. L. JOHNSON, *Some vegetation-environment relationships in the upland forests of Oklahoma*, Master's Thesis, University of Oklahoma, Norman, 1970. (OK) Twenty forest sites investigated representing samples from those same areas studied by Rice and Penfound, #259.
359. F. L. JOHNSON, *Biomass, annual net primary production, and dynamics of six mineral elements in a post oak-blackjack forest*, Ph.D. Dissertation, University of Oklahoma, Norman, 1973. (SC)
360. F. L. JOHNSON and P. G. RISSER, Some vegetation - environment relationships in the upland forests of Oklahoma. *J. Ecol.* 60: 655-663 (1972). (OK)
361. F. L. JOHNSON and P. G. RISSER, Correlation analysis of rainfall and annual ring index of central Oklahoma blackjack and post oak. *Am. J. Bot.* 60: 475-478 (1973). (SC)

362. F. L. JOHNSON and P. G. RISSER, Some forest-soil relationships in Oklahoma. *J. Ecol.* 60: 655-663 (1973). (OK)
363. F. L. JOHNSON and P. G. RISSER, Biomass, annual net primary production, and dynamics of six mineral elements in a post oak - blackjack oak forest. *Ecology* 55: 1246-1258 (1974). (SC)
364. F. L. JOHNSON and P. G. RISSER, A quantitative comparison between an oak forest and an oak savannah in central Oklahoma. *Southwest. Nat.* 20: 75-84 (1975). (SC)
365. J. C. JOHNSON, JR., *Habitat preferences among representative wintering and breeding birds of the central Oklahoma forest-prairie ecotone*, Ph.D. Dissertation, University of Oklahoma, Norman, 1957. (SC) Vegetation of ecotone described. Maps and photographs.
366. R. E. JONES, The life-form concept applied to prairie chicken habitat in Oklahoma. *Proc. Okla. Acad. Sci.* 40: 134-136 (1960). (NC, PH) Warming's "life-form" concept applied to vegetation in Osage and Beaver Counties in prairie chicken habitats.
367. R. E. JONES, Identification and analysis of lesser and greater prairie chicken habitat. *J. Wildl. Manage.* 27: 757-778 (1963). (PH, NC)
368. R. E. JONES, Habitat used by lesser prairie chickens for feeding related to seasonal behavior of plants in Beaver County, Oklahoma. *Southwest. Nat.* 9: 111-117 (1964). (PH) Describes the half-shrub vegetation and short grass vegetation in a prairie chicken study area.
369. L. A. KAPUSTKA and F. L. MOLESKI, Changes in community structure in Oklahoma old field succession. *Bot. Gaz.* 137: 7-10 (1976). (SC)
370. R. W. KELTING and W. T. PENFOUND, Literature on the vegetation of Oklahoma. *Proc. Okla. Acad. Sci.* 34: 126-135 (1953). (OK)
371. R. K. KENNEDY, *An analysis of selected Oklahoma upland forest stands including both overstory and understory components*, Ph.D. Dissertation, University of Oklahoma, Norman, 1973. (OK)
372. A. W. KUCHLER, A biogeographical boundary: the Tatchl Line. *Trans. Kans. Acad. Sci.* 73: 298-301 (1970). (RE) The line has implications for marking the boundary between bluestem and mixed prairie within the region.
373. E. L. LITTLE, JR., *Acer grandidentatum* in Oklahoma. *Rhodora* 46: 445-450 (1944). (SW) Vegetation of Caddo Canyons and Wichitas.
374. M. A. K. LODHI and E. L. RICE, Allelopathic effects of *Celtis laevigata*. *Bull. Torrey Bot. Club* 98: 83-89 (1971). (SC) Study plot was grassland prairie invaded by woody species.
375. A. W. LONG, *Ecological factors affecting the distribution of woody vegetation near the Arkansas River, Tulsa County, with special reference to the smoke-tree Cotinus obovatus*, Master's Thesis, University of Tulsa, Tulsa, 1970. (NC) Color photographs and aerial photographs of study region.
376. R. W. LOVELAND, *Grass stand establishment on rough, rocky, wooded lands in Eastern Oklahoma*, Master's Thesis, Oklahoma State University, Stillwater, 1972. "Lamar, Oklahoma, on the Sarkeys foundation land..." Exact region not specified.
377. J. F. LOVELL, Net production relations of two tree species in southern Oklahoma. *Proc. Okla. Acad. Sci.* 48: 2-6 (1967). (SC) *Diospyros virginiana* is a faster growing species than *Quercus stellata* on limestone soils of southcentral Oklahoma.
378. C. Y. McCULLOUGH, JR., *Populations and range effects of rodents on the sand sagebrush grasslands of western Oklahoma*, Ph.D. Dissertation, Oklahoma State University, Stillwater, 1959. (NW) Percent importance of plant species recorded for area studied.
379. C. B. McDONALD III, *A floristic study of the native or naturalized angiosperm plants of Washington County, Oklahoma*, Master's Thesis, Oklahoma State University, Stillwater, 1974. (NW) Include description of ecology, vegetation. Maps and photographs.
380. E. H. McILVAIN and C. G. ARMSTRONG, A summary of fire and forage research on Shinnery Oak rangelands. *Proc. Tall Timbers Fire Ecology Conf.* 5: 127-129 (1966). (NW)
381. E. H. McILVAIN and D. A. SAVAGE, Spraying 2, 4-D by airplane on sand sagebrush and other plants of the southern great plains. *J. Range Manage.* 2: 43-52 (1949). (NW) Pre- and Post-spray vegetation described and species susceptibility to 2,4-D related.
382. WM. M. McMURTRY, *Data and observations concerning regrassing abandoned cultivated land in Lincoln, Kay and Garfield Counties, Oklahoma*, Master's Thesis, Oklahoma A&M College, Stillwater, 1945. (NC)
383. J. K. McPHERSON and G. L. THOMPSON, Competitive and allelopathic suppression of understory by Oklahoma oak forests. *Bull. Torrey Bot. Club* 99: 293-300 (1972). (NC)
384. M. A. B. MALLIK and E. L. RICE, Relation between soil fungi and seed plants in three successional forest communities in Oklahoma. *Bot. Gaz.* 127: 120-127 (1966). (SC) From senior author's Ph.D. Dissertation at the University of Oklahoma, Norman.
385. R. E. MARTIN and J. R. PRESTON, The mammals of Harmon County, Oklahoma. *Proc. Okla. Acad. Sci.* 49: 42-60 (1968). (SW) Mixed grass, mesquite plains, sand sage, shin oak and riparian vegetation types are recognized in Harmon County.
386. E. B. MAY and WM. T. PENFOUND, Efficiencies of the point-center quarter and quadrat methods in forest sampling. *Proc. Okla. Acad. Sci.* 48: 6-10 (1967). (SC) The quadrat method is the more efficient for sampling forests of this type.
387. S. W. MAY, *Microbial decomposition of cellulose and native plant litter in a true prairie*, Ph.D. Dissertation. University of Oklahoma, Norman, 1974. (NC)

388. F. H. MEANS, *Vascular Plants of southeastern Oklahoma from the Sans Bois to the Kiamichi Mountains*, Ph.D. Dissertation, Oklahoma State University, Stillwater, 1969. (SE) Discusses plant communities of the region.
389. T. H. MILBY and W. T. PENFOUND, Additions to the literature on the vegetation of Oklahoma. *Proc. Okla. Acad. Sci* 45: 23-33 (1965). (OK)
390. W. H. MILTON, *The seeding, development and utilization of native grasses in Kay County, Oklahoma*, Master's Thesis, Oklahoma A&M College, Stillwater, 1947. (NC) Photographs.
391. J. A. MORRISON and J. C. LEWIS, Preliminary observations on mourning doves wintering in southwestern Oklahoma. *Proc. Okla. Acad. Sci.* 54: 25-33 (1974). (SW) Vegetation is described of dunes and pasture lands in the study area.
392. D. M. J. MUELLER, *A phenological comparison of mowed and unmowed tallgrass prairie sites in north-central Oklahoma*, Master's Thesis, Oklahoma State University, Stillwater, 1964. (NC) Importance determined of dormant species for study areas. Photographs.
393. C. L. MURRAY, *A vegetation analysis of a pimped prairie in northeastern Oklahoma*, Master's Thesis, University of Tulsa, Tulsa, 1974. (NE) Maps of area and color photographs.
394. R. L. NEILL and E. L. RICE, Possible role of *Ambrosia psilostachya* on pattern and succession in old-fields. *Am. Midl. Nat.* 86: 344-357 (1971). (SC) Study plot a field near Norman abandoned 25 years.
395. G. L. NICKELL, *The physiological ecology of upland and lowland Panicum virgatum*, Ph.D. Dissertation, University of Oklahoma, Norman, 1972. (SC)
396. C. E. OLMSTEAD and E. L. RICE, Relative effects of known plant inhibitors on species from first two stages of old field succession. *Southwest. Nat.* 15: 165-173 (1970). Inhibition of plants in first vegetational stage in old field succession may permit establishment of tolerant second stage species.
397. T. G. OVERMIRE, *The effect of grazing upon habitat utilization of the Dickcissel (Spiza americana) and Bell's Vireo (Vireo bellii) in north central Oklahoma*, Ph.D. Dissertation, Oklahoma State University, Stillwater, 1963. (NC) Maps, photographs and narrative descriptions of grazed and ungrazed vegetation on sites of investigation.
398. S. PAKA, *Relation of soil properties to site index of shortleaf pine and distribution of tree species in the coastal plain soils of southeast Oklahoma*, Ph.D. Dissertation, Oklahoma State University, Stillwater, 1969. (SE)
399. S. K. PANCHOLY and E. L. RICE, Soil enzymes in relation to old field succession: amylase, cellulase, invertase, dehydrogenase, and urease. *Soil Sci. Soc. Am. Proc.* 37: 47-50 (1973). Tall grass prairie, post oak-blackjack forest and oak-pine forest vegetation investigated. Study plot locations not identified.
400. S. K. PANCHOLY, E. L. RICE, and J. A. TURNER, Soil factor preventing revegetation of a denuded area near an abandoned zinc smelter in Oklahoma. *J. Appl. Ecol.* 12: 337-342 (1975). (NE)
401. R. L. PARENTI and E. L. RICE, Inhibitional effects of *Digitaria sanguinalis* and possible role in old-field succession. *Bull. Torrey Bot. Club* 96: 70-78 (1969). *D. sanguinalis* inhibitory to its own seed germination thus may allow invasion of species in second stage of old-field succession.
402. W. J. PARK, *Ecological study of western Payne County Oklahoma land utilization project*, Master's Thesis, Oklahoma A&M College, Stillwater, 1938. (NC) Description and photographs of vegetation.
403. G. R. PARKER, *Edaphic and topographic effects on forest communities in Payne County, Oklahoma*, Master's Thesis, Oklahoma State University, Stillwater, 1967. (NC)
404. H. L. PARKER, *A comparison of the insects of a virgin prairie, a grazed pasture and abandoned plowed land*, Master's Thesis, University of Oklahoma, Norman, 1952. (SC). Three study plots in McClain County identified and vegetation described and illustrated with photographs.
405. J. M. PARKS and H. G. BARCLAY, The increasing importance of vines in southern Oklahoma. *Proc. Okla. Acad. Sci.* 46: 9-16 (1965). (SC)
406. W. T. PENFOUND, Effects of denudation on the productivity of grassland. *Ecology* 45: 838-845 (1964). (SC) Denudation increased biomass of both prairie and abandoned cropland though species composition unaffected.
407. W. T. PENFOUND, The relation of grazing to plant succession in the tall grass prairie. *J. Range Manage.* 17: 256-260 (1964). (SC)
408. W. T. PENFOUND, Vegetational changes in a black willow forest over a four-year period. *Proc. Okla. Acad. Sci.* 45: 39 (1964). (SC)
409. W. T. PENFOUND, Influence of a wildfire in the Wichita Mountains wildlife refuge, Oklahoma. *Ecology* 49: 1003-1006. (1968). (SW)
410. W. T. PENFOUND, M. C. JENNISON, and J. S. SHED, Replacement of a population of Johnson grass by a vine-forb community. *Proc. Okla. Acad. Sci.* 45: 40-41 (1964). (SC)
411. W. T. PENFOUND, J. S. SHED, and M. C. JENNISON, A plant community dominated by vines. *Proc. Okla. Acad. Sci.* 45: 41-43 (1964). (SC)
412. J. V. PERINO and P. G. RISSER, Some aspects of structure and function in Oklahoma old-field succession. *Bull. Torrey Bot. Club* 99: 233-239 (1972). (SC) Examples of stands representing stages in old-field succession in central Oklahoma cited and described.
413. P. G. PHILLIPS, *Rodent distribution in overgrazed and normal grasslands*, Mas-

- ter's Thesis, University of Oklahoma, Norman, 1935. (SC) Vegetation of study area described and illustrated with photographs and maps.
414. C. L. PORTER, JR., An analysis of variation between upland and lowland switchgrass. *Panicum virgatum* L., in central Oklahoma. Ecology 47: 980-992 (1966). (SC) Vegetation discussed of sites in which switchgrass occurs.
415. C. E. POSEY, Natural regeneration of Loblolly pine 230 miles northwest of its native range. J. Forest. 65: 732 (1967). (NE)
416. J. L. PRESTON, *Establishment and management of tame and native grass pastures in Oklahoma*, Master's Thesis, Oklahoma A&M College, Stillwater, 1942. (OK) Numerous photographs. Sites poorly identified.
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