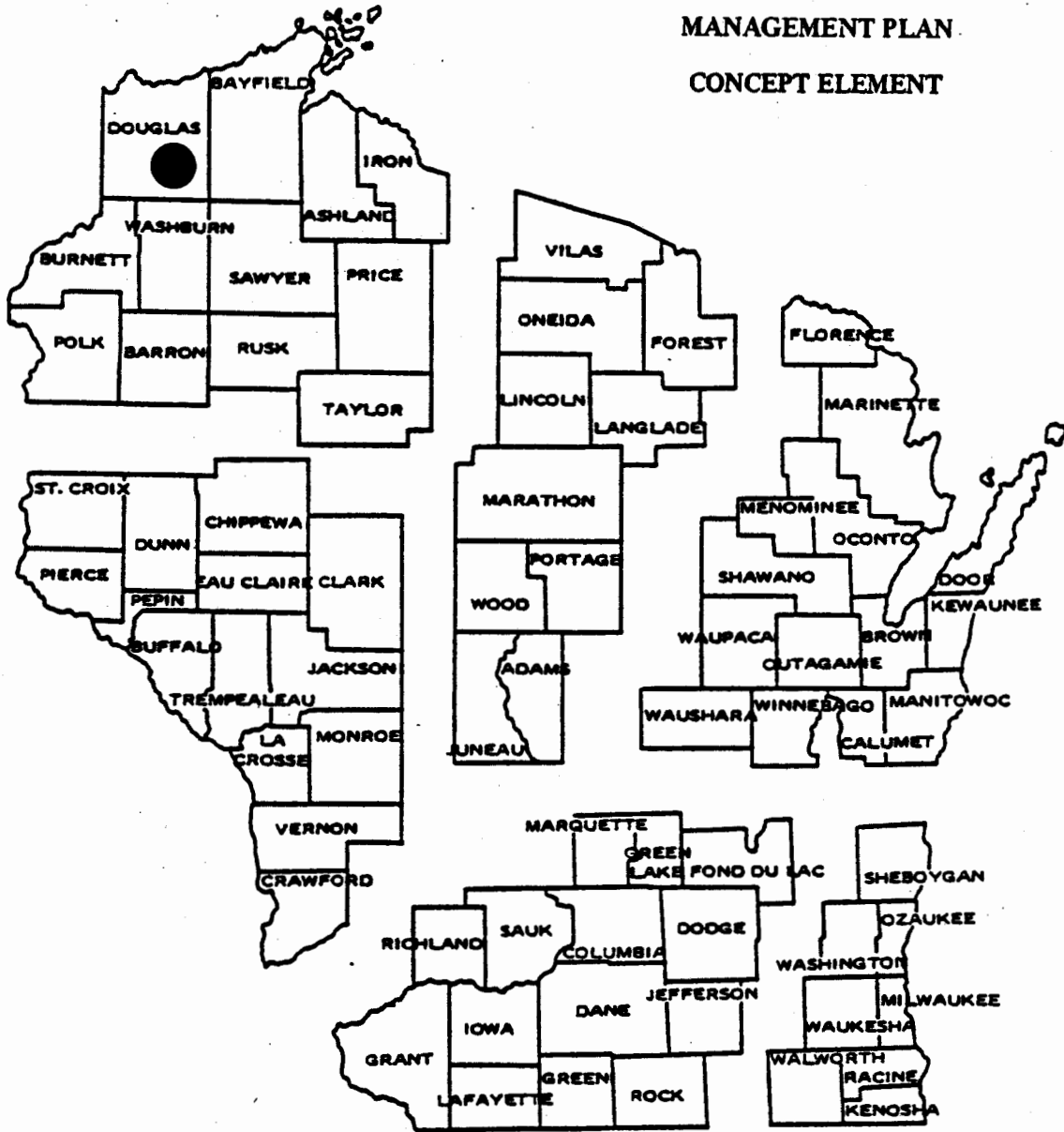


DOUGLAS COUNTY WILDLIFE AREA
 MANAGEMENT PLAN
 CONCEPT ELEMENT



Property Task Force

Leader: Donald Bublitz, Area Wildlife Mgr.
 Steve Schram, Fish Manager
 Barry Stanek, Forester-Ranger
 Jim Stordahl, Forester
 Tom White, Conservation Warden

Approved By: JRH

Date: DEC 16 1985

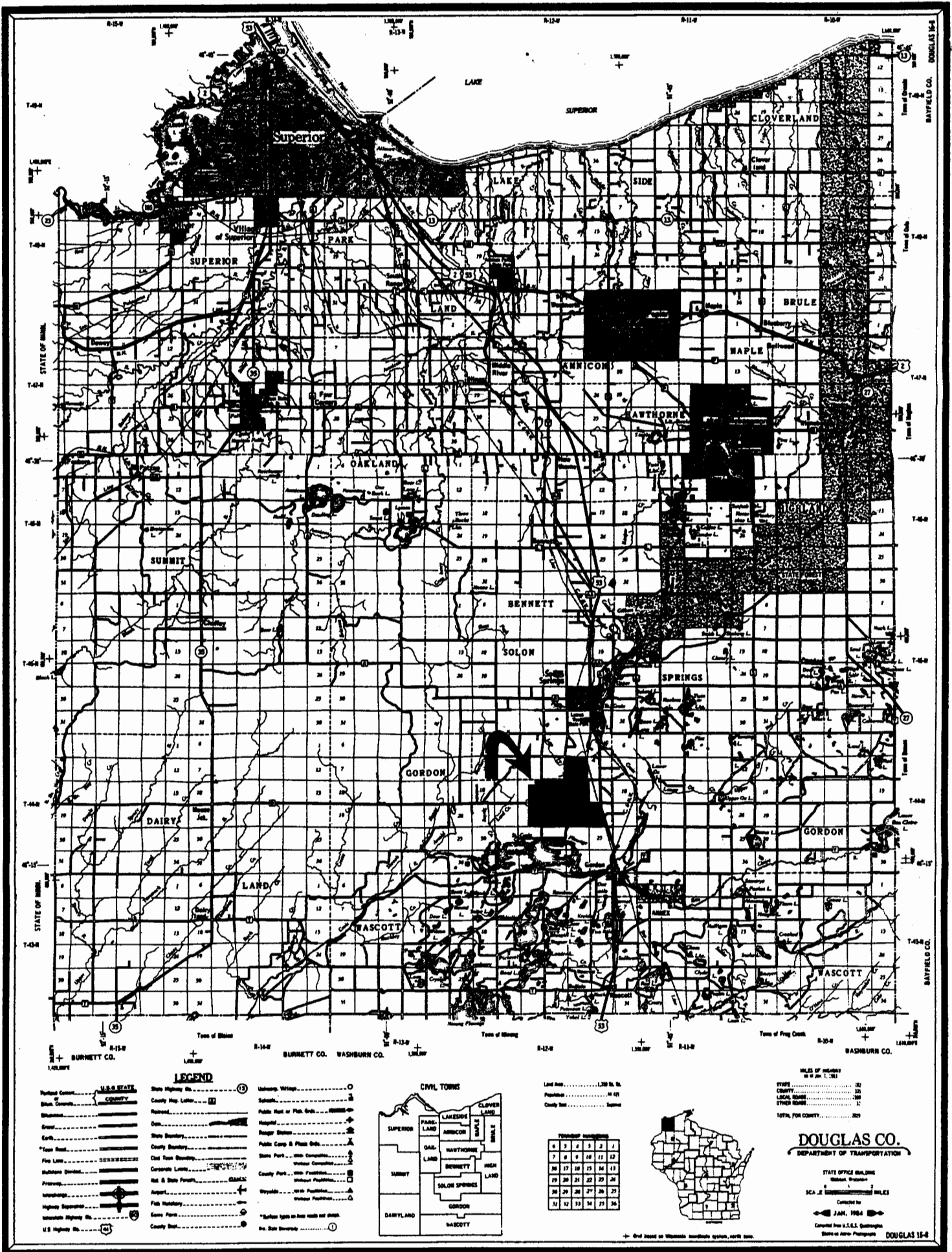


FIGURE 1 LOCATOR

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DOUGLAS COUNTY WILDLIFE AREA

Section I - Actions

GOALS, OBJECTIVES AND ADDITIONAL BENEFITS

Goal

To manage a state-owned and leased wildlife area for sharp-tailed grouse production and to provide public hunting, fishing, and trapping opportunities.

Annual Objectives

1. Manage for a cyclic high fall population of 160 sharp-tailed grouse.
2. Provide 150 angler-days of fishing.
3. Provide 1,000 participant-days of hunting and trapping opportunity as follows:

<u>Activity</u>	<u>Participant-days</u>
Deer	500
Grouse/Woodcock	300
Waterfowl	100
Furbearers	100

4. Protect and maintain one 240-acre Scientific Area:

Annual Additional Benefits

1. Contribute to the habitat of other game and nongame wildlife.
2. Harvest forest products consistent with wildlife objectives.
3. Accommodate 2,500 participant-days of compatible recreational pursuits including field trailing, berry picking, bird study, and wildlife photography.

RECOMMENDED MANAGEMENT AND DEVELOPMENT PROGRAM

Vegetative management efforts will continue to strive to obtain a mixture and dispersion of grass/brush savanna with thickets of young aspen and jack pine that is optimum sharp-tailed grouse habitat. Initial clearing of parcels will be accomplished by commercial timber sales followed by prescribed burning. Timber sales will be designed by the local Department forester to maximize the efficient use of available products in keeping with vegetative management goals.

Overall administration of timber sales shall be the forester's responsibility; wildlife technicians will assist in lay-out and routine monitoring of sale progress. Small scattered stands of jack pine will remain uncut to provide escape cover and diversity. Maintenance of developed habitat will be by prescribed fire. Except for the 240-acre Scientific Area, the entire property is designated a fish and wildlife management area--RD2.

Acquisition (Figure 2)

The property boundary delineating the wildlife area should remain unchanged. County-owned lands within the boundary will continue to be leased under the long-term lease agreement between county and state. Acquisition efforts will continue to focus on private acreage within the boundary on a willing-seller, willing-buyer basis.

Planned Development (Figure 3)

Management will continue in the same pattern followed since the establishment of the wildlife area. Prescribed burning will continue to be the major technique for development and maintenance of cover types. Conversion of cover types to that mixture most suitable for sharptails is virtually complete on 75% of Department-controlled lands. Major development (initial clearing by commercial timber sale and burning of slash) will be required on larger tracts of forest to reach an optimum size of ten acres in scattered areas throughout the property.

Twenty-five percent of the forested acreage will be maintained in stands approximately ten acres in size to provide escape cover for wildlife and for ecological diversity. Stands to be saved will be identified during sale design; they will be selected according to location, understory, and vigor. Scheduled maintenance burns will ensure perpetuation of the desired mix of grass and brush and young stands of aspen and jack pine.

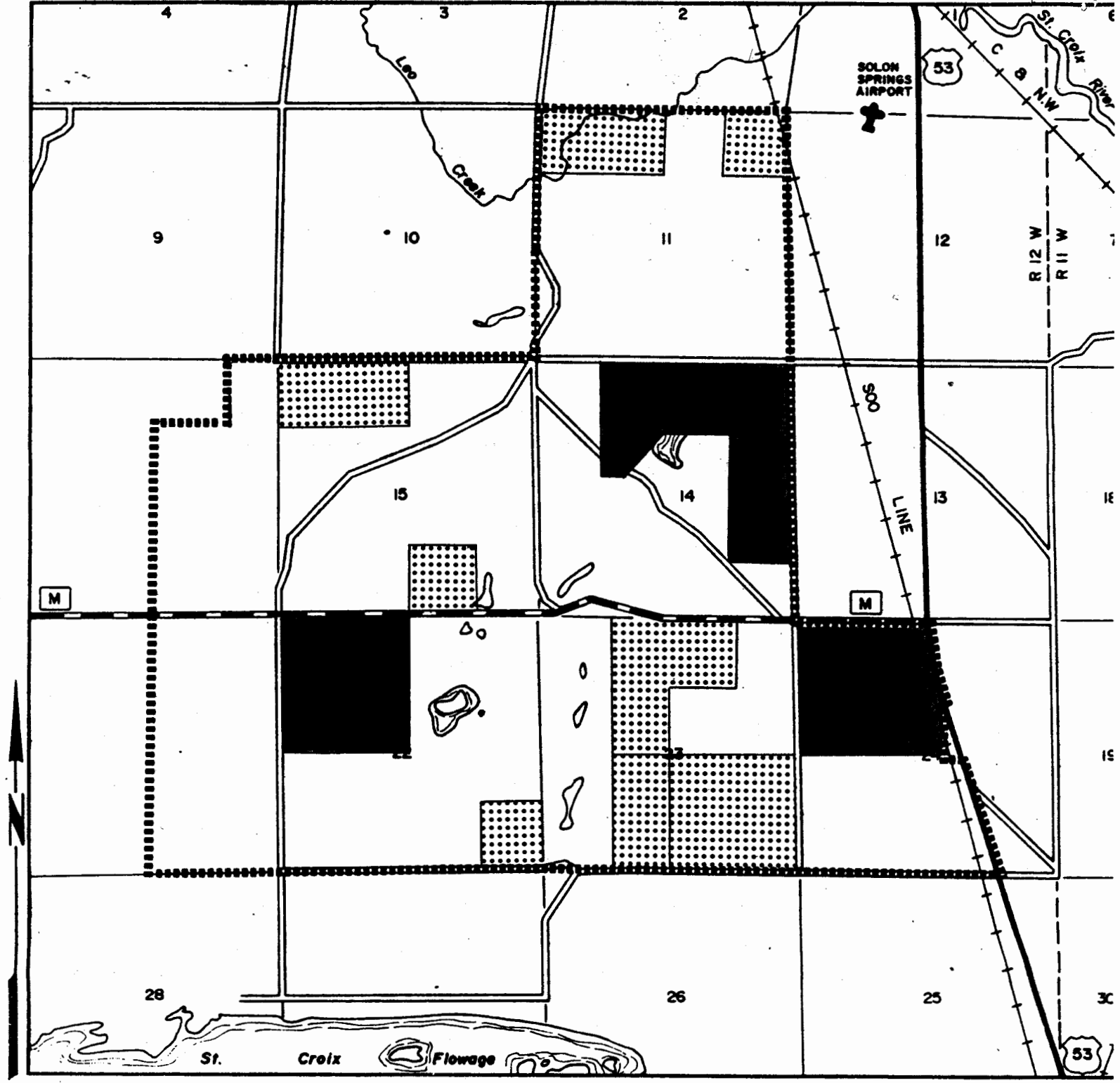
<u>Cover</u>	<u>Acres (owned & leased)</u>
Brush-Prairie	2,785
Pine	723
Aspen	356
Swamp Conifer	41
Wetlands	84
Water	<u>47</u>
Total	4,036

Other planned development needs include:

1. Improvement of the 13 mile-long vehicle access trail through the area.
2. Erection of new project signs at three main entrance points.
3. Expansion and improvement of the permanent firebreak system.

Annual maintenance will be required to maintain the food patch system, firebreak network, and boundary posting.

Five to seven thousand dollars will be budgeted annually for development and maintenance on the area.

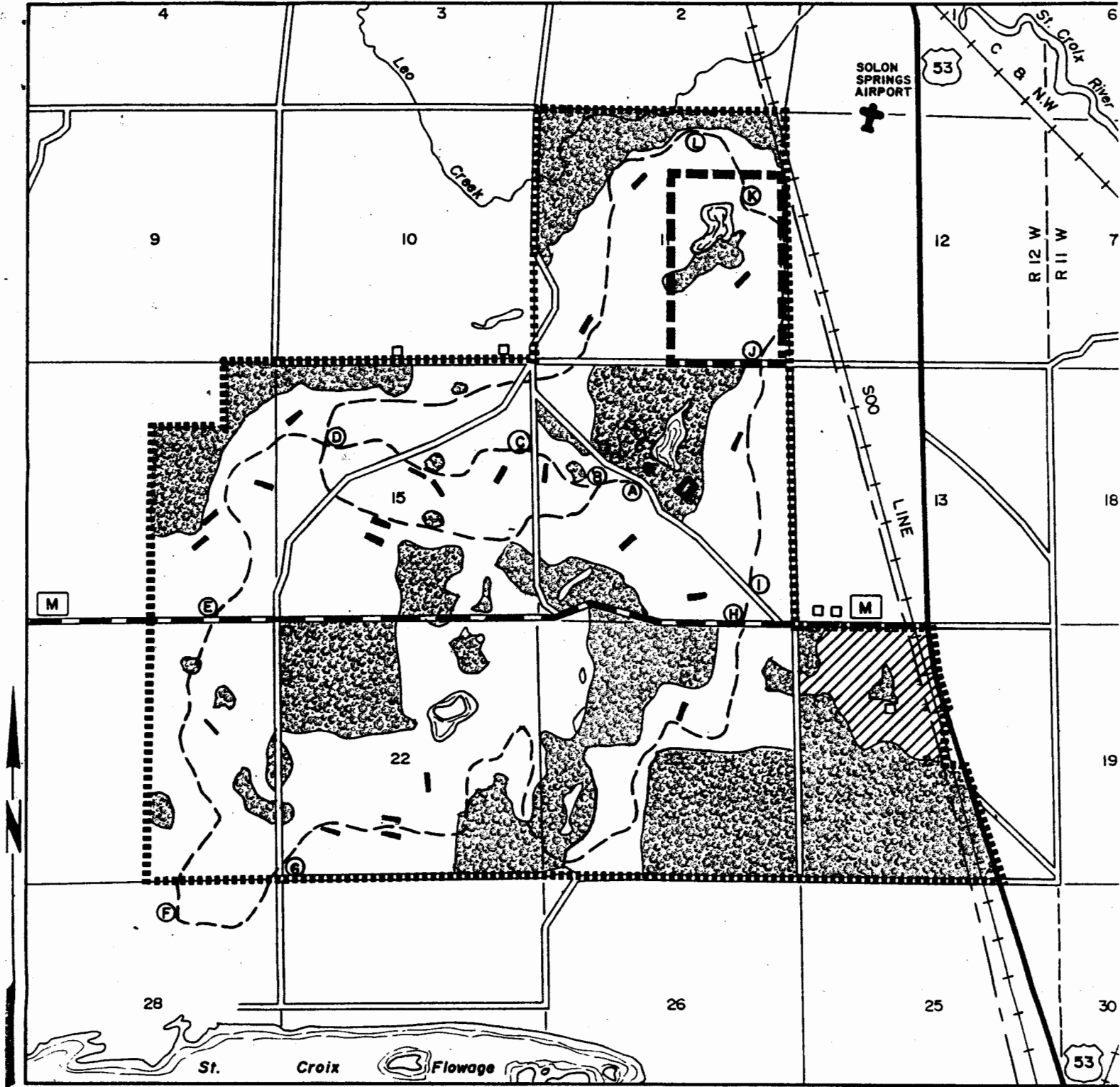


LEGEND

- PROJECT BOUNDARY
- STATE-OWNED
- ▭ STATE LEASED
- ▭ PRIVATE OWNERSHIP

DOUGLAS COUNTY WILDLIFE AREA

FIGURE 2



DOUGLAS COUNTY WILDLIFE AREA

LEGEND

- | | |
|--|---|
| <ul style="list-style-type: none"> ▬▬▬▬ PROJECT BOUNDARY ▨ TIMBER □ GRASS/BRUSH ▨ AGRICULTURAL LAND ○ WATER ▬ FOOD PATCH | <ul style="list-style-type: none"> ▬▬▬▬ SCIENTIFIC AREA BOUNDARY ▣ STABLES & KENNELS □ BUILDINGS ■ CLUBHOUSE --- PIPELINE - - - DOG TRAIL |
|--|---|

PLACE NAMES

- | | | |
|---|--|--|
| <ul style="list-style-type: none"> (A) THE BREAKAWAY (B) KIRK'S HEADACHE (C) FARNSWORTH PASS (D) SIMON'S CORNER | <ul style="list-style-type: none"> (E) HWY. M CROSSING NO. 1 (F) AIRPORT FLATS (G) STOOKIES CROSSING (H) HWY. M CROSSING NO. 2 | <ul style="list-style-type: none"> (I) PUPPY COURSE-START (J) TELEPHONE TRAIL (K) BLUEBERRY HILL (L) THE BEAR TRAP |
|---|--|--|

FIGURE 3 VEGETATION & DEVELOPMENT

All lands proposed for development will be examined for the presence of endangered and threatened wild animals and plants. If listed species are found, development will be suspended until the District Endangered Resources Coordinator is consulted, the site evaluated, and appropriate protective measures taken.

SECTION II - SUPPORT DATA

BACKGROUND INFORMATION

The Douglas County Wildlife Area is located between Solon Springs and Gordon in Douglas County. It lies 30 miles southeast of the City of Superior. The area is situated on the northwestern edge of a rather flat, sandy plain that extends as a belt 10 to 20 miles wide from northeastern Bayfield County southwest to northwestern Polk County. The entire property lies in the drainage basin of the St. Croix River.

The pre-settlement forest was predominately jack and red pine, with scattered scrub oak and aspen. Brushy and grassy openings, the result of fires started by lightning strikes and by Native Americans to drive game and to stimulate the growth of blueberries, also characterized the area. Fires in the slash of turn-of-the-century logging burned and reburned the area. Between 1930 and 1960, a few farms were present. Today's cover types range from grasslands to maturing jack pine stands.

Douglas County Forest lands border most of the area. Other adjoining lands are also forested, except for one active farm, as are the private tracts within the project's boundary.

Never abundant in densely forested, pre-settlement northern Wisconsin, sharptailed grouse populations reached all-time highs as their range greatly expanded when wild fires roared through slash of turn-of-the-century logging. For thirty years--from the mid-twenties to mid-fifties--the Solon-Gordon-Wascott area's grassy brushlands and young forests were ideal sharptail habitat and provided excellent hunting. But as early as the mid-forties, the eventual loss of sharptail range became apparent as open country gave way to natural forest succession, tree planting, declining agriculture and improved capability to suppress wild fires. Today, sharptails in Douglas County are found only in small, scattered flocks in young pine forests and pine clear-cuts and occasionally in rough farmlands. A half-dozen other northwest counties support even fewer sharptails in similar habitats.

Land Control

Recognizing the uncertain future for sharptails, the wildlife area was created officially as a sharp-tailed grouse management area by the Wisconsin Conservation Commission in 1948 when 2,480 acres were leased for 50 years from Douglas County. Actually, interest in the Douglas County Wildlife Area had its beginning with a bird dog trial on the "County Bird Sanctuary" in 1925.

Annual bird dog trials since 1925, coupled with experimental wildlife management techniques begun on the area in 1953, established the area's reputation for maintenance of the most stable sharp-tailed grouse population in Wisconsin.

The state currently owns 636 acres in fee title; another 2,957 acres are leased from Douglas County under terms of a lease which expires in the year 2003. The approved purchase goal is 4,036 acres.

Management History

Development of the area was originally authorized to maintain a breeding stock of sharptails "to propagate the large acreage of pine to be cut in another 20 to 40 years." It was also anticipated that sharptails from the area would establish flocks in adjacent townships where suitable habitats might be created by wild fires.

Field work began on the area in May, 1948, when 120 acres were experimentally burned. During June of the same year, 20 acres of buckwheat food patches were planted. Clearing of the vegetation began in 1949 when 70 acres of jack pine, aspen and willow were cleared by hand. Development progressed slowly, but steadily, for the next dozen years as land clearing and burning techniques were refined. By 1960, the use of controlled fire was accepted locally and statewide as an inexpensive, but effective management tool. Its use greatly accelerated management efforts on the wildlife area through the decades of the sixties and seventies.

RESOURCE INVENTORY AND CAPABILITY

The mixture of grass and brushy openings, young aspen and jack pine stands, food patches, and seeded firebreaks has proved attractive to many wildlife species. Birds preferring open country found in season on the area include upland sandpipers, rough-legged hawks, clay-colored sparrows, and a host of other songbirds. At least one of two beaver colonies is usually active. Mallards, teal, ring-necked ducks, wood ducks, geese, and pied-billed grebes have been observed on the several shallow ponds.

Periodic controlled burns maintain plant species which characterize the "barrens". Shrub communities include sweet fern, blueberry, dewberry, redroot, bearberry, hazel, juneberry, and chokecherry. Ground-layer species commonly found are big bluestem, little bluestem, prairie rose, puccoon, wormwood and asters.

That portion of Leo Creek flowing through the wildlife area is classified as Class II trout water. Management will continue to consist of stocking brook trout and attempting to minimize beaver damage by directing trappers to problem areas. Leo Creek and the several small wetlands located on the area will remain intact; no alterations are planned nor should land management practices change their character.

Endangered and Threatened Species

No endangered or threatened species of fish, amphibians, mollusks, mammals, birds, reptiles or wild plants are known to be present on the property.

Historical and Archaeological Features

According to the State Historical Society of Wisconsin, there are no known sites of historical or archaeological significance in the Douglas County Wildlife Area. No architectural, archaeological, or historical surveys have been made on the area. Thus, prior to any movement of soils or structures to accomplish proposed objectives on the wildlife area, the State Historical Society should be contacted for advice.

No surveys or inquiries have been made regarding special interest in ethnic heritage by any particular ethnic group. Nor have Native Americans been surveyed to ascertain their concern in the Area; however, it is unlikely that Indian campsites were present on these grounds which are some distance from the St. Croix River travelway.

Geology and Soils

Geologically, the wildlife area was part of a glacial lake bed. Soils are sandy, podzolic, and nutrient poor.

Significant Mineral Resources

No evidence can be found of recent--or historic interest in mineral exploration on the wildlife area. Adjacent lands of similar soils and geology are not known to overlay any significant mineral resource.

Current Use

The wildlife area is a favorite of sharp-tailed grouse and deer hunters. All public lands within the boundaries are open to hunting and trapping of all game species and furbearers during the established seasons. Leo Creek, a popular trout stream, crosses the area's northwest corner.

Use of the wildlife area by interest groups other than the traditional users (hunters and fishers) continues to grow. The annual national field trial event continues to attract 50-100 people each September. Field trips by high school and university ecology classes are on the increase (a 240-acres scientific area has been established as an example of grass/brush savanna).

Berry pickers, mushroom gatherers, bird watchers, cross-country runners, hikers, horseback riders, and photographers all use the wildlife area. A locally popular, county-maintained snowmobile trail crosses the area. In keeping with the demand for multiple-use on public ~~lands~~, all such groups shall continue to be accommodated whenever their activity is not detrimental to management goals.

MANAGEMENT PROBLEMS AND ALTERNATIVES

With each decade, "traditional" users of the area--hunters and dog trailers--find other interest groups in growing numbers attracted to the area. While those users whose interests are mostly non-mechanized (i.e., bird watchers, berry pickers, mushroom gatherers, photographers, etc.) can continue to be accommodated, off-road vehicle users will need to be reminded that such vehicles are not allowed in state parks, wildlife or fishery areas unless a use area is designated or a conditional use permit (as for a dog trial) authorizes their temporary use. Adequate posting and follow-up enforcement should encourage compliance.

Approximately 500 acres will be burned annually. Department forms must be completed and approved for each burning project to assure adequate protection is given to the environment. This procedure identifies the need and objective of the proposed burn, as well as cover types, sensitive receptors, potential emissions, anticipated weather conditions, acreages, and costs. Maps identifying the exact location of each burn unit are recorded. Adequate natural or constructed firebreaks must surround each area to be burned to reduce the possibility of wildfires. Weather conditions must be such that the desired intensity is achieved without the threat of a wildfire becoming likely. Fire control equipment and personnel as required will be present at the burning site.

Potential problems associated with burning on the area include:

1. Visibility obstruction and fire-induced air turbulence could create temporary unsafe flying conditions at the Solon Springs airport and the associated air traffic patterns. Consultation with the airport manager should result in timing of the burn to minimize any potential problem.
2. Smoke could reduce visibility along Highway 53, causing safety and aesthetic problems. The stationing of red light vehicles at entrance and exit points of smoke-shrouded highway can reduce hazard.
3. Smoke and particulate deposition can cause nuisance problems, health impacts, and property damage to nearby property owners. Routine forewarning of burning activity permits nearby residents to take precautionary measures.

Alternative management techniques which could be employed to control woody vegetation on the area include mechanical (bulldozing, root-raking, roller-chopper, mowing) and chemical (ground and/or air application of herbicide). None of the techniques listed above, though, are as inexpensive or as effective in achieving the desired result as controlled burning, the major management tool in use on the area.

Since the inception of the wildlife area, an especially cooperative spirit has existed between the Area Wildlife Manager, the County Forest Administrator (who approves the management practices on the leased lands), and the townspeople. Because the management plan simply projects a continuance of management techniques which have been acceptable in the past, no serious controversy over details of this plan is anticipated.

ANALYSIS OF ALTERNATIVES

Since the Douglas County Wildlife Area is an established and approved property, and land control (acquisition and lease) has progressed to the point where the goals and objectives are virtually attainable, the alternatives are considered limited to those which are practical land use alternatives. They are: do nothing; manage for other forest game wildlife species; manage for timber production; manage as an intensive recreational area.

1. Do Nothing:

This alternative would mean there would be no management. Controlled burning would not be practiced, timber cutting would come to an end, food patches would no longer be planted.

Uncontrolled forest succession would eventually--probably within 20 years--result in a continuous forest cover which would preclude the use of the area by sharp-tailed grouse. In effect, this alternative would be contrary to the reason for establishment of the area--the propagation of sharptailed grouse--and deny the people of the state the results of a significant dollar investment in both land and management effort.

2. Manage for Other Forest Game Wildlife Species:

Though the primary management effort over the years has been directed toward sharptailed grouse, a shift in management toward the establishment of aspen and jack pine stands over much of the acreage would increase--to the detriment of sharptails--the area's use by ruffed grouse, deer, bear, and snowshoe hare.

The Douglas County Wildlife Area is surrounded by forested lands (mostly open to public hunting) which support one of the higher deer populations in northern Wisconsin and, during periods of cyclic highs, fair to good numbers of ruffed grouse and snowshoe hare. However, the area is unique as one of the only four wildlife areas in northern Wisconsin that have huntable populations of sharptails.

3. Manage For Timber Production:

Intensive timber management would be another alternate use. The large grass/brush openings could readily be planted to red pine; other acreages now timbered could also be converted to red pine upon being cut at normal rotation age. The forested lands adjacent to the area are managed intensively to produce red pine fiber and timber and, in fact, are contiguous with some of the most extensive red pine plantations in Wisconsin. To pursue this management alternative would eliminate sharptailed grouse from the area within a dozen years.

4. Manage as an Intensive Recreational Area:

Intensive recreational development would be totally at odds with the intent of the area--the propagation of sharp-tailed grouse. Unlimited all-terrain vehicle use, uncontrolled snow-mobiling, unrestricted dog training--all activities of this nature would discourage breeding and nesting of sharptails.

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APPENDIX A

Review Comments

By: Stanley A. Nichols
Representing: Wisconsin Geological and Natural History Survey
Date: January 17, 1985

No comment about soils of the region. Comment on no significant mineral resources being present may not be true. See the following analysis from our minerals and geology section:

Summary of Mineral Exploration Activity in T. 43 N., R. 10 W.,
Douglas County, Wisconsin

Prepared by Wm. P. Scott
April 1979

Gordon Exploration - Copper, Douglas County
(also called "Weyerhaeuser Ex. near Gordon")

Various explorations have taken place:

1. John W. Gates started Shaft #1, 650' S.W. of the center of Sec. 12, T.43N., R.10W., prior to the work of the Rudolph Land Co. and the Rudolph Exploration Company.
2. Rudolph Land Company and Rudolph Exploration Company explored from 1906-1913, drilling 53 diamond drill holes totalling 19,374', 16,015 of which was in rock, and making surface pits, prospecting shafts, cross cuts and drifts, and a surface survey of the outcrops. A small mill was erected and tests showed 16 pounds of copper to the ton. About \$150,000 was expended on the work. Cuyler Adams and L. A. Barton were in charge of the work. Copper of commercial quality, but not quantity, was found at that time. Information is filed under Douglas County, Adams Suite of Drill cores. Many maps are available.
3. In 1943, Dan Skrupky, then of Rice Lake, Wisconsin, notified the state geologist, E.F. Bean, and the Bureau of Mines, of the copper in the old mine dumps. This started an investigation by the Bureau of Mines which unwatered and inspected No. 1 shaft to the first level, and unwatered No. 3 shaft to the bottom and then sampled and inspected it. A report of the investigation was published in June, 1947. Skrupky was owner of some of the lands investigated by the Bureau of Mines.
4. Cerro de Pasco Corporation drilled 20 diamond drill holes from July 1, 1959 to November 14, 1959 and had several cores assayed; copper content averaged under 0.10%. No further expenditures were recommended. Assay results and summary logs are available as well as a map showing the drill hole locations, which were on Weyerhaeuser property.

5. The U.S. Bureau of Mines investigated sections 11, 12, 13 and 14 from 1943 through 1945 "to determine the character, continuity, and extend of the mineralization", and reported their findings in R.I. 4088 in June, 1947. Work included unwatering of the No. 1 and No. 3 shafts, sampling of the No. 3 shaft, partial mapping and sampling of the "A" lode, construction of a small mill, milling 155 tons of sample, and analysis of 22 samples for copper.

The statement on mineral resources is true, however, the author of the Management plan missed several important sources of information on the metallic and non-metallic mineral potential of the area.

The Wildlife area is in the center of the Ashland Syncline. Copper mineralization is known in the St. Croix and Minong copper ranges to the north and south respectively. The U. S Bureau of Mines evaluated the Weyerhaeuser prospect to the east in the 1940's. Recently, White (1978) evaluated copper mineralization, and feels that the best potential lies in the Solon Springs - Minong area.

Interest has been expressed recently on the continuation of the Nonesuch Formation from Iron County to the southwest into Douglas County. The Nonesuch is presently being evaluated by several petroleum exploration companies. The center of the Lake Superior Syncline is viewed as one of the more favorable areas along the Keweenawan petroleum exploration trend.

No mention is made under the acquisition of privately held mineral interests (if any) and mineral access of the privately held surface interests.

Reference should have been made to the most recent topographic map of the area as an aid to the planners and the reviewers of this document.

DNR RESPONSE: Comments noted. Mineral right acquisition is a normal part of the DNR fee title pursuit. If mineral rights have been reserved by the grantor, the remaining rights will still be acquired by the Department.

By: Cynthia A. Morehouse, Director
Representing: Department of Transportation
Date: February 8, 1985

We have reviewed the Management Plan for the Douglas County Wildlife Area and offer the following comments:

1. Before acquiring portions of private lands in Section 24, T44N, R12W between the Soo Line Railroad and USH 53, you should contact:

L.F. Crook, District Director
Wisconsin Department of Transportation
1701 North 4th Street
Superior, Wisconsin 54880
(715) 394-0551

2. We recommend that you contact the Douglas County Highway Commissioner if similar acquisitions are made along CTH "M" in Sections 22 or 24, T44N, R12W.
3. We suggest that more specific and detailed plans for prescribed burns be made to include roadway traffic safety arrangements. In addition to the airport manager you should contact:

Robert T. Germond
Chief Maintenance Engineer
Wisconsin Department of Transportation
1701 North 4th Street
Superior, Wisconsin 54880
(715) 394-0544

4. We suggest that prior to the prescribed burn you also contact the Douglas County Highway Commissioner and the chairpersons of Solon Springs and Gordon Townships.

DNR RESPONSE: The DNR property manager will contact the above personnel when necessary.

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