

A. NATURAL HISTORY INVENTORY
STEELE CREEK PARK
BRISTOL TENNESSEE
SUMMER 1970

Brent Rowell
Park Naturalist

Presented to
Park and Recreation Commission
19 May 1971

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The Study

A proposed natural history program for Steele Creek Park and the Bristol Tennessee Parks and Recreation Commission was carried out through the summer of 1970. The program consisted principally of an initial plant-animal inventory of Steele Creek Park, and natural history interpretative services for the public.

The park (owned by the City of Bristol Sullivan County, Tennessee) was recognized as an area of natural and educational value to the people of Bristol and surrounding areas. The study centered around the research of a park naturalist employed by the Bristol Parks and Recreation Commission. The naturalist recorded a field inventory of fauna-flora, and offered interpretative services at Steele Creek Park from 16 May through 22 August, 1970.

METHODS AND MATERIALS

Throughout the research at Steele Creek, the naturalist employed several suggested systems and methods.

Surveys of aquatic and terrestrial life were consistently attempted. By making the "aquatic life surveys" by canoe, the naturalist could minimize noise and approach lake banks closely. The usual survey consisted of paddling the canoe closely along the shoreline of The Gorge to the dam, and returning along the opposite Gorge shoreline. Separate trips were concentrated in different areas. Animal life (semi-aquatic turtles, waterfowl, snakes, frogs, etc.) was surveyed on the majority of trips, but specific trips were also planned to survey plants along the lakeshore. It was estimated that the usual aquatic survey covered two miles per trip. Approximately 20 surveys were made totaling 40 miles of aquatic survey for the summer period.

Another survey, tagged "hike-survey", was often employed. The naturalist waded a previously planned route, either to some destination or only for the purpose of surveying that particular route. Plant and animal observations were listed on the route in each case. Destinations and trails varied with each trip. New trails were explored; surveys were made to both familiar and remote areas of the Park. An estimated 35 miles were covered on foot.

Bird species observed were noted each day at the Park. Each species was recorded along with the number of individuals of that

species observed.

Keeping record of observations in the park was accomplished by utilizing a system established by competent amateur naturalists of our area. The naturalist's field notebook was small (4" x 6"); it had ruled paper of 3½" x 6". Notes were placed under several headings. A heading for the particular day (including date, time, location, pertinent weather information) was placed at the top of the first page. Records were further classified under limiting sub-headings (birds, mammals, reptiles, trees, shrubs, ferns, etc.). An itinerary was left each day at the Gate; notes were made about each day's activities in the field. All records were further prepared on Mondays at the Parks and Recreation Office. All notes were compiled for this final report.

Additional field equipment utilized, included contour maps, field bag, glass specimen jars, plastic bags, "snake rake", and cloth sacs.

The contour maps used were printed and enlarged by the Ratheon Company. The most often used field map was a large (36" x 30") map with five foot contours. All areas of the park were named so that localities could be easily described. Maps, along with collecting equipment and field identification guides were carried in an Army surplus gas mask bag. The bag was of heavy duty canvas.

Binoculars (7 x 35) were also carried in the field. Equipment such as plastic bags for plants, glass specimens^{jars}, and cloth bags for reptiles, were used to take specimens from the field.

Specimens were most often taken for identification or demonstration purposes.

Several plant specimens were collected by Mrs. Ann Bachman, who pressed them (pressed between alternate layers of newspaper and corrugated cardboard). Charles R. Smith also collected plant specimens from the park for the East Tennessee State University Biology Department's herbarium.

Herptile specimens, often collected for demonstration-interpretive services, were usually measured by means of a yard stick, tape measure, or small pocket ruler. One salamander specimen of uncertain identity was preserved in formalin solution. When collecting salamanders, the naturalist used a potato rake to pull over rocks and logs. This tool offered greater safety from poisonous snakes.

Field equipment, except for binoculars and field guides, was stored and locked in the small chlorine pump house located between the Beach and Boat Dock. Traps and nets were also stored there.

A small amount of fish research was accomplished in the park. Minnows were seined in Mill's Creek, Steele Creek, and below the dam. The seine used measured 4' x 4' with $\frac{1}{4}$ " mesh mounted on 5' closet rods. The seine was easily used by one man, but two men seined. Seining was done in small pools below the dam. Minnows were kept in a galvanized minnow bucket.

A trot line was stretched along the length of an 18' log in the Bend area.

An attempt was made to live-trap semi-aquatic turtles for identification along the same log in the Bend. The trap design, suggested by one of the park employees, proved of little value.

Park employees were asked to report observations to the naturalist; attendants at the Gate gladly reported several observations of nocturnal life.

Within the Gate building, the day's schedule was left. Also, the naturalist checked in and out at the Gate each day, recording his hours within the park. The times were noted on a card provided for that purpose.

Total man hours from 16 May to 22 August was 420 man hours.

Total number of field notebook pages used was 150 pages (pages used front and back).

THE STUDY AREA

The area researched from 16 May to 22 August was Steele Creek Park. The park was planned and developed by the Bristol Tennessee Parks and Recreation Commission as a recreational center for Bristol and surrounding areas. The park is located in the southwest corner of the City of Bristol in Sullivan County, Tennessee. The area lies adjacent to Broad Street and is enclosed on two sides by a portion of Beaver Creek Knobs. Features of the park include a 35^{acre} man-made lake and Steele Creek, which was dammed to create the lake.

Steele Creek

Location - NE section of county; near Bristol. Located in South Fork Holston watershed. Central section of county; near Bristol. Enters from Washington County (Va.); Flows into Sullivan County. Flows in a southeasterly direction into Beaver Creek.

Size - 35 acres. 3.55 miles in county. Width of stream bed averages approximately 10 feet; varies from 5 to 21 feet. 1.5 feet average pool depth; 7 inches average riffle depth.

Description of Water - Lake maintains good water quality. Aquatic vegetation is scarce. Lake is slightly turbid from plankton. Scenic values are excellent. Fertility of watershed is rich. At minimum flow, water is continuous. Minimum flow is 2.83 C.F.S.; averages flow is 3.1 C.F.S.; subject to limited flooding. Average velocity is rapid. On alkalinity 187 ppm. Temperature was 40 degrees F on 2/27/68. Normal color is clear. Estimated

Description of Water - stream in pools is 50%. Estimated pool bottom is silt 15% and gravel 10%, rubble 50% and bedrock 25%. Abundance of; fish food organisms is numerous. Predominant families are mayflies, caddis flies & diptera. Abundance of littoral aquatic plants is scarce. Cover abundance is good in 40% of stream, average in 60%. Shade or canopy good over 80% of stream.

Present Use - Fishing is good. Primary fish caught are bluegill, largemouth bass, channel catfish and carp. Fishing pressure is heavy. High potential for improving fishery. Lake fee is charged by City of Bristol. Local watershed about 85% timber - 15% urban. Watershed is about 60% in Steele Creek Park.

The above is an appraisal of potentials for outdoor recreation development of Sull. Co. Tenn., Nov. 1968, U.S. Dept. of Agriculture Soil Conservation Service.

Steele Creek converges with two small springs and a second small creek (Mill's Creek) where it enters Steele Creek Lake. Mill's Creek is a small stream which flows from points within the city. The two natural springs are located in the picnic area directly below the Pro Shop.

The present lake was filled by damming Steele Creek. Land where the lake now lies was originally farmland with the creek flowing through the center of the present Bend Area and down through The Gorge.

Three major land divisions are found in the park: the main recreational area (Golf Course, Ball Field, swimming and picnic areas), a dry knobs area on the northeast side of The Gorge, and a more moist knobs area on the southwest side of The Gorge.

The recreational area, although not a primary concern in this study, proved to be good habitat for several animal and plants/ for species (Striped Skunks were found denning next to the Beach Area). N. Black Racers (snakes) were found on the edges of the Golf Course, etc.). The picnic areas, particularly those along Steele Creek, were visited for interpretative services.

The dry knobs area on the northeast side of The Gorge was found to be easily accessible with well worn trails. The trails were most often used by motorcycles. The motorcycles seemed to contribute to the eroding of soil here: Deep ruts now lie in the center of Flat Ridge Trail, the major trail on this side of The Gorge. Some few small footpaths were discovered on this "dry side", apparently undiscovered as yet by the cyclists. Trails on this side are not especially steep or rugged; Flat Ridge Trail climbs gentle slopes and covers a large flat and downhill area. The Gorge Road, an old dirt road winding around the lake's edge, is very wide, flat, and easily traveled upon.

All trails on this side lie adjacent good habitat for a variety of plants and animals. Several areas hold moisture in the summer; certainly different localities are very wet in other seasons of the year. A small trickle flows from the knobs into Deep Cove occasionally in the summer; but Hidden Hollow remains fairly moist throughout the season.

Hidden Hollow seems to be an area of particular interest. This hollow is well shaded, slightly moist, and seems to house

mainly small mammals.

Two areas adjacent Broad Street also provide interesting habitat. The "Rock Quarrey" above Mill's Creek is an area where limestone seems to have possibly been mined at some time. Within this quarrey area, there is a small limestone cave. The cave maintains a temperature below that of the "outside" temperature in the summer. The cave extends back about 35 feet before it almost flattens out completely.

Cave Salamanders were found here and some mammal species possibly inhabit the cave. Another interesting habitat, the old riding stables area, can be found adjacent Broad Street.

The opposite side of The Gorge (southwest) is, on the whole, a more moist habitat within the park boundaries. Areas on this side of the Gorge escape much of the sun's rays throughout the day. There are no widely travelled trails. Animal trails are usually all a hiker can find. The area remains in a somewhat natural, wild condition; the moisture held on this side of the park enables different plant and animal species to survive here.

The four-ridged section of Beaver Creek Knobs within the park is oriented from northeast to southwest, bordered by Steele Creek Lake, the Golf Course, and Broad Street on one side and bordered by Kettlefoot Shooting Range, the Bristol Sewage Disposal Plant, residential areas, and farmland on the other.

The forest type of the entire knobs area of Steele Creek Park was said to be an "upland second-growth hardwood of no commercial value. *The timber was estimated to be 95% hardwood, 5% conifer.

*Jack Griswold, Timber Management, U.S. Forest Service,
Eliz. Tenn.

PARK NATURALIST

DRESS: The shirt should be a military-style green, brown or tan with two button down flap-type pockets.

A name plate will be worn over the right shirt pocket flap which shall read:

John Doe
PARK NATURALIST

Two name tags are issued the naturalist at the start of the program. This will provide for continuous identification should one be damaged or lost.

The shoulder-patch emblem of the Bristol Tennessee Park and Recreation Commission is worn on the left sleeve and is placed two inches from the shoulder seam and centered on the sleeve.

The pants should be either burmuda or full length. Solid colors such as brown, green, tan will be acceptable.

A T-shirt, bearing Park and Recreation identification, is issued for specialized dress such as field work including difficult or messy labor.

The uniform should be worn with good taste and kept clean and neat at all times.

VISITORS CONTACTED BY NATURALIST AT STEELE CREEK PARK

Date	Pre-school	Elemen.	High-school, college	30-55	over 55	Total
5-16-70		3		8		11
5-30-70	3	7	2	12	3	27
6-9-70		9	1			10
6-10-70		5	2	1		8
6-11-70		2	1			3
6-20-70	1	21	13	6	5	46
6-27-70		65	2	1		68
7-3-70		8	2	1		11
7-4-70	9	35	8	13	3	68
7-5-70		30	6	5	1	42
7-12-70			3	10		13
7-17-70	2	16	9	4		31
7-18-70	2	5	8	4		19
7-19-70	16	50	2	5	2	75
7-21-70			6			6
7-25-70		80	22	15		117
8-1-70			8			8
8-8-70			12	5		17
totals	33	336	116	90	14	589
contacted maintenance, gate, life guards, train workers, and boat dock operators throughout the summer.						100
						689

ENVIRONMENTAL RECREATION PROGRAM

(Naturalist's Itinerary)

Saturday
16 May 1970

Steel Creek Park:

8:00 a.m. - 12:00am

With Wallace Coffey and Dan Emmel
to make critical examination of the
park.

12:00am - 6:00pm

Hike to dam and back using trail on
the lakeshore along Front Knob and
the Gorge.

Note: Fauna will be captured alive, whenever possible, for nature
demonstration programs and general interpretation.

Brent Rowell
Park Naturalist

(Naturalist's Itinerary)

Saturday
23 May 1970

Steele Creek Park:

8:15 am - 10:00 am

Meet with Paul Cook and Wallace Coffey to ask various questions of the Park's organization, polices, boats, etc.

10:00 am - 12:00 am

Leave park with Wallace Coffey to shop for a uniform.

12:00 - 12:30

Lunch at Park.

12:30 pm - 4:30 pm

Aquatic life shoreline survey by canoe.

4:00 pm - 4:30 pm

Tree identification - Three Springs picnic area.

(Naturalist's Itinerary)

Saturday
30 May 1970

Steele Creek Park:

7:30 am - 9:30 am

Avian survey of visitation areas,
trails, roads, etc.

9:30 am - 11:30 am

General exploration of park lands,
trails, creeks, springs, Notes to
be detailed on fauna and flora.

11:30 am - 12:30 am

Park visitor contacts for nature in-
terpretation and public relations.

12:30 pm - 1:00 pm

Lunch break

1:00 pm - 2:00 pm

Park visitor contacts (continued)

2:00 pm - 4:00 pm

Reptile amphibian search of upper
pumping-station area and springs
located in picnic area.

4:00 pm - 5:00 pm

Aquatic life survey (work lake shore-
line canoe).

Note: Fauna will be captured alive, whenever possible, for nature
demonstration programs and general interpretation.

Brent Rowell
Park Naturalist

(Naturalist's Itinerary)

Tuesday
9 June 1970

Steele Creek Park:

8:00 am - 9:00 am

Avian survey covering roads of Park.

9:00 am - 9:30 am

General Organization - obtaining keys, canoe, etc. with Wallace Coffey.

10:00 am - 12:00am

Aquatic plantlife survey along shoreline. - Pqr Bay to dam (by canoe).

12:00am - 1:30pm

Contacts (main picnic areas)

1:30 pm - 2:00pm

Lunch

2:00 pm - 3:30 pm

Tree measurements -large trees adjacent Flat Ridge trail.

3:30 pm -

Salamanders - Bogey and Sapling knobs.

(Naturalist's Itinerary)

Wednesday
10 June 1970

Steele Creek Park:

7:00 am - 8:30 am

Aquatic and shoreline plant survey
(canoe) - dam to front knob.

8:30 am - 11:00 am

Work for salamanders on Flatridge
Trail (Hidden Hollow emphasis)
and tree measurements.

11:00 am - 5:00 pm

Off

5:00 pm - 7:00 pm

Hike and work Bogey and Sapling
Knob -fauna -flora.

7:00 pm - 9:00 pm

Work for reptiles and amphibians along
lake.

(Naturalist's Itinerary)

Thursday
11 June 1970

Steele Creek Park:

7:00 am - 7:30 am

Avian survey - Park grounds

7:30 am - 9:00 am

With Bill Bridgeforth from E.T.S.U.-
catalog plants along Front Knob to
Bend.

9:00 am - 12:00 am

Hike with Wallace Coffey and Bill
Bridgeforth - Flatridge Trail to
Lake Spur Ridge.

12:00 am - 1:30 pm

Prepare and set minnow trap

1:30 pm - 8:00 pm

Off

8:00 pm - 10:00 pm

With Jim Boring making Canoe Survey
for nocturnal birds and herptiles.

(Naturalist's Itinerary)

Sunday
14 June 1970

Steele Creek Park:

7:00 pm - 10:30 pm

Canoe shoreline looking for crepuscular and nocturnal species of birds, mammals., herptiles, etc. - Check minnow trap.

10:30 pm - 11:00 pm

Search of boatdock and beach area for nocturnal life.

(Naturalist's Itinerary)

Tuesday
16 June 1970

Steele Creek Park:

7:45 am - 8:00 am

8:00 am - 11:30 am

11:30 am - 12:00 am

12:00 am - 1:00 pm

1:00 pm - 2:00 pm

2:00 pm - 5:00 pm

Await Ann Bachman at Gate.

Working with Mrs. Bachman surveying
the plants along Flat Ridge Trail.

Lunch

With Wallace Coffey
distributing park maps.

Off

Compiling records at Park & Recreation
Office.

(Naturalist's Itinerary)

Wednesday
17 June 1970

Steele Creek Park:

7:30 - 9:30 am	Survey of Park boundaries around Golf Course.
9:30 - 10:30 am	Lake survey of time permits and minnow trap check
10:30 - 11:30 am	Three Springs Picnic Area - Reptile and Amphibian check for springs.
11:30 - 12:00 am	Lunch
12:00 - 7:00 pm	Off
7:00 - 9:00 pm	Aquatic life shoreline survey for crepuscular life.
9:00 - 10:00 pm	Examination of Beach Area for nocturnal activity.

(Naturalist's Itinerary)

Saturday
20 June 1970

Steele Creek Park:

10:00 am - 11:30 am

Compilation of previous Avian records
(Gate) and Avian survey - Park Grounds.

11:30 am - 1:30 pm

Contacts - Three Springs Picnic Area
and Pines Area.

1:30 pm - 4:30 pm

Check and moving of minnow trap. Seining
of Steele Creek if possible.

4:30 pm - 6:00 pm

Contacts - Three Springs and The Pines
Areas.

(Naturalist's Itinerary)

Sunday
21 June 1970

10:30 am - 11:30 am

Avian list - Park Grounds and
Aquatic life shoreline survey -
Front Knob to bend.

11:30 am - 12:00 am

Lunch

12:00 am - 2:00 pm

Contacts - Three Springs Picnic
area

2:00 pm - 6:30 pm

Off

6:30 pm - 8:30 pm

With Jim Boring and Guy Jones to
Seine minnows and check minnow trap

8:30 pm - 9:30 pm

Waited to see skunk family near
Chlorine house.

(Naturalist's Itinerary)

Wednesday
24 June 1970

Steele Creek Park:

7:30 am - 8:00 am

Bird listing - Park grounds

8:00 am - 10:30 am

Hike along Pratt's Knob Trail

10:30 am - 12:30 pm

Plans uncertain for this period

(Naturalist's Itinerary)

Saturday
27 June 1970

9:30 am - 10:00 am

Begin bird listing - Park Grounds

10:00 am - 11:00 am

Check turtle trap and reset if needed

11:00 am - 11:30 am

Check and reset minnow trap.

11:30 am - 12:00 am

Lunch

12:00 am - 2:00 pm

Contacts - Three Springs and The Pines

2:00 pm - 6:30 pm

Off

6:30 pm - 7:00 pm

Check area of the Bend near pumphouse
for herptiles.

7:00 pm - 10:00 pm

Seine Mills Creek for and aquatic life

(Naturalist's Itinerary)

Tuesday
30 June 1970

Steele Creek Park:

6:30 am - 11:00 am

With Ann Bachman working with plants,
trees, etc., uncertain locations.

11:00 am - 12:00 am

Check turtle trap with shoreline
survey to Bend and back; check and
change minnow trap position.

(Naturalist's Itinerary)

Thursday
2 July 1970

Steele Creek Park:

7:30 am - 10:00 am

Hike Survey around
Mill's Creek, Old Home
Place Field, Old Stables
and adjacent areas.

10:00 am - 12:00 am

Salamander search- hollows
and moist areas on and off
Flat Ridge Trail - emphasis
on Hidden Hollow.

12:00 am - 12:30 pm

Lunch

12:30 pm - 1:30 pm

Check and completely reset
turtle trap. Check minnow
trap.

1:30 pm - 3:30 pm

Make contacts in picnic
areas.

(Naturalist's Itinerary)

Friday
3 July 1970

9:00 am - 9:30 am	Make this itinerary; set up mammal traps in storehouse.
9:30 am - 10:00 am	Check turtle trap; check minnow trap.
10:00 am - 11:30 am	Work trees and insects - Three Springs Picnic Area.
11:30 am - 12:00 am	Lunch
12:00 am - 2:00 pm	Contacts - Three Springs Picnic Area
2:00 pm - 4:00 pm	Plants identification - Three Springs Picnic Area
4:00 pm - 5:00 pm	Planning for small mammal trapping.

(Naturalist's Itinerary)

Saturday
4 July 1970

10:00 am - 10:30 am

Gate - making itinerary.

10:30 am - 12:30 pm

Hike - Survey - Bogey and Sapling
Knobs.

12:30 pm - 3:00 pm

Contacts - Three Springs Picnic Area.

3:00 pm - 5:00 pm

Work Stables and adjacent areas for
plants, insects, etc.

5:00 pm - 6:00 pm

Contacts - Three Springs Picnic Area

(Naturalist's Itinerary)

Sunday
5 July 1970

8:30 am - 8:45 am

Making itinerary - Gate

8:45 am - 12:00 am

Hike - Survey starting in Gorge
over Side Ridge and down to par bay.

12:00 am - 2:30 pm

Contacts - Main Picnic Areas.

2:30 pm - 3:00 pm

Run "aquatic traps".

3:00 pm - 4:30 pm

Contacts - Main Picnic Areas.

(Naturalist's Itinerary)

Monday
6 July 1970

7:30 a.m. - 7:45 a.m.

Made this itinerary at Gate

7:45 a.m. - 11:00 a.m.

Hike - Survey - Flat Ridge Trail
coming out on Lake Spur Ridge
following Gorge Rd. back (to
Double Knob also)

11:00 a.m. - 11:45 a.m.

"Run" turtle and minnow trap

11:00 p.m. - 12:15 p.m.

Lunch

12:15 p.m. - 3:00 p.m.

Contacts - Three Springs Picnic
Area

3:00 p.m. - 3:30 p.m.

Mammal trapping planning - Gate

(Naturalist's Itinerary)

Saturday
11 July 1970

9:00am - 9:15 am

Made itinerary at Gate

9:15 am - 10:15 am

Check mammal traps

10:15 am - 11:30 am

Duck survey- lake by motorboat
if possible

11:30 am - 12:00 am

Lunch

12:00 am - 2:00 pm

Contacts - picnic areas

2:00 am - 3:30 pm

Check and reset mammal traps-
also check minnow trap.

3:30 pm - 5:00 pm

Contacts - picnic areas

(Naturalist's Itinerary)

Sunday
12 July 1970

8:30 am - 9:00 am

Make itinerary at Gate

9:00 am - 10:00 am

Check mammal traps

10:00 am - 10:30 am

Check minnow and turtle traps

10:30 am - 12:30 pm

Hike - Survey - Pratt's Knob Trail

(Naturalist's Itinerary)

Wednesday
15 July 1970

7:30 am - 8:00 am

Make itinerary at Gate

8:00 am - 11:00 am

"Pull up" all mammal traps, make
bait, rebait, reset in new loca-
tion.

11:00 am - 11:30 am

Check minnow and turtle traps

11:30 am - 12:00 am

Lunch

12:00 am - 1:30 pm

Contacts - 3 Springs Picnic Area

1:30 pm - 3:30 pm

Office work

(Naturalist's Itinerary)

Thursday
16 July 1970

9:15 am - 9:45 am

Make the itin. at Gate

9:45 am - 10:30 am

Check mammal traps

10:30 am - 11:00 am

Check and move minnow trap

11:00 am - 11:30 am

Set rat size traps

11:30 am - 12:00 am

Lunch

12:00 am - 1:00 pm

Contacts - 3 Springs Picnic Area

1:00 pm - 5:00 pm

Office (not able on 16 July)

(Naturalist's Itinerary)

Friday
17 July 1970

9:45 am - 10:00 am

Make itin. at Gate

10:00 am - 11:00 am

Check all mammal traps

11:00 am - 11:30 am

Check minnow and turtle traps

11:30 am - 12:00 am

Lunch

12:00 am - 2:00 pm

Contacts - 3 Springs Picnic Area

2:00 pm - 4:00 pm

Rebait and reset mammal traps:
in new location for area B.

4:00 pm - 5:45 pm

Undecided as yet

(Naturalist's Itinerary)

Saturday
18 July 1970

9:15 am - 9:30 am

Make itin. at Gate

9:30 am - 10:00 am

Check turtle trot line

10:00 am - 10:30 am

Check mammal traps

11:00 am - 11:30 am

Lunch

11:30 am - 2:00 pm

Contacts - picnic areas

2:00 pm - 3:30 pm

Pull & reset all mammal traps

3:30 pm - 5:30 pm

Contacts - picnic areas

(Naturalist's Itinerary)

Sunday
19 July 1970

11:30 am - 11:50 am

11:50 am - 12:00 am

12:00 am - 3:00 pm

3:00 pm - 4:00pm

4:00 pm - 5:00 pm

Make itin. at Gate

Check trot line in Bend

Contacts - picnic areas

"Run" mammal traps

Contacts - picnic areas

(Naturalist's Itinerary)

Tuesday
21 July 1970

9:15 am - 9:30 am

Make itin. at Gate

9:30 am - 11:30 am

Take up all mammal traps, rebait;
reset in new location

11:30 am - 12:00 am

Lunch

12:00 am - 3:00 pm

Hike - Survey - Rural Park
boundaries - emphasis on birds

3:00 pm - 5:15 pm

Check rebait; reset; minnow
trap, turtle trap, trotline

(Naturalist's Itinerary)

Wednesday
22 July 1970

10:00 am - 12:00 am

Check trot line by canoe (also
turtle and minnow traps)

12:00 am - 12:15 pm

Lunch

12:15 pm - 3:00 pm

Hike - Survey to old stables,
Pratt's Knob, etc. - emphasison
salamanders if weather permits

3:00 pm - 600 pm

Hike - Survey - down Hidden Hollow
and Flat Ridge Trail above the Bend
area of Lake

(Naturalist's Itinerary)

Saturday
25 July 1970

9:45 am - 10:00 am

Make itin. at Gate

10:00 am - 1:00 pm

Check minnow trap; walk Golf
Course boundaries

1:00 pm - 3:30 pm

Public contacts - main picnic areas

3:30 pm - 4:00 pm

Planning "session" for small mammal
trapping

4:00 pm - 6:00 pm

Public contacts - main picnic areas

(Naturalist's Itinerary)

Sunday
26 July 1970

8:30 am - 8:45 am

Make itin. at Gate

8:45 am - 11:45 am

Bird survey - walk for new
species in park boundaries, field
borders, etc.

11:45 am - 1:00 pm

Public contacts - main picnic areas

1:00 pm - 5:00 pm

Off

5:00 pm - 7:00 pm

Public contacts - main picnic areas

(Naturalist's Itinerary)

Thursday - Sunday
30 July - 2 August 1970

Although present at park, I planned little field work due to accident on 27 July in which I sprained an ankle. Making of bird list was planned each day along with canoe shoreline surveys and routine checks of areas "close at hand". Much time was spent at Gate and Boat Dock areas. Public contacts were planned for Saturday and Sunday.

(Naturalist's Itinerary)

Tuesday
4 August 1970

No set itinerary - elevated ankle; make bird list, vicinity of Boat Dock.
Planned to set all small mammal traps.

(Naturalist's Itinerary)

Thursday
6 August 1970

7:00 am - 7:15 am

Make itin. at Gate

7:15 am - 8:15 am

Make extensive bird survey around
edge of Golf Course, Maintenance
Shelter.

8:15 am - 9:00 am

Check all mammal traps

9:00 - 12:00 am

Hike - survey up Flat Ridge Trail
Hidden Hollow - down Lake Spur
Ridge

12:00 am - 12:30 pm

Lunch

12:30 pm - 3:00 pm

Canoe survey; move minnow trap
from dam site.

(Naturalist's Itinerary)

Saturday
8 August 1970

9:30 am - 9:45 am

Make this day's itinerary at Gate

9:45 am - 10:45 am

Bird survey - Park grounds

10:45 - 12:00 am

Work Stables area for new birds;
particularly plants.

12:00 am - 12:30 am

Lunch

12:30 am- 1:00 pm

Pull up all mammal traps

1:00 pm - 5:00 pm

Canoe to dam where search for
a list of shorebirds present;
concentrate for warblers in coves
on side of Gorge opposite Deep
Cove.

(Naturalist's Itinerary)

Sunday
9 August 1970

Itinerary was not to be planned until raining stopped. Rain continued on throughout entire day. We planned to make bird list within vicinity of Gate where I remained waiting for rain to stop.

(Naturalist's Itinerary)

Wednesday
12 August 1970

8:10 am - 8:20 am

Make this itin.

8:20 am - 11:00 am

Hike - plant survey, with Joey
Jackson from King Collège,
Shallow Cove; Short Branch

11:00 am - 11:30 am

Lunch

11:30 am - 4:00 pm

Survey of late summer flora by
canoe around lake shore with
stop at dam for reptile-amphi-
bian search.

(Naturalist's Itinerary)

Friday
14 August 1970

10:00 am - 11:00 am

Compile flora records listing
scientific names (for flowers
listed with J. Jackson on 12 Aug.)

11:00 am - 11:30 am

Lunch

11:30 am - 2:00 pm

Seine for minnows, portion of
Steele Creek within the park.

2:00 pm - 4:30 pm

Waterfowl population survey-
lake

4:30 pm - 5:00 pm

Check and move minnow trap

5:00 pm - 5:45 pm

Complete bird list with survey
around Old Stables, Rock Quarrey;
field areas.

5:45 pm - 6:00 pm

Complete day's journal at Gate;

(Naturalist's Itinerary)

Saturday
15 August 1970

9:30 am - 10:00 am

Make this day's itinerary at Gate and begin bird listing around park borders near Gate.

10:00 am - 12:30 pm

Bait; set small mammal traps

12:30 pm - 1:00 pm

Lunch

1:00 pm - 4:30 pm

Hike - flora survey Flat Ridge Trail, Hidden Hollow, Powerline Cut to 2nd powerline tower and off trail to dam. Return by flora-survey of Gorge Road.

4:30 pm - 5:30 pm

Find and collect - for pressing a small fern observed on 12 August and collect other species of ferns.

(Naturalist's Itinerary)

Sunday
16 August 1970

10:00 am - 11:30 am

Compile flora survey of 15 Aug.
with scientific nomenclature and
make this day's itinerary.

11:30 am - 12:30 pm

Lunch at home to get car in order
to bring small mammal traps to
Park.

12:30 pm - 2:30 pm

Bait; reset small mammal traps.

2:30 pm - 5:00 pm

Boat House - try to obtain Park
Patrol boat in order to make
2nd waterfowl survey.

(Naturalist's Itinerary)

Tuesday
18 August 1970

9:00 am - 10:00 am

Office, finish up records
for past week's work.

10:00 am - 10:30 am

Obtain oatmeal for baiting trap

10:30 am - 11:00 am

Gate, write up records for
Broad-winged hawk and Garter
Snake (17 Aug., 18 Aug.)

11:00 am - 11:30 am

Lunch

11:30 am - 2:00 pm

Fern collecting trip Short
Branch; explore trail along Side
Ridge Knob to dam.

2:00 pm - 3:30 pm

Press and identify ferns

3:30 pm - 5:00 pm

Boat around lake with stop at
dam to check for shorebirds.

(Naturalist's Itinerary)

Wednesday
19 August 1970

9:30 am - 10:00 am

Pick up Woody Boyd; arrive at Gate

10:00 am - 12:00 am

Trip to dam to explore area for shorebirds and possibly R. Crossbills.

12:00 am - 12:45 pm

Lunch - W. Boyd's or my home.

12:45 pm - 1:15 pm

Explore White Oak Cove area for frogs.

1:15 pm - 4:30 pm

D. Hicks, W. Boyd and I to dam where we will search for R. Crossbills behind cliff in extensive Va. Pine stand. Woody has camera to photograph birds.

4:30 pm - 5:30 pm

Hike back by small trail along edge of Gorge (side opposite Gorge Road).

(Naturalist's Journal)

Saturday
16 May 1970

Dan Emmel, Wallace Coffey, and I first stopped at the old stables; Wallace explained boundaries of the Park. We made hike along Flat Ridge Trail around Mill's Creek and The Bend area. An Eastern Garter Snake was collected and birds, mammals, reptiles, etc. were noted. The Three Springs picnic area was gone over to note interesting observances.

At noon, Wallace, Dan and I left the Park. I had lunch and then hiked to the dam, noting fauna and flora and collecting specimens. I talked to several persons at the Dam. Leaving the dam area, a late afternoon thunderstorm soaked me.

Awaiting transportation at the bridge over Steele Creek on Broad Street. I saw a large Northern Water Snake slide under this bridge. It carried a small Bluegill in its jaws. I left the park at 6:15 pm.

(Naturalist's Journal)

Saturday
23 May 1970

Checked in at gate (8:15 am) and awaited Paul Cook. Went over questions to be asked with Wallace Coffey. At Paul Cook's arrival, I was introduced to various Park employees. Asked Paul Cook questions concerning canoes, keys, times, etc.

Later left Park with Wallace to look for a uniform. We visited four or five stores finally finding a suitable shirt at Sears.

12:00 am - Returned to Park and had lunch

12:30 pm - Make "Shoreline Survey" by canoe covering the Gorge to the dam and back. Fauna-Flora noted.

4:00 pm - Worked on tree identification at Three Springs picnic area until departure at 4:45 pm.

(Naturalist's Journal)

Saturday
30 May 1970

7:15 am - Waited for Wallace Coffey outside gate; began bird census with walk to maintenance building. Wallace Coffey arrived at Gate.

8:00 am - First checked pumphouse area (the Bend) for herptiles then began exploration hike through Flat Ridge Trail. Compiled catalog of variety of birds, insects, mammals, and herptiles on the Flat Ridge Trail. Observed opportunities to use this as main "nature walk". Left the trail at 1:00 pm.

1:20 met Boyd Barnes. Boyd tried to collect herptile specimens while I made personal contacts in Three Springs picnic area.

2:50 pm - Began canoe shoreline survey accompanied by B. Barnes. Mr. Hicks informed us of an early dock closing time - we headed back.

4:00 pm - Met Paul Cook at "pavilion" and then checked out animal "dens" he had seen off no. 2 tee on the golf course.

4:45 pm - Checked out at gate.

(Naturalist's Journal)

Tuesday
9 June 1970

8:00 am - 10:30 am - I took down tree labels in the Park.

10:30 am - 1:30 pm - Made aquatic plantlife survey from Par Bay to the dam. This route needs to be done again with someone of more experience. Also examined an apparently sick or injured duck near the beach area. The white duck could hardly walk and was in a very ragged condition.

1:30 pm - Lunch

2:00pm -5:00 pm - Made contacts around Three Springs picnic area.

(Naturalist's Journal)

Wednesday
10 June 1970

7:00 am - 9:30 am - Made aquatic plant shoreline survey from dam to Front Knob. This took longer than planned. Again, much help is needed in this area.

9:30 am - 12:30 pm - Made tree measurements of large trees adjacent Flat Ridge Trail along Lake Spur Ridge.

12:30 pm - 6:00 pm - Off

6:00 pm - 7:00 pm - Constructed minnow seine while thunderstorm.

7:00 pm - 9:00 pm - Walked over park grounds in the sprinkling rain to observe fauna-flora in these conditions and at this time of day.

(Naturalist's Journal)

Thursday
11 June 1970

7:00 am - 7:30 am - While waiting for Wallace and Bill Bridgeforth, I made bird list on the Park grounds. Two birds were heard that could not be identified.

7:30 am - 9:00 am - Bill Bridgeforth, from E.T.S.U., and I went by canoe from Front Knob to the Bend, noting plantlife along the shoreline. We met Wallace at the Bend at 9:00 am. From 9:00 am - 12:00 am, the three of us walked over Flat Ridge Trail from the Bend area to Lake Spur Ridge. We returned by the Gorge Road. All outstanding fauna-flora were noted.

12:00 am - 1:30 pm - Jim Boring and I set the minnow trap near the shore of Side Knob near Par Bay.

1:30 pm - Off

? 2:00 pm - Jim Boring and I, by canoe, explored the shoreline for herptiles. We checked the minnow trap also. Nocturnal birds were listed.

10:00 pm - We departed.

(Naturalist's Journal)

Tuesday
16 June 1970

7:45 am - Awaited Mrs. Ann Bachman at Gate. She arrived at 8:00 am. and we walked to the Bend and the base of Flat Ridge Trail.

8:00 am - 11:00 am. - Hiking on Flat Ridge Trail, we listed "out-standing" plants and collected those that could not be identified. Most of the work was done in the vicinity of Hidden Hollow.

11:30 am - 12:00 am - Lunch

12:00 am - 1:00 pm - Wallace Coffey and I distributed labeled mops of Steele Creek Park to Boat Dock and "Beach House".

1:00 pm - 2:00 pm - Off

2:00 pm - 5:00 pm - Arrived at Parks and Recreation Office and finished compiling records not completed on 15 June 1970.

(Naturalist's Journal)

Wednesday
17 June 1970

7:30 am - 10:30 am - Walked, starting at Gate, around boundaries of Park noting interesting habitats, fauna-flora, etc. Explored into areas immediately beyond Park boundaries.

10:30 am - 11:30 am - Examined the springs of Three Springs Picnic area for Reptiles and Amphibians, digging under rocks, leaves, etc.

11:30 am - 12:00 am - Lunch

12:00 am - 7:00 pm - Off

7:00 pm - 9:00 pm - With Boyd Barnes surveyed by canoe the shoreline of the Gorge for crepuscular and nocturnal activity.

9:00 pm - 10:00 pm - We examined Beach area for any nocturnal activity along shoreline and under spotlights.

(Naturalist's Journal)

Sunday
19 June 1970

7:00 pm - 10:30 pm - Boyd Barnes (12 yrs.) and I surveyed the shoreline from Par Bay to dam and back. Several interesting things were noted because of the time of day. On the way back we checked the minnow trap (set 11 June). No minnows.

10:30 -11:00 pm - Collected toads, moths, etc. Ground Beach and Boat Dock areas.

(Naturalist's Journal)

Saturday
20 June 1970

10:00 am - 11:30 am - Compiled bird records at the Gate while it rained outside.

11:30 am - 11:30 pm - Made a few contacts in the Three Springs Picnic Area. Few people were present because of the bad weather. A large negro group was around.

1:30 pm - 2:00 pm - Lunch

2:00 pm - 5:00 pm - Checked and changed position of minnow trap. An aquatic life shoreline survey was also made for the Gorge.

4:30 pm - 6:00 pm - Made as many contacts as possible to picnickers in the Three Springs Area. Boyd Barnes arrived at the Park and accompanied me.

(Naturalist's Journal)

Sunday
21 June 1970

10:30 am - 12:00 am - Birds were listed while on foot in the Park and while canoeing to the Bend. Aquatic life was observed and listed from Front Knob to the Bend by canoe also.

12:00 am - 2:00 pm - Tried to make contacts around Three Springs. Many people were present, but they seemed too interested in eating and games to listen to a Park naturalist. Few contacts were made.

2:00 pm - 6:30 pm - Off

6:30 pm - 8:30 pm - Two friends, Jim Boring and Guy Jones wanted to help with minnow seining and wanted to see the skunks. We checked the minnow trap also.

8:30 pm - 9:30 pm - We waited for and finally observed the skunk family at 9:20 pm.

(Naturalist's Journal)

Wednesday
24 June 1970

7:30 am - 8:15 am - Birds seen along route to Park and Pratt's Knob trail were listed. Other birds were later added to the list.

8:15 am - 1:30 pm - Walked up Flat Ridge Trail through Hidden Hollow and followed a trail following ridges above the gorge all the way to the dam. My map did not clearly show Pratt's Knob trail and it was "missed". Time was extended because of the length of the trail to the dam. - Was picked up at the dam by the "Park Patrol" boat.

1:30 pm - Off

(Naturalist's Journal)

Saturday
27 June 1970

9:30 am - 10:15 am - Started listing birds in Park while waiting for Mr. Hicks to help check turtle trap in Bend.

10:15 am - 11:30 am - At boat dock - attendant caught several bluegill with a small piece of meat fat. We returned, to Bend, rebaited and repositioned turtle trap. (Trap was first set on log in Bend on night of 26 June after making it on day off, 26 June.

11:30 am - 12:00 am - Lunch

12:00 am - 2:15 pm - Made contacts in Three Springs Picnic Area

2:15 pm - Off

6:30 pm - 7:30 pm - With Chip Moore - we covered the Bend area near pumphouse and shoreline to the foot of Front Knob for herptiles.

7:30 pm - 9:30 pm - Seined Mill's Creek for minnows, crawfish, etc.

9:30 pm - 10:00 pm - Contacted man on motorcycle and talked for a while on erosion and other effects of motorcycle riding in the Park.

(Naturalist's Journal)

Tuesday
30 June 1970

6:30 am - 8:15 am - Awaited Mrs. Ann Bachman at Gate. She did not arrive;

8:15 am - 10:00 am - First made aquatic life shoreline survey to the Bend; checked turtle trap in the Bend and made survey of shoreline back out of Bend. Next we checked the minnow trap. People were watching on the opposite bank so I did not change minnow trap location until later.

6:30 pm - 9:30 pm - With Chip Moore surveyed land around shore of Par Bay and moist areas near fairway no. 3.

(Naturalist's Journal)

Thursday
2 July 1970

7:35 am - 10:30 am - Walked from Boat Dock to Stables-took trail back from old Stables to "Rock Quarrey"; started up Flat Ridge Trail when it began to storm. I ran for shelter down "Pine Hill" to a picnic shelter where I waited for the rain to let up (10:35 am -11:30 am)

11:30 - 11:50 - Walked to Gate to get motorcycle;

12:00 -12:30 - Lunch

12:30 pm - 3:20 pm - Walked from Gate to Hidden Hollow where I searched for salamanders (taking advantage of wet weather conditions).

(Naturalist's Journal)

Friday
3 July 1970

9:10 am - 9:30 am - Made itinerary

9:30 am - 11:50 am - Caught Bluegill at Boat Dock for turtle trap bait; constructed ropes to support trap. Also obtained information from George Hicks about turtle caught in trap; checked minnow trap. Left Boat at "Tunnel of Love" to check out bird thought to be a Black-Billed Cuckoo.

11:50 am - 12:20 pm - Lunch

12:20 pm - 3:00 pm - Contacts-Three Springs Picnic Area; also worked some on tree identification and measurements.

(Naturalist's Journal)

Saturday
4 July 1970

10:00 am - 10:20 am - Made itinerary at Gate.

10:20 am - 10:30 am - Talked with George Hicks about the trap he had checked.

10:30 am - 2:30 pm - Made the Hike Survey to Bogey and Sapling Knob.

2:30 pm - 2:45 pm - Lunch

2:45 pm - 5:00 pm - Made contacts - Three Springs Picnic Area.

5:00 pm - 5:15 pm - Checked minnow trap and turtle trap

5:15 pm - 6:00 pm - Back at Three Springs - made more contacts

(Naturalist's Journal)

Sunday
5 July 1970

8:30 am - 8:45 am - Made itinerary at the Gate.

8:45 am - 9:00 am - Checked turtle trap

9:00 am - 2:45 pm - I had planned to hike from ^{Lake} Back Spur Ridge to Side Ridge Knob, but somehow I got "turned around and hiked down a dry creek bed coming out of the knobs a few miles "down range".

2:45 - 4:40 pm - Made contacts principally in Three Springs Picnic Area.

(Naturalist's Journal)

Monday
6 July 1970

7:30 am - 7:50 am - Made itinerary at Gate

7:50 am - 12:00 am - Made Hike Survey up Flat Ridge trail from the Bend.
Through Hidden Hollow and to Double Knob-down Lake Spur Ridge-back on Gorge
Road.

12:00 am - 12:45 pm - Lunch-3 springs picnic

12:15 pm - 4:30 pm - Contacts were originally planned, but few people
were in the picnic grounds and they were scattered couples. I went back to
Boat Dock where I met Wallace Coffey.

4:30 pm - 6:00 pm - Wallace and I went by boat to Deep Cove where we
got off and walked back by the Gorge Rd.

(Naturalist's Journal)

Saturday
11 July 1970

9:00 am - 9:10 am - Made itin. at Gate

9:10 am - 10:20 am - Checked the small mammal traps set on Bogey Knob

10:20 am - 11:00 am - Waited return of G. Hicks to see if he could help make duck population survey.

11:00 am - 12:00 am - With help of Leslie Ayer, made cloth "bait for minnow trap then checked and rebaited-reset the minnow trap.

12:00 am - 12:30 pm - Lunch

12:30 pm - 1:30 pm - Contacts - 3 Springs Picnic Area (few people present in area)

1:30 pm - 1:50 pm - Rebait mammal traps at Boat Dock

1:50 pm - 4:00 pm - Reset mammal traps-field adjacent Bogey Knob-caught Black Racer along Bogey Knob

4:00 pm - 5:00 pm - Took shelter at Boat Dock - storm threatendd.

(Naturalist's Journal)

Sunday
12 July 1970

8:30 am - 8:45 am - Made itin. at Gate

8:45 am - 10:30 am - Checked all mammal traps -caught up on mammal trapping records, dates, etc.

10:30 am - 1:00 pm - Hike Survey - Pratt's Knob Trail- went onto trail starting at "Rock Quarrey above Mill's Creek - came out at top of Hidden Hollow-went down Hidden Hollow and out on Flat Ridge Trail.

(Naturalist's Journal)

Wednesday
15 July 1970

7:30 am - 8:00 am - Made itin. at Gate

8:00 am - 9:00 am - Awaited G. Hicks who had 383 Key and I had left in my wallet at home.

9:00 am - 11:00 am - "Pulled" all mammal traps.

11:00 am - 11:30 am - Lunch

11:30 am - 12:00 am - Made bait-rebaited traps.

12:00 am - 3:00 pm - Reset traps adjacent White Oak Cove and above on hill and in weeds.

3:00 pm - 4:30 pm - Went to Three Springs picnic area to make contacts-few people in area.

(Naturalist's Journal)

Thursday
16 July 1970

9:15 am - 9:35 am - Made itinerary at Gate.

9:35 am - 10:30 am - Checked mammal traps and housed mammals captured

10:30 am - 11:30 am - Went with maintenance boys and D. Hicks to change minnow trap location and rebait

11:30 am - 12:00 am - Lunch

12:00 am - 1:00 pm - Made new bait for and rebaited and set rat traps along little Lane, with Dickie Hicks

1:00 pm - 1:30 pm - Checked on Muskrat seen by maintenance crew and located at below Steele Creek Broad St. Bridge.

1:30 pm - 5:00 pm - Tried to make contacts in Three Springs picnic area but no one was using the area. I read book Nature and caught up on mammal records in other notebook.

(Naturalist's Journal)

Friday
17 July 1970

9:45 am - 9:55 am - Made itin. at Gate

9:55 am - 11:00 am - Checked all mammal traps and housed mammals captured.

11:00 am - 11:40 am - Checked turtle trap with Sonny Morris-Liver set in trap earlier had been eaten and ~~not~~ turtles had been caught-liver set on trot line in Bend along log where trap was.

11:40 am - 12:00 am - Lunch

12:00 am - 2:00 pm - Contacts attempted in main picnic areas

2:00 pm - 4:30 pm - With Sonny Morris checked turtle trot line-captured softshell but it escaped while trying to put it into boat. We waited at intervals at Boat Dock to return and check line-checked line later and captured large Snapper.

4:30 pm - 6:30 pm - Made bait-rebaited-reset traps in new location (Gully adjacent Ball Field).

(Naturalist's Journal)

Saturday
18 July 1970

9:15 am - 9:35 am - Made itin. at Gate

9:35 am - 10:00 am - Talked with G. Hicks who had checked trot
line earlier-Sonny Morris had also checked line earlier.

10:00 am - 11:00 am - Checked all mammal traps

11:00 am - 11:30 am - Lunch

11:30 am - 1:30 pm - Contacts made in 3 Springs picnic area

1:30 pm - ?

(Naturalist's Journal)

Sunday
19 July 1970

11:30 am - 11:45 am - Made itin. at Gate

11:45 am - 12:00 am - With D. Hicks-checked and rebaited trot
line in Bend.

12:00 am - 3:30 pm - Contacts-3 Springs picnic area

3:30 pm - 4:00 pm - "Ran" mammal traps

4:00 pm - 5:10 pm - Contacts made- 3 Springs picnic area

(Naturalist's Journal)

Tuesday
21 July 1970

9:30 am - Talked to G. Hicks and with maintenance crew who had checked trot line in Bend- They reported that nothing was captured on the line. I also pulled up small mammal traps which were set in Area C. Traps were brought back to Boat Dock.

11:00 am - Lunch and talked with S. Morris about fish, stocking, etc.

12:00 am - Leslie Ager and I went to Steele Creek below the dam and seined pools and rapids there for minnows-Hundreds of shad were netted and a few other minnows were captured.

2:30 pm - Made mammal trap bait, and rebaited all small mammal traps

3:30 pm - Began raining and continued after 5:30 pm. I left Park at 5:15 pm.

(Naturalist's Journal)

Wednesday
22 July 1970

10:00 am - With Chip Moore checked (by canoe) trot line in Bend and also checked the turtle trap.

11:30 am - Lunch

12:00 am - Chip and I walked to Stables area and worked the area behind Stables and below Pratt's Knob for salamanders--no salamanders could be found--habitat dry. After exploring the the "Rock Quarrey" area above Mill's Creek and on Flat Ridge Trail, we found a small limestone cave which seemed to go back about 30'. A flashlight was needed for further exploration. We proceded up Pratt's Trail to Pratt's Knob and power line cut; we came down via Flar Ridge Trail through Hidden Hollow.
5:45 pm.

(Naturalist's Journal)

Saturday
25 July 1970

9:45 am - 10:00 am - First made this day's itin. at Gate

10:00 am - Checked minnow trap and made several contacts with Black Snake at Boat Dock.

11:45 am - 12:15 am - Lunch

12:15 am - Made public contacts in the Three Springs and main picnic areas. Black Snake was shown to people. When not busy I read.

5:15 pm - Severe storm began; I took shelter in Pro Shop until 6:30 pm.

(Naturalist's Journal)

Sunday
26 July 1970

8:30 am - First made this day's itin. at Gate

9:00 am - Avian survey covering Park boundaries adjacent
Broad St. and Golf Course.

12:20 pm - 12:40 pm - Lunch

12:40 pm - 1:00 pm - Made public contacts in Three Springs and
main picnic area.

1:00 pm - 5:00 pm - Off

5:00 pm - 8:00 pm - Attempted to make further public contacts
in picnic areas.

(Naturalist's Journal)

Thursday
30 July 1970

10:00 am - Made bird list from immediate vicinity of Gate; checked on G. Horned Owl possible roosting site within a few hundred yards of Gate from where Emmet Haley had heard owls hoot.

_ Lunch_ Kept Gate while E. Haley went to lunch. Elevated ankle.

2:00 pm - Aquatic life shoreline survey made along shoreline of entire lake. I was accompanied by Jim Boring. Few things were noted; the shoreline seemed "dead".

5:00 pm - Jim and I, with flashlights, explored further the limestone cave in the "Rock Quarrey" above Mill's Creek just off Flatt Ridge Trail. We found the cave to go back about 30 ft. where it flattens out almost completely. The sides of the cave were wet with limestone deposits.

(Naturalist's Journal)

Friday
31 July 1970

10:00 am - 2:00 pm - Composed bird list and remained at Gate. Checked out another G. Horned Owl possible roosting area suggested by employees working at Gate. - Lunch - at Boat Dock. Came to Gate to meet Chip Moore, who arrived at Park.

2:00 pm - 6:00 pm - Made cloth "bait bag" to hold bread bait for minnow trap; rebaited the trap and reset at dam. Ankle was elevated throughout day.

(Naturalist's Journal)

Saturday
1 August 1970

10:05 am - 1:30 pm - Remained at Gate where made bird list and elevated ankle and read. - Lunch - Later contacted young people from yap group.

4:00 pm - 6:00 pm - Rained throughout the rest of the day. There were very few people in picnic areas to contact.

(Naturalist's Journal)

Sunday
2 August 1970

10:00 am - 6:00 pm - Remained at Boat Dock where I helped L. Ager work while foot elevated. Made contacts here at Boat Dock. Also composed bird list from the immediate vicinity of the dock.

(Naturalist's Journal)

Tuesday
4 August 1970

9:00 am - 3:30 pm - Remained at boat dock-helped L. Ager while staying off ankle. Made bird list from this vicinity.

3:30 pm - 6:00 pm - Set all mammal traps along Mill's Creek and field next to Flat Ridge Trail just off Broad Street. I did not attempt to set the traps in the higher areas of this map (Pratt's Knob area).

(Naturalist's Journal)

Thursday
6 August 1970

7:05 am - 7:15 am - Made this day's itin. at Gate

7:15 am - 8:55 am - Made bird survey around Maintenance area (with Woody Boyd) and Golf Course, then checked all small mammal traps.

8:55 am - 12:30 pm - We made hike survey up Flat Ridge Trail, through Hidden Hollow and spent time locating new bird species and "life list species" for W. Boyd. Went across Flat Ridge and came down Lake Spur Ridge.

12:30 pm - 1:45 pm - Lunch at W. Boyd's house; called W. Coffey for hawk identification.

1:45 pm - 3:00 pm - Canoe survey and exploration below dam. Moved minnow trap from dam to Deep Cove. Arrived back at Gate.

(Naturalist's Journal)

Saturday
8 August 1970

Arrived at Park (9:30 am) when it was raining. Checked in, made itinerary; (Slusher at Gate) drove once around park and went out to Mill's Creek where I pulled up all small mammal traps - I captured nothing.

11:00 am (Park closed at 10:45)

✓ I walked around stables area noting birds, plants, etc., then recorded list of common "weeds" of vicinity.

1:45 pm - 2:15 pm - Lunch

2:15 pm - 4:45 pm - Canoeed to dam where recorded the Spotted Sandpiper and other birds; canoeed back 4:45 pm.

4:45 pm - 5:17 pm - Talked to several life guards in "pavilion" and also talked with train "engineers". Made contact with two boys seining Steele Creek above Three Springs picnic area-they caught nothing.

(Naturalist's Journal)

Sunday
9 August 1970

Arrived at Park 10:30 am. Raining-stayed at Gate talking to T. Henniger. Made bird list and checked out Rusty Blackbird sighting.

12:20 pm - 12:45 - Lunch

12:45 pm - 5:30 pm - Did not plan itin. - waited for rain weather to break, but rain continued throughout the day. I left Park at 5:30 pm.

(Naturalist's Journal)

Wednesday
12 August 1970

8:10 am - 8:20 am - Arrived at Gate and met Joey Jackson, a graduate from King College who was to accompany me throughout the day. Made the itin.

8:20 am - 1:00 pm - We surveyed flowering plant and ferns of Shallow Cove, Short Branch, and hollow above Short Branch which led to summit Bogey Knob.

1:00 pm - 1:45 pm - Joey left the park to obtain more books and to eat lunch; I waited for him and had lunch; he returned 1:45 pm.

1:45 pm. - 5:00 pm - We listed and collected flora for further identification along shoreline of Side Ridge Knob and other knobs on that side of the Gorge. Stopped at dam for reptile-amphibian search where we captured a small Queen snake. At Deep Cove we picked up minnow trap and met Wallace who arrived in the Park Patrol boat- later reset minnow trap and returned to Dock. Plants were further classified at B. Dock and at Gate.

(Naturalist's Journal)

Saturday
15. August 1970

9:30 am - 11:00 am - Made itin. and caught up on plant records at Gate.

11:00 am - 11:30 am - Went home to get Green Heron and try to bring small mammal traps to Park. The heron had died and there was no car at the house.

11:30 - 12:00 am - Lunch

12:00 am - 5:30 pm - Surveyed flora up Flat Ridge Trail, Hidden Hollow to 2nd powerline tower and down a trail which led to Deep Cove. This was a long trail, along which many old scraps of metal were lying.

4:20 pm - 5:10 pm - Surveyed ferns along shore of Gorge (Side Ridge Knob side) and collected a few for pressing.

5:10 pm - 5:30 pm - Completed journal and other records at Gate.

(Naturalist's Journal)

Sunday
16 August 1970

10:00 am - 12:00 am - Arrived at Gate and compiled list of scientific names of flora surveyed on 15 Aug.; made itin.

12:00 am - 2:00 pm - Left Park for lunch at my home and brought mammal traps to the Park by car. I returned the car and came back to Park on motorcycle- stopped at Broad St. Grocery for peanut butter (as mammal bait)

2:00 pm - 5:00 pm - Went to Boat House; tried to capture Black Racer which crossed the lake. I went by rowboat to the dam gathering ferns for pressing. I returned to the dock and pressed the ferns. Signed out at Gate.

(Naturalist's Journal)

Tuesday
18 August 1970

9:00 am - 11:00 am - Office, finished all records for past week.

11:00 am - 11:30 am - Went to my home to get oatmeal in order to bait traps; arrived at Gate.

11:30 am - 11:45 am - Made itin. at Gate and wrote records for Broad-winged Hawk and Garter Snake.

11:45 am - 12:15 - Lunch

12:15 pm - 3:30 pm - Collected ferns in Short Branch and adjacent areas. Attempted to press and identify.

3:30 pm - 5:00 pm - Took motor boat around Lake with stop at dam to check for shorebirds. - saw Red Crossbills.

(Naturalist's Journal)

Wednesday
19 August 1970

9:30 am - 9:50 am - Picked up W. Boyd and took my brothers to country club to get the car.

9:50 am - 10:00 am - Checked dam area from motorboat for shorebirds.

10:00 am - 12:00 am - Checked White Oak Cove to Par Bay for frogs; aquatic life.

12:00 am - 12:30 pm - Lunch

12:30 pm - 1:00 pm - Woody and I ran Boat Dock while Dickie Hicks went to lunch.

1:00 pm - 5:15 pm - D. Hicks took us to dam where we hiked up knobs behind cliff and explored large stand of Va. Pines (wanted to photograph Red Crossbills). We hiked back on footpath on side of Gorge (side opposite Gorge Rd.).

(Species Account)

Saturday
16 May 1970

Birds:

E. Sparrow Hawk - (male) Flew from area around Dry Cove out into the Gorge and out around the main lake.

Spotted Sandpiper - Three of these birds noted flying around the dam.

Eastern Phoebe - Nesting under the eave of the Chlorine House - 2 young in nest.

Starling - Nesting in vent of concessions building.

(Species Account)

Saturday
23 May 1970

Birds:

Chimney Swift - Skimming lake (actually striking the water)
in early morning.

Spotted Sandpiper - Two at the dam.

(Species Account)

Saturday
30 May 1970

Birds:

Mallard - should be noted here that some of the Mallards seem to have extended powers of flight and readily take to their wings when approached. Some of these ducks only stay near the dam.

Mallard - The white ducks seem to be in poor condition and and two were found dead near the Bend.

Mallard - Nesting with four eggs near a bush (The Bend near Three Springs Picnic Area)

Hooded Warbler - One identified by Wallace Coffey (Hidden Hollow).

Hairy Woodpecker - One identified by Wallace Coffey (Flat Ridge Trail at top of Hidden Hollow).

(Species Account)

Tuesday
9 June 1970

Birds:

Domestic Blue Goose - Nesting in a honey suckle thicket in front of Side Ridge Cove about 5 ft. above and back from the water. Nest contained 8 eggs. The bird flew from the nest as I approached toward the dam through the Gorge.

Eastern Phoebe - Nesting under roots of shale "cliffs" along the Gorge Road.

Spotted Sandpiper - Two seen at the dam.

Mallard - Nesting above Steele Creek - Broad St. Bridge.
Female could not be made to leave the nest.

(Species Account)

Wednesday
10 June 1970

Birds:

Carolina Chickadee - Many were heard and observed along the Gorge. Many of them used a musical note that I hadn't heard previously from a Chickadee.

Worm Eating Warbler - Record established by Wallace Coffey along the Gorge Road.

White-Breasted Nuthatch - Record established from the "middle" of the Gorge.

Common Nighthawk - This species was recorded at the main lake area at 8:45 p.m.

Pileated Woodpecker - One observed in Deep Cove.

Mallard - The nest above the Steele Creek - Broad St. Bridge was found to contain 12 hatchlings and 14 additional eggs.

Mallard - The White duck observed to be sick or injured on 9 June is now dead and floating in lake.

(Species Account)

Thursday
11 June 1970

Birds:

Worm - eating Warbler - One of these warblers was recorded singing on Flat Ridge of Flat Ridge Trail.

Hairy Woodpecker - This bird recorded of the top of Hidden Hollow across Flat Ridge Trail. We noted his call could be confused with the Rose-Breasted Grosbeak.

Hooded Warbler - noted on Flat Ridge (Flat Ridge Trail)

Yellow breasted Chat - This large warbler recorded in Hidden Hollow across Flat Ridge Trail. The birds unusual song could be detected in the distance.

Whip-poor-will - Heard at 9.00 p.m. on Front Knob. The bird called only once that could be heard. Mr. Slusher said that he had not heard any whip-poor-wills while on night duty. Another nocturnal bird was heard off Par Bay, somewhere on the golf course. It wasn't a whip-poor-will, but could not be further identified.

Great Horned Ow. - Mr. Slusher reports hearing them often at the gate.

(Species Account)

Tuesday
16 June 1970

Birds:

American Goldfinch - Two Goldfinches were heard and observed on Flat Ridge Trail just below Hidden Gap.

Turkey Vulture - A turkey vulture was sighted soaring over Front Knob at about 12:30 p.m.

Eastern Bluebird - Observed by Wallace Coffey near the riding stables at the east end of the park along Broad Street.

(Species Account)

Wednesday
17 June 1970

Birds:

Belted Kingfisher - One observed perched in tree on knob opposite Deep Cove. Time: 7:30 p.m.

Mallard - Two adult female mallards are swimming together with a group of 14 young ones. This is possibly the group from the nest above the Steele Creek - Broad Street Bridge.

(Species Account)

Saturday
20 June 1970

Birds:

Belted Kingfisher² Two observed chasing each other in treetops above Steele Creek near the Pines.

Green Heron - Seven Green Herons were observed on the lake this day.

Turkey Vulture - A Turkey Vulture was observed sailing over Front and Side Knobs. Weather, sunny-hot-with breeze: Time- 4:10 pm.

(Species Account)

Sunday
21 June 1970

Birds:

Eastern Sparrow Hawk - A sparrow hawk flew from the telephone line as I drove by on Broad Street. It flew from the line near the old stables - possible nestings vicinity.

Belted Kingfisher - Kingfisher was observed hunting (perched on a tree limb above lake) on Side Knob at "entrance" to the Gorge. Kingfisher later observed perched on the train tunnel.

Domestic Bluegoose - One of the geese was observed making a very long flight from Steele Creek Station to Par Bay area.

(Species Account)

Wednesday
24 June 1970

Birds:

Belted Kingfisher - One was observed hunting from powerline above the Bend.

Bobwhite - Two flushed from Flatridge Trail above Mill's Creek.

Ruffed Grouse - One flushed from trail on ridge 200 yds. before trail comes out on cliff above dam. Bobwhite and Grouse are found on these trails even though motorcycles frequently use the trails.

(Species Account)

Saturday
27 June 1970

Birds:

Turkey Vulture: One observed soaring over Front Knob. Possibly strong updrafts coming from Front Knob.

(Species Account)

Tuesday
30 June 1970

Birds:

Purple Martin - Several were seen flying above the lake at 8:00 am and perched on line above Baot Dock.

Yellow - shafted Flicker - Flicker nesting in pole at Gate-3 young. The pole is near the exit and is about 2½' tall. The entrance to the nest is a holw (about 3" diam.) in the top of the pole (pole is the telephone type of pole).

(Species Account)

Thursday
2 July 1970

Birds:

Mallard - Female with 6 young - the adult female chase to young drake mallards away from the other young.

White-eyed Virco- Two were observed along Broad St. between the old stables and Mill's Creek.

- Old stable contain old bird nests of some variety.

Broad-winged Hawk - One observed in Hidden Hollow about 50 yds. up from Hidden Gap. I stood 10 yds. off trail to left at 2:20 p.m.; saw large shadow go overhead. The Hawk landed in a tree on the other side of the trail; then sailed on down toward Hidden Gap, being very moisy. The Broad-winged Hawk probably hunts in Hidden Hollow regularly as indicated by small mammals dead on the trail.

House Sparrow - Two were observed on telephone lines adjacent Gate.

Bob White - One adult and at least 6 young flew from concrete base adjacent the old stables. Female used broken-wing act.

(Species Account)

Monday
6 July 1970

Birds:

Louisiana Water Thrush - One observed on rock in Steele /Creek at Three Springs picnic area.

White-eyed Vireo - One singing above Mill's Creek off Flat Ridge Trail.

Hairy Woodpecker - One "in" powerline cut above Hidden Hollow.

Kentucky Warbler - Three in dense foilage on opposite side of powerline cut from Hidden Hollow.

Red-Bellied Woodpecker - One in same area as Ky. Warbler.

Broad-Winged Hawk - One flew over my head (20' high) over powerline cut above Hidden Hollow.

(Species Account)

Saturday
11 July 1970

Birds:

E. Bluebird - One observed in tree in middle of No. 4
fairway.

(Species Account)

Wednesday
15 July 1970

Birds:

Yellowthroat - One heard singing from Green No. 4.

(Species Account)

Sunday
26 July 1970

Birds:

American Redstart - Two observed (yellow plumage) in pines just above Gate and camping area toward Maintenance Shelter.

House Wren - Five observed in pines across Maintenance Shelter.

(Species Account)

Thursday
30 July 1970

Birds:

Great Horned Owl - Accurate reports of Horned Owl hooting by E. Haley, Slusher, and L. King, working at Gate.

Screech Owl - L. King reports whistling of Screech Owl in a tree directly across from the Gate.

(Species Account)

Saturday
1 August 1970

Birds:

Killdeer - One heard flying around vicinity of Gate.

(Species Account)

Thursday
6 August 1970

Birds:

- with Woody Boyd, a bird list of 54 species was compiled.

Broad-winged Hawk - Woody and I flushed an immature Broad-winged Hawk from the Gorge Rd. in the corner of the Bend. The hawk did not have heavy striping on the tail, indicating to us that it was an immature. It soared over us and over Front Knob. Time: 12:00 a.m.

R.T. Hummingbird - One was observed diving at the Broad-winged Hawk mentioned above.

Spotted Sandpiper - Two observed below the dam.

(Species Account)

Sunday
9 August 1970

Birds:

Killdeer - One observed in rain flying around Gate.

(Species Account)

Wednesday
12 August 1970

Green Heron - An adult Green Heron was found tangled in a vine along the lakeshore across from Deep Cove. The bird had a broken or dislocated left wing which was twisted over its back. The heron was taken home, for banding and measurements.

(Species Account)

Friday
14 August 1970

Waterfowl survey - Steele Creek Lake. Time 4:15 p.m.

White Domestic Duck - 11
Domestic Mallard - 43
White Domestic Mallard - 1

(Species Account)

Tuesday
18 August 1970

Birds:

Red Crossbill -

Broad-winged Hawk - One observed soaring over gate and
"peeling" off toward Blountville Highway at 10:30 a.m. on
17 August 1970.

(Species Account)

Wednesday
19 August 1970

Birds:

Chimney Swift - A flock of approx. 40 birds were observed flying around knob directly behind dam and above the shooting range.

Killdeer - One was observed flying about the dam 10:15 a.m.

(Species Account)

Saturday
22 August 1970

Birds:

Wood Duck - First Wood Duck in Park this year observed in Deep Cove by Charlie Smith and myself.

Ruffed Grouse - One flushed from Golf Course side of Bogey Knob.

Chimney Swift - Approx. 75 birds flying over Lake at noon.

SUMMARY ON THE STUDY OF BIRDS
1970

Green Heron
Butorides virescens

The Green Heron is common along all parts of the Lakeshore at the park. Green Herons may have nested, but no nests were discovered. From one to a maximum of seven Green Herons were seen practically every day during the summer.

On 12 August, an adult Green Heron was found tangled in a vine along the lakeshore across from Deep Cove. The bird's wing was broken and twisted over its back.

Domestic Goose

Four Domestic Geese were known to inhabit the park throughout the study. A nest (contained eight eggs), built in Honey-suckle about five feet above the water at Side Ridge Cove, was unsuccessful. The Goose was probably flushed from the nest too many times by park visitors.

Domestic Mallard
Anas platyrhynchos

Approximately eight pairs of Mallards nested within the park. These "Domestics" stayed through the period, and on 15 August, the population was 43 Mallards. Most of the Mallards could be easily approached and fed by visitors, but it was noted on 30 May that some ducks seemed to have extended powers of flight and readily take to their wings when approached. Some of these (possibly wild Mallards) remained only at the far end of The Gorge, near the dam.

Wood Duck
Aix sponsa

Only one Wood Duck was observed; this rare visitor was recorded in Deep Cove on 22 August.

Domestic Duck

The total number of tame white ducks was eleven on 14 August. Little is known about this duck population in the park. No active nests were discovered, but young ducks appeared in the park. It is suspected that some of these young ducks were "Easter Ducks" released in the park. The White Ducks, as well as the Domestic Mallards, never travel far from the picnic areas.

Turkey Vulture
Cathartes aura

A Turkey Vulture was occasionally seen soaring over the high ridges of the park. The Vultures' breeding status in the park is unknown. A total of 10 birds were observed from 11 June to 22 August. Two were spotted on 1 August.

Broad-winged Hawk
Buteo platypterus

The Broad-winged Hawk, observed on four occasions, ranges over the park's knob areas. A Broad-wing was heard and seen in Hidden Hollow 2 July, and again at the powerline cut 6 July. Woody Boyd and the naturalist flushed an immature Hawk from The Gorge Road at The Bend, and on 17 August, a Broad-winged Hawk was spotted soaring low over the Golf Course, just behind the Gate.

Eastern Sparrow Hawk
Falco sparverius

The Sparrow Hawk is considered rare, based on only one observation within the park boundaries. On 16 May, a male was seen flying from above Dry Cove and out The Gorge to the lake. On 21 June, a Sparrow Hawk was flushed from the telephone line adjacent Broad Street across from the old stables. It is suspected that these birds nest the open fields against the southwest and northwest boundaries of the park.

Ruffed Grouse
Bouasa umbellus

Ruffed Grouse are probably more common in the knobs areas than two records indicate. One was flushed on 24 June from the face of a knob above the dam, and the other was flushed from Bogey Knob (side facing Golf Course) on 22 August. There are many areas of suitable habitat for Grouse in the knobs areas.

Bobwhite
Colinus virginianus

The Bobwhite is a fairly common breeding bird. About 30 Bobwhites were recorded during the period, and on 2 July, an adult with six young were flushed in front of the stables. Bobwhites were most frequently recorded in this area and in the old homeplace field area.

Spotted Sandpiper
Actitis macularia

The Spotted Sandpiper, an uncommon spring and fall migrant, was recorded below the dam from 16 May to 4 June (maximum of 4 on 16 May) and from 6 August to 22 August (max. 4 on 22 August).

Killdeer
Charadrius vociferus

An unusual visitor in the park, the Killdeer was recorded only on three occasions: twice observed flying around the Gate area, 30 July and 9 August; at dam, 19 August.

Mourning Dove
Zenaidura macroura

In all parts of the recreational area, the Mourning Dove is very common and probably nests. About 60 Doves were recorded during the study.

Pigeon

Pigeons were often observed perched on the barn directly across Broad Street from the Gate. They occasionally flew down to the parking lot adjacent the Gate.

Yellow-billed Cuckoo
Coccyzus americanus

The Yellow-billed Cuckoo often heard in the knobs areas, was recorded on 23 occasions from 23 May to 22 August.

Black-billed Cuckoo
Coccyzus erythrophthalmus

Black-billed Cuckoos, less commonly heard than the Yellow-billed Cuckoos, were noted on 9 occasions in the knobs areas of the park.

Screech Owl
Otus asio

The Screech Owl was not observed, but Louis King heard some near the Gate during the nights in August. Screech Owls were probably not rare; probably, they were missed because of their nocturnal activities.

Green Horned Owl
Bubo virginianus

James Slusher, Emmet Haley, and Louis King (Gate Attendants) each reported having heard the deep hooting of the Great Horned Owl. They heard the owls hooting at night or early morning throughout the summer. The hooting was heard to the northwest and southwest of the Gate.

Whip-poor-will
Caprimulgus vociferus

During a period of evening study at the park, the naturalist heard a single Whip-poor-will on Front Knob (11 June).

Common Nighthawk
Chordeiles Minor

During the same nocturnal study period as mentioned above, two nighthawks were noted flying over the lake at dusk on 10 June.

Chimney Swift
Chaetura pelagica

Through-out the period, Chimney Swifts were common, most often observed skimming over the water of the lake. On 22 August, 75 Swifts were noted circling above the lake in front of the Boat Dock.

Ruby-throated Hummingbird
Archilochus colubris

Hummingbirds were not seen prior to 6 August, but from 6 August to 22 August, seven records were established. Hummingbirds were most often seen in late summer. At flowering plants and shrubs we observed them. On 6 August, one was noted diving at a Broad-winged Hawk over the Bend.

Belted Kingfisher
Megaceryle alcyon

The Kingfisher was commonly observed perched above and flying over the lake from 17 June to 22 August. On 20 June, two were observed chasing each other in the tree-tops above Steele Creek in the picnic areas.

Yellow-shafted Flicker
Colaptes auratus

The Flicker was the most common woodpecker during the survey. It was frequently noted on poles adjacent park roads and on 30 June a Flicker nested in one of these short roadside poles and produced three young.

Pileated Woodpecker
Dryocopus pileatus

A few Pileated Woodpeckers inhabited the woodland and areas of the park. Ten were recorded during the summer survey.

Red-bellied Woodpecker
Centurus cardlinus

During the survey period, the Red-bellied Woodpecker was a rare visitor to woodland areas. On 6 July, one was recorded on the northeast side of the powerline cut and on 22 August, a Red-bellied was noted in Short Branch.

Hairy Woodpecker
Dendrocopos villosus

The Hairy Woodpecker was observed on seven occasions; most frequently recorded in deciduous trees along the powerline cut. The first was identified by Wallace Coffey at the "cut" on 30 May.

Downy Woodpecker
Dendrocopos pubescens

Common in both the recreational area and woodland area. The Downys recorded, numbered 22 for the survey period.

Eastern Kingbird
Tyrannus tyrannus

Kingbirds were commonly observed in many parts of the recreational area. Twenty individuals were listed from 16 May to 6 August.

Great-crested Flycatcher
Myiarchus crinitus

More often heard than seen, the Great-crested Flycatcher was recorded on ten occasions through 12 July, but only one additional Flycatcher was listed for the rest of the summer (8 August). This bird was invariably recorded in woodland habitats.

Eastern Phoebe
Sayornis phoebe

The Phoebe was a fairly common nester in the recreational area of the park. A nest containing 2 young was found on 16 May under an eave of the roof of the chlorine house; on 9 June, a Phoebe was seen flying to a nest under roots hanging over the shale banks above The Gorge Road. Old nest were found at the entrance to the cave and on the walls inside a "covert" over Mill's Creek on Broad Street.

Acadian Flycatcher
Empidonax virescens

The Acadian Flycatchers frequented moist woodland areas of the park. Eleven were recorded during the summer period (max. of 4 on 4th of July).

Eastern Wood Pewee
Contopus virens

The Wood Pewee was often heard in both the recreational area and the woodland areas. During the survey, 15 were recorded. Three were observed or heard on 2 July.

Rough-winged Swallow
Stelgidopteryx ruficollis

One Rough-winged Swallow was observed flying over the Beach on 23 May and another on 9 June at the dam. Eight were seen flying around the cliff above the dam on 24 June--last observation for the survey.

Barn Swallow
Hirundo rustica

Although frequently seen skimming over the lake, Barn Swallows were common at most other parts of the recreational areas. Twenty were observed flying low over the Golf Course and perching on the telephone lines (in the rain) on 9 August.

Purple Martin
Progne subis

Purple Martins were present in the summer during a short period from 30 June to 18 July. Fifteen were noted flying over the lake and Boat Dock area through this period.

Blue Jay
Cyanocitta cristata

The Blue Jay was a very common inhabitant of all areas in the park during the survey. There were few times when the Blue Jay was not on the daily bird list. On 6 August, a maximum of 10 individuals were observed.

Common Crow
Corvus brachyrhynchos

The Crow was very common in small numbers; they were observed frequently throughout the study. On 16 July, the maximum number of six Crows was recorded. The Crows sometimes visited the picnic areas, but were most often noted flying over the high ridges of the park, especially Pratt's Knob.

Carolina Chickadee
Parus carolinensis

This very common bird was recorded on 41 occasions from all areas in the park. Ten were observed on 6 August.

Tufted Titmouse
Parus bicolor

Common in the park, the Titmouse was listed 19 times in Woodland areas.

White-breasted Nuthatch
Sitta Carolinensis

Less common than the Titmouse, the White-breasted Nuthatch was recorded on 11 occasions. Although most often noted in woodland habitats, the White-breasted Nuthatch was recorded at Three Springs Picnic Area on 10 June.

House Wren
Troglodytes aedon

House Wrens were found in only one area of the park: Pines area around the maintenance shelter. Six were recorded at this

location, four on 26 July and two on 6 August.

Carolina Wren
Thryothorus ludovicianus

Carolina Wrens were found to be fairly common at both the recreation area and woodland areas of the park. The bird was observed on 26 occasions.

Robin
Turdus migratorius

Robins were recorded each day in the park principally within the recreational area throughout the summer.

Wood Thrush
Hylocichla mustelina

The Wood Thrush was commonly heard and noted in woodland habitats from 16 May to 16 July. For the remainder of the period, only one additional Thrush was recorded 6 August. Singing of Wood Thrushes diminished after mid-July.

Eastern Bluebird
Sialia sialis

Bluebirds were occasionally observed along the telephone lines along Broad Street near Mill's Creek. Six were recorded in this location from 11 July to 22 August. On 6 August, a family group of four birds was observed along Lakeshore Drive near The Bend.

Blue-gray Gnatcatcher
Polioptila caerulea

Eighteen were recorded during the survey period; they were found in both the recreational area and woodland areas. On 26 July, a maximum number of five were observed.

Loggerhead Shrike
Lanius ludovicianus

One Loggerhead Shrike was spotted sitting on a telephone wire over a small dirt road about $\frac{1}{2}$ mile to the southwest of the park boundary on 5 July.

Starling
Sturnus vulgaris

Starlings were recorded practically every day in the park. They usually inhabited the recreational area; on 6 August, a flock of 20 was noted in this area. A nest was found in the exhaust fan of the "Snack Bar" on 16 May.

Mockingbird
Mimus polyglottos

Mockingbirds occupied the recreational area in small numbers throughout the summer. A maximum number of four was recorded on 26 July.

Catbird
Dumetella carolinensis

Catbirds were noted in small numbers in the recreational area throughout the summer. The maximum number of three was recorded.

Brown Thrasher
Toxostoma rufum

Although Brown Thrashers were observed most often in the recreational area, a few were noted in woodland habitats. Twenty-eight were listed for the survey period.

White-eyed Vireo
Vireo griseus

White-eyed Vireos were heard exclusively in the areas around the old stables. Nine were recorded during the period, with a maximum number of two listed on 2 July.

Red-eyed Vireo
Vireo olivaceus

During the first half of the survey, these Vireos could be regularly heard in woodland habitats, but their singing later diminished and only four birds were recorded from 19 July to 31 August. Four were noted on 18 July.

Black-and-white Warbler
Mniotilta varia

A rare occupant of the park, the Black-and-white Warbler was observed only on two occasions (5 July and 6 August); both records were from woodland areas.

Worm-eating Warbler
Helminthos vermivorus

Worm-eating Warblers were also rare during the summer; only five were recorded (9 June and 6 August).

Prairie Warbler
Dendroica discolor

Only a single individual was recorded; this one was identified by Wallace Coffey on 16 May near the rock quarry.

Ovenbird
Seiurus aurocapillus

From 16 May to 6 July, Ovenbird were regularly heard (woodland habitat), but none of these warblers were recorded for the rest of the summer after 6 July when their singing diminished. Ten individuals were heard during the period mentioned above.

Louisiana Waterthrush
Seiurus motacilla

Four Waterthrushes were observed in scattered "wet" habitats from 5 July to 6 August. On 6 July, an individual was observed on a rock in the middle of Steele Creek at Three Springs Picnic Area; two were recorded near the dam on 6 August.

Kentucky Warbler
Opornis formosus

There were fourteen records for this bird (which was regularly observed at certain locations). On 6 July, three were observed near the powerline cut; two were recorded in Hidden Hollow on 8 August.

Yellowthroat
Geothlypis trichas

This warbler is considered rare, as it was recorded only once (15 July, golf course).

Yellow-breasted Chat
Icteria virens

Chats were recorded regularly in small numbers around field and woodland habitats through out the period. Two were observed at the powerline cut on 2 July.

Hooded Warbler
Wilsonia citrina

Rarely observed in the park, the Hooded Warbler was identified by song on 30 May by Wallace Coffey in Hidden Hollow. Two were observed above a moist cove near the dam on 8 August; the total was four for the summer (all at woodland areas).

American Redstart
Setophaga ruticilla

The Redstart was rare in the park as only three were observed: two females in pines adjacent maintenance shelter on 26 July, and one in Hidden Hollow on 6 August.

House Sparrow
Passer domesticus

House Sparrows were recorded in small numbers at the Gate from 30 June to 19 August. There were only fourteen individuals listed, with the maximum number of three observed on 6 August.

Eastern Meadowlark
Sturnella magna

Seventeen Meadowlarks were listed for the survey, these records having been established particularly from open field habitats

and the Golf Course. Three (max.) were noted on 6 July on the Golf Course.

Red-winged Blackbird
Agelaius phoeniceus

Five individuals were observed around Steele Creek, scattered throughout the period from 16 May to 11 July.

Orchard Oriole
Icterus spurius

Only two Orchard Orioles were observed (30 May and 11 June--recreational area.

Baltimore Oriole
Icterus galbula

More often observed than the Orchards, Baltimore Orioles were recorded on five occasions. All were noted in the recreational area and on 6 August, six were observed above Mill's Creek.

Common Grackle
Quiscalus quiscula

Grackles were very common in large numbers in all parts of the recreational area during the summer, although their numbers diminished toward the end of the study.

Brown-headed Cowbird
Molothrus ater

Large groups of Cowbirds were observed at intervals during the summer, among cattle across from the Gate; the largest group

of 30 was recorded there on 2 July.

Summer Tanager
Piranga rubra

The Summer Tanager was regularly recorded in woodland habitats; eighteen were listed during the period.

Cardinal
Richmondia cardinalis

Forty-seven Cardinals were listed during the study from practically all areas of the park. On 6 August, there were six (max.) individuals recorded.

Indigo Bunting
Passerina cyanea

Indigo Buntings were common in "edge habitats", such as along The Gorge Road, the powerline cut, and parts of the recreational areas. The total number counted was 31 individuals from 16 May to 6 August.

American Goldfinch
Spinus tristis

A total of forty Goldfinches were listed during the period, from all area; on 8 August, six (max.) were observed.

Red Crossbill
Loxia curvirostra

A pair of Red Crossbills were discovered near the dam on 18 August. The birds were first seen drinking from rocks around the

dam overflow. They flew back and fourth from the large stand of Virginia Pine above the cliff over the dam. They were easily approached and veiwed from about 15 yds. with 8x30 binoculars. One bird had the red and black plumage while the other resembled a Goldfinch in coloration (probably male and female).

The Red Crossbill should be considered an accidental in the park; this is a very low elevation for Crossbills to appear.

Rufous-sided Towhee
Pipilo erythrophthalmus

Towhees were commonly found in the recreational area, and less often in woodland areas. Eighty were recorded for the study. On 26 July and 6 August, eleven and ten individuals were noted, respectively.

Field Sparrow
Spizella pusilla

Often heard around open field areas and the Golf Course, Field Sparrows were common in fair numbers. From the total of 82 individuals recorded, 10 were noted on 12 July.

Song Sparrow
Melospiza melodia

Song Sparrows were fairly common in open field areas, the recreational areas, the "edge habitats" (see Inidgo Bunting). Of 47 birds listed, four (max.) were noted on 2 July, 15 July, and 18 July.

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PARK AND RECREATION COMMISSION

		PARK AND RECREATION COMMISSION														3		4	
SPECIES		22 July	25 July	26 July	30 July	1 August	2 August	6 August	8 August	9 August	12 August	14 August	15 August	16 August	17 August	18 August	19 August	22 August	31 JULY
1	Great Blue Heron																		
2	Green Heron		1	2	1	1	2	2		*1					1	1			
3	Little Blue Heron																		
4	Blk. cr. Night Heron																		
5	Yel. cr. Night Heron																		
6																			
7	Domestic Goose	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓					
8	Mallard	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓					
9	Wood Duck																1		
10	Domestic Ducks	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓				
11																			
12	Turkey Vulture				2	1											1		
13	Black Vulture																		
14	Sharp-shinned Hawk																		
15	Cooper's Hawk																		
16	Red-tailed Hawk																		
17	Red-shold. Hawk																		
18	Broad-winged Hawk						1						1	1					
19	Sparrow Hawk																		
20																			
21	XXX Ruffed Grouse																1		
22	Bobwhite	2	2	2	2	3	1				1								
23	Turkey																		
24																			
25	American Woodcock																		
26	Spotted Sandpiper					2	2			1				2	3	4			
27	KILLDEER		1							1					1				
28																			
29																			
30	Common Tern																		
31	Don. PIGEON					1													
32	Mourning Dove		3	5	1	3	6			3	3	2	1	2	2	1			
33	Yellow-bellied Cuckoo	1								1	1				1	1			
34	Black-billed Cuckoo		1	1		1	1								1				
35	Barn Owl																		
36	Screech Owl																		
37	GLIM-HORNED OWL																		
38	Chuck-will's-widow																		
39	Whip-poor-will																		
40	Common Nighthawk																		

SUMMER BIRDS OF STEELE CREEK PARK

BRISTOL, TENNESSEE

Park and Recreation Commission

		1			2						3					4								
SPECIES		MAY	MAY	MAY	JUNE	JUNE	JUNE	JUNE	JUNE	JUNE	JUNE	JUNE	JUNE	JUNE	JUNE	JUNE	JUNE	JUNE	JUNE	JUNE	JUNE	JUNE	JUNE	
		16	23	30	4	10	11	16	17	20	21	24	27	30	2	3	4	5	6	11	12	15	16	21
1	Chimney Swift	✓	✓		✓	✓	✓	✓	✓	✓				✓	6	5	2	1	2	14	2	5	15	5
2	R. th. Hummingbird																							
3	Belted Kingfisher											1	1	1	1		1	1	1	2		2		2
4	Yellow-shafted Flicker	✓	1	✓	✓	✓	✓	✓	✓	✓		✓		✓	4	3	2	✓	1	3	3			
5	Pileated Woodpecker				✓	✓				1								1						
6	Red-bellied Woodpecker																		1					
7	Red-headed Woodpecker																							
8	Hairy Woodpecker			✓			1										1	1	1					
9	Downy Woodpecker			✓		✓	✓					✓			5	1		1	1	1	1	1	1	
10																								
11	Eastern Kingbird			✓	✓	✓		✓				✓		✓	1	1			4					
12	Grt. crested Flycatcher	✓	✓	✓	✓	✓	✓					2						1	4	1				
13	Eastern Phoebe	✓	1		✓	✓	✓	✓	✓			✓		✓	3	1			1					
14	Acadian Flycatcher			1	1												4	1	1	1				
15	Traill's Flycatcher																							
16	Ea. Wood Pewee	✓	✓	✓	✓	✓	✓	✓				✓			3									
17																								
18	Horned Lark																							
19	Rough-winged Swallow		1		✓							8												
20	Barn Swallow	✓			✓	✓	✓	✓							2			3	2	2	2	2	4	3
21	Purple Martin														4	1	1		4		3	2		
22																								
23	Blue Jay	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓		2	2	✓	✓	1	2	2	1		
24	Common Crow	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	4	1	2	✓	3	3	3	6		
25	Carolina Chickadee	✓	✓	✓	✓	✓	✓	✓				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	2		
26	Tufted Titmouse	✓	✓	✓	✓	✓	✓	✓				✓	✓	✓	3	1	1		1					
27	White-br. Nuthatch				1	1											3							
28	House Wren																							
29	Bewick's Wren																							
30	Carolina Wren	✓				✓											1	2	1	2	1			
31																								
32	Robin	✓	✓		✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
33	Wood Thrush	✓	✓		✓	✓	✓	✓				✓	✓		✓	✓	✓	✓	1	1	2			
34	-Eastern Bluebird																		1					
35	Blue-gry. Gnatcatcher			✓	✓	✓	✓	✓						2						2				1
36	Cedar Waxwing																							
37	Loggerhead Shrike																*							
38	Starling	✓	✓	✓	✓	✓	✓	✓				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
39	Mockingbird	✓	✓	✓		✓	✓					✓	✓	✓	1	1			1	1		1	1	
40	Catbird	✓		✓		✓	✓					✓			2				1			1	1	
	Brown Thrasher			✓	✓	✓	✓	✓				✓			2	2				1	2			

SUMMER BIRDS OF STEELE CREEK PARK

BRISTOL, TENNESSEE

PARK AND RECREATION COMMISSION

		SPECIES																				
		22 July	25 July	26 July	30 July	1 August	2 August	8 August	9 August	12 August	14 August	15 August	16 August	17 August	18 August	19 August	22 August	31 July				
1				2			1	1					1		1		15					
2							1	1		2		2					1					
3			1			1	2	1			2		1	1								
4			1				5	2	1	2	1											
5							1	1		2		1										
6																	1					
7																						
8							1	1														
9		2	1	1			3															
10																						
11		1	1	2			3															
12								1														
13			1																			
14							1										1					
15																						
16							1			1							1					
17																						
18																						
19																						
20								4	20	3												
21																						
22																						
23		✓	1	3		3	10	7		3	1			1	3		1					
24				3	4		3	5		2	4	4					1					
25				5	1		10				1				2							
26								1			1											
27								3		2							1					
28			4				2															
29																						
30			1	1	1	1		3	3	1	3				2		1					
31																						
32		✓	✓	✓	✓	✓	✓	✓	✓													
33							1															
34			3				4		2								2					
35				5			3															
36																						
37																						
38		✓	3	15	10	20	7		15	6	5	5	1									
39			1	4	2	1			1	1	2	2										
40		1	2	3		2	1	1						1			1					
			2	2		5	1										1					

SUMMER BIRDS OF STEELE CREEK PARK

BRISTOL, TENNESSEE

Park and Recreation Commission

		MAY			JUNE						JULY					AUGUST									
		16	23	30	9	10	11	16	17	20	21	24	27	30	2	3	4	5	6	11	12	15	16	18	21
SPECIES																									
1	White-eyed Vireo		✓	✓											2				1						
2	Yellow-thr. Vireo																								
3	Red-eyed Vireo	✓		✓	✓				✓			✓		✓	✓				✓	✓			4		
4	Warbling Vireo																								
5																									
6	Black-and-white Warbler																	✓							
7	Prothonotary Warbler																								
8	Worm-eating Warbler					✓	✓											✓	✓						
9	Yellow Warbler																								
10	Yellow-throated Warbler																								
11	Prairie Warbler	✓				✓	✓	✓																	
12	Ovenbird	✓	✓	✓		✓	✓	✓				✓				✓			✓						
13	Louisiana Waterthrush																								
14	Kentucky Warbler	✓																3	3	2					
15	Yellowthroat																				✓				
16	Yellow-br. Chat	✓		✓		✓	✓	✓				✓			2		✓	✓	✓						
17	Hooded Warbler			✓		✓																			
18	American Redstart																								
19	House Sparrow														2										
20	Eastern Meadowlark	✓	✓				✓	✓				✓		✓	2	✓	✓	3	✓						
21	Red-winged Blackbird	✓		✓			✓								✓			✓	✓						
22	Orchard Oriole			✓		✓																			
23	Baltimore Oriole	✓	✓		✓																				
24	Common Grackle	✓	✓	✓	✓	✓	✓	✓				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
25	Brown-headed Cowbird	✓		✓								✓			30										
26	Scarlet Tanager																								
27	Summer Tanager			✓	✓	✓	✓	✓							2	2		✓	✓						
28	Cardinal	✓	✓	✓	✓	✓	✓	✓				✓	✓	✓	2	✓	✓	3	✓	✓	✓	✓	✓	2	
29	Blue Grosbeak																								
30	Indigo Bunting	✓	✓	✓	✓	✓	✓	✓				✓	✓		✓	✓		✓	✓	✓				3	
31	Dickcissel																								
32	American Goldfinch						2					✓					✓	4	3	4	✓			✓	
33	Rufous-sided Towhee	✓	✓	✓	✓	✓	✓	✓				✓	✓	✓	5	2	✓	✓	2	3	5				
34	Grasshopper Sparrow																								
35	Chipping Sparrow																								
36	Field Sparrow	✓		✓			✓					✓	✓	✓	2	2	✓	2	✓	✓	✓	✓	✓	4	
37	Song Sparrow	✓	✓	✓		✓	✓	✓				✓	✓	✓	4	2	2	3	2	✓	✓	✓	✓	2	
38																									
39																									
40																									

SUMMER BIRDS OF STEELE CREEK PARK

BRISTOL, TENNESSEE

PARK AND RECREATION COMMISSION

		1								2								3		4	
SPECIES		22 July	25 July	26 July	30 July	1 August	2 August	6 August	8 August	9 August	12 August	14 August	15 August	16 August	17 August	18 August	19 August	22 August	31 July		
1	White-eyed Vireo		1			1	1				1										
2	Yelloww-thr. Vireo																				
3	Red-eyed Vireo						2				2										
4	Warbling Vireo																				
5																					
6	Black-and-white Warbler					1															
7	Prothonotary Warbler																				
8	Worm-Eating Warbler						1														
9	Yellow Warbler																				
10	Yellow-throated Warbler																				
11	Prairie Warbler																				
12	Ovenbird																				
13	Cousiana Waterthrush						2														
14	Kentucky Warbler		2			1		2													
15	Yellowthroat																				
16	Yellow-br. Chat						1										1				
17	Hooded Warbler							2													
18	American Redstart		2			1															
19																					
20	Eastern Meadowlark		2			1															
21	Red-winged Blackbird																				
22	Orchard Oriole																				
23	Baltimore Oriole					6	1														
24	Common Grackle	1	1	1	1	1	1				1			1							
25	Brown-headed Cowbird		15	12	15	12	3														
26	Scarlet Tanager																				
27	Summer Tanager					1				1		1					1				
28	Cardinal	4	1	2		3	6			2		2		3	1						
29	Blue Grosbeak																				
30	Indigo Bunting	2	1	5		1															
31	Dickcissel																				
32	American Goldfinch		3	2		5	6			1	1	2					3				
33	Rufous-sided Towhee	3	11			10	5			3	2	3		1			3				
34	Grasshopper Sparrow																				
35	Chipping Sparrow																				
36	Field Sparrow	6	6	3	2	4	5	4		5	5	2	2	2	2	1					
37	Song Sparrow	3	1			2	5	1													
38	HOUSE SPARROW					3					2	2	2	2	2	1					
39	RED CROSSBILL														2						
40																					

SUMMARY ON THE STUDY OF AMPHIBIANS

Blue Ridge Mountain Salamander
Desmognathus ochrophaeus carolinensis

The most common salamander of the park is probably the Blue Ridge Mountain Salamander. Specimens could be easily located in certain areas. During the summer, these salamanders were confined to the southwest side of The Gorge in the moist stream beds deep down in the valleys between ridges. Five specimens were found on 12 August under rocks in a moist stream bed in Short B Branch; on 22 August, three specimens were located under rocks in a stream bed at the end of a cove adjacent the dam (S.W. side of The Gorge). The salamanders measured from two to five inches.

Slimy Salamander
Plethodon glutinosus glutinosus

Slimy Salamanders were found to be uncommonly distributed on both sides of The Gorge. Two of these terrestrial Plethodons were uncovered in Hidden Hollow: one 6" slimy was under a rotting log just above the Hollow (back side of Front Knob) on 2 July, and the other was found dead adjacent Flat Ridge Trail, in the Hollow on 30 May. Also, a large 5" Slimy Salamander was found under a rotting log in Short Branch on 12 August.

Cave Salamander
Eurycea lucifuga

In the small limestone cave at the Rock Quarrey, six (3"-6") specimens of the Cave Salamander were observed on 22 August. The

Cave Salamander is restricted to this cave in the park where it is easily found along the moist walls and crevices at certain times of the year.

American Toad
Bufo americanus americanus

Little is known about the status of the American Toad in the park. Only one was discovered during the summer; therefore, the American Toad is considered rare in the park.

On 17 June, the toad was found in the "rough" grass of the Golf Course fairway no. 4 near green no. 4.

Fowler's Toad
Bufo woodhousel fowleri

Fowler's Toads were commonly heard and seen during a period of late evening field work in June. Approximately 14 individuals were found along the Beach Area and grassy area around the boat and chlorine houses, from 10 June to 20 June. The toads were usually within 10 ft. of the lake. On 12 July, a Fowler's Toad was found at noon on a dry bank adjacent Golf Course Fairway 3.

Bullfrog
Rana catesbelana

Although probably fairly common along the lakeshore in the park, no Bullfrogs were observed or collected. Bullfrogs were heard along the lakeshores in the evenings from 10 June to 20 June.

Pickereel Frog
Rana palustris

Pickereel Frogs were apparently abundant in White Oak Cove. They leaped from the grassy banks into the water as a person approached. Two frogs were collected at the cove on 21 July. A specimen was also caught on 15 July, and another on 16 July.

(Species Account)

Saturday
16 May 1970

Amphibians:

Salamanders

Spring Salamander - one collected from submerged
leaves of a spring of Three
Springs picnic area.

Frogs, etc.

Unidentified tadpoles - observed in pools behind
deep cove.

(Species Account)

Saturday
30 May 1970

Amphibians:

Salamanders

Slimy Salamander - One found dead in a small "drainage?"
ditch along Flat Ridge Trail (Hidden Hollow) Length-
approx. 6"

Frogs

-Very large tadpoles were used for fish bait by boys-
12-14 yr.- They said they caught the tadpoles out of the
pond at DeFriece Park.

(Species Account)

Wednesday
10 June 1970

Amphibians:

Frogs

Bullfrog - Many could be heard from around for lakeshore.

(Species Account)

Tuesday
16 June 1970

Amphibians:

Pickerel Frog - Collected from grass around White Oak Cave. Measured larger than the record length listed in Cornant's A Field Guide to Reptiles and Amphibians. Length $3\frac{1}{4}$ ". Time collected - 10:45

(Species Account)

Thursday
2 July 1970

Amphibians:

Hidden Hollow- made complete search of Hidden Hollow for salamanders after heavy rains earlier in the day. Right side of the trail (as going up) was very dry and harbored no salamanders. After searching the more moist left side, I came up with a large:
Slimmy Salamander - (5" - 6" length) This was the only salamander found in Hidden Hollow.

(Species Account)

Saturday
4 July 1970

Reptiles:

E. Box Turtle - baby - seems to be a very unusual find. On trail in Shallow Cove (11:20 a.m.). Shell measures _____ length.

E. Box Turtle: One observed in valley to Center Ridge knob.

Turtle Trap - checked - empty

(Species Account)

Saturday
4 July 1970

Amphibians:

Dusky Salamander - Most likely Blue Ridge Mtn. Salamander.
Three collected in beginning of Short
Branch.

Slimy Salamander - large (6" approx.) under rotten log
in Short Branch.

(Species Account)

Sunday
5 July 1970

Amphibians:

Dusky Salamander - probably Blue Ridge Mtn. Salamander, eight were collected from under rocks in dry creek bed below Back Spur Ridge. Several others were seen, but not collected. This area seems to be one of the best salamander habitats in the Park. Areas this moist have not been found on the opposite side of the Gorge with the possible exception of Deep Cove.

(Species Account)

Wednesday
15 July 1970

Amphibians:

Pickerel Frog - One captured and released in White Oak
Cove 2:10 p.m. Frog retreated into grass.
this did not seem a typical pattern for
the pickerel frogs.

(Species Account)

Tuesday
21 July 1970

Amphibians:

Pickerel Frog - Two observed on edge of White Oak Cove-
seem to be "cross" of Leopard Frog. Spots
more round than square, while there is
a definite yellow color on undersurfaces
of hind legs.

(Species Account)

Saturday
22 August 1970

Amphibians:

Cave Salamander - Six specimens were observed (sizes from 3 to 6") in small limestone "cave" in Rock Quarrey above Mill's Creek. The salamanders were clinging to the sides and crevices in all parts of the "cave".

SUMMARY ON THE STUDY OF REPTILES

Common Snapping Turtle
Chelydra serpentina

Snappers were found commonly in all parts of the lake, particularly in shallow water. George Hicks, Boat Dock manager, caught several large individuals in Par Bay on a line suspended from a plastic milk jug with a hook baited with various types of meat. A 9" snapper was taken by this method near Side Ridge Knob on 18 July. Sonny Morris, park employee, took one individual with a shell measurement of 10" in The Bend area of the lake. On the morning of 10 June, a dead snapper (shell 8") was found floating near Side Ridge Knob with a fishing hook lodged in its mouth. When line from the hook was pulled up, a complete rod and reel set was recovered from the lake. A very small specimen (2 1/3") was found on 30 June near the lakeshore in the vicinity of the train tunnel. Another young snapper (3") was found in one of the springs at Three Springs Picnic Area on 17 June.

Eastern Box Turtle
Terrapene carolina

The Box Turtle is a common and relatively abundant reptile in the park. Twenty individuals were observed from 16 May to 22 August. Most of the Box Turtles in the park were found in the more remote regions in various types of habitat. Only one individual (6 July) was observed in the main recreational area - in honeysuckle adjacent Little Lane. On 16 May, one was found dead in the water of The Bend. On 20 June, one was seen to roll off Side Knob into the lake. It tumbled about 50 ft. before reaching water. This species evidently depended upon various berries,

which were found in the park for food. Box Turtles were discovered in association with or feeding on Huckleberries and Blackberries from 24 June to 22 July.

Eastern Spiny Softshell
Trionyx spinifer spinifer

This fairly common lake inhabitant was most often observed in or near shallow water. Large females (15"-17") along with other smaller softshells were frequently seen on a log in The Bend throughout the summer. On 12 August, the remains of one small turtle (shell 4½") was found on rocks below the dam. A large female softshell was hooked on Sonny Morris's trot line in The Bend (17 July). This turtle jerked off the hook as it was being pulled into the boat.

Fence Lizard
Sceloporus undulatus

The Fence Lizard is probably more common than the four records indicate. It was found along the dry trails in association with dry shale banks. On 16 May, two were found along The Gorge Road. Another individual was discovered on Flat Ridge Trail (30 May). The lizards seemed to be more conspicuous in early summer.

Five-lined Skink
Eumeces fasciatus

Little is known about this lizard in the park. Only one individual was observed. Based on present knowledge, the skink should

be considered a very rare inhabitant of the park, with distribution relatively unknown. On 16 May one was observed briefly along The Gorge Road at Deep Cove. This individual was seen underneath a Blackberry Bush.

Northern Water Snake
Natrix sipedon sipedon

Although there were only two records of this snake in the park, this water snake is probably locally abundant within the park. Under rocks below the dam and along the lakeshore below The Gorge Road are excellent habitats.

A small (12") snake was collected under a rock just below the dam's concrete overflow on 16 May. Also on 16 May, a very large (approx. 48") Northern Water Snake was seen sliding under the Steele Creek-Broad Street Bridge. This Natrix carried a small Bluegill in its jaws.

Queen Snake
Natrix septemvittata

The Queen Snake is fairly common around the lake. Queen Snakes can also be found along the banks of Steele Creek. They are encountered lying in shrubs and weeds hanging over the water. On 14 June, one was picked from a rose bush along the shore of Deep Cove; on 12 August, a very small Queen Snake (9") was caught under a rock in Steele Creek below the dam.

Eastern Garter Snake
Thamnophis sirtalis sirtalis

Little is known about the Garter Snake in the park. Records indicate it is uncommon. The Garter Snake is probably more common in local areas. Two specimens (both about 20"-24") were collected near one of the springs at Three Springs Picnic Area. Sonny Morris caught one of these on 18 August. A small snake (10") was found lying in a large rhubarb leaf in a grassy area between Mill's Creek and the Rock Quarrey on 16 May.

Northern Black Racer
Coluber constrictor constrictor

The Northern Black Racer appears to be locally abundant at an area within the park. Two specimens were collected from the edge of the Golf Course below Bogey Knob. These two, caught on 6, 11, July, were large (50", 52" respectively) and could move rapidly through grass. On 16 August, another racer was seen crossing the lake to White Oak Cove.

(Species Account)

Saturday
16 May 1970

Reptiles:

"Turtles"

Eastern Box Turtle-found dead lying in water of the bend.

Eastern Box Turtle-shell found in dry cove.

Eastern Box Turtle-captured alive by small boys below dam in stream. Turtle was found resting in the water.

Unidentified "aquatic turtles" (2) observed swimming around logs in middle of the Bend (good trapping location).

Lizards

Fence Swift- collected from log along trail (lake shore-Front Knob)

Fence Swift- collected from stump (trail overlooking dam).

Five-Lined Skink- one observed under Blackberry bushes (along trail-Deep Cove)

Snakes

Eastern Garter Snake (spotted phase) collected off trail in grassy meadow off Flat Ridge Trail above Mill's Creek. Snake was sunning in large "tobacco type" leaf. Time 11:00 a.m.

Northern Water Snake- one small (12") specimen collected from under a rock between the dam and "cliff". Time: late afternoon.

Northern Water Snake- Very large specimen observed at bridge over Steele Creek on Broad Street. The snake slid under bridge carrying a small Bluegill (fish) in its jaws.

Unidentified Snake skin- found at dam (Creek between dam and cliff).

(Species Account)

Saturday
23 May 1970

Reptiles:

Turtles

- Painted turtle- One sunning on log extending into the water from side knob. Shell was approx. 5" x 8". (good trapping site)

(Species Account)

Saturday
30 May 1970

Reptiles:

Fence Swift - One observed on Flatridge Trail above the Bend.

(Species Account)

Tuesday
9 June 1970

Reptiles:

Turtles

Unidentified aquatic turtle - large size (8" - 10" shell) on logs off of Side Knob at entrance to the Gorge. Time - 12:00 am: Weather - Hot and sunny.

(Species Account)

Wednesday
10 June 1970

Reptiles:

Toads

Fowler's toad- one collected from grass near Chlorine House.

Turtles

Eastern Box Turtle - Two found along Flat Ridge Trail
(Lake Spur Ridge)

Snapper - 7:30 am found large snapper (8" shell) floating in lake around logs off of Side Knob. Snapper was dead and had swallowed a fisherman's hook and line. Pulling up the line, I found a complete rod and reel set.

Unidentified aquatic turtle - One observed swimming around logs off Front Knob.

(Species Account)

Thursday
11 June 1970

Reptiles:

"Turtles"

Softshell Turtle - (Most likely Eastern Spring Soft-shell). One boy around 15 yrs. and two smaller boys caught in White Oak Cave, a small softshell turtle. They released the turtle. The turtle was found under alua at water's edge. Mr. Hicks of the Boat Dock reports observations of the softshell turtle at Steele Creek also.

Snapper - A Baby Snapper was captured by the boys mentioned above in the identified location. Do their habits correlate?

Unidentified aquatic turtle - One medium size spotted in the shaded water under a sumac tree at the Bend. The turtles make seek shady and covered sites to surface at times.

Toads

Fowlers toad - Two heard and collected around shore of White Oak Cave. Their weird call can be heard frequently at the lakeshore.

(Species Account)

Sunday
14 June 1970

Reptiles:

Toads

Fowler's Toad - Can be easily seen near the lake. One collected by Boyd Barnes from water's edge.

Snakes:

Queen Snake - Collected from "thorn bush" on shoreline of Deep Cove. time 9:00 p.m. The snake had cloudy eyes and seemed ready to shed.

(Species Account)

Wednesday
17 June 1970

Turtles:

Snapper - One caught by Mr. Hicks this morning. shell 8" Turtle was caught in Por Bay on a line suspended from a floating plastic milk jug. The hook was baited with a dead bird.

Snapper - One baby (3" shell) observed in the spring of Three Springs Picnic Area (spring under large Hemlocks).

Toads:

American Toad - the first American Toad record for the park was established by collecting this toad in the rough of the golf course near green no. 4 at the foot of the "knobs". This area is moist but is not near a body of water (the Fowler's foods were found around Steele Creek Lake).

Turtles:

Aquatic Turtle - Small turtle (about 4½) observed on log in water below Side Knob.

Eastern Box Turtle - Box Turtle observed on bank of stream between the dam and large cliff. Time 7:30 p.m.

Eastern Box Turtle - observed on bank below Double Knobs Time 8:00 p.m.

(Species Account)

Saturday
20 June 1970

Reptiles:

"Turtles"

Eastern Box Turtle - One rolled through the leaves from about 50 ft. above the lake on Side Knob all the way down and into the lake. The turtle must have somehow lost its balance.

Snakes:

Snake skin from an unknown species was found in grass near Steele Creek - Broad Street bridge.

Toads:

Fowler's toad - These toads heard and observed in grass around the Boat Dock.

(Species Account)

Sunday
21 June 1970

Reptiles:

"Turtles"

Soft-shelled turtle-(probably Eastern Spiny Soft-shelled)
observed sunning on log in middle of the Bend. Turtle was very
large (10" - 15" shell). Weather: sunny Time: 12:15 pm

Eastern Box Turtle - Found on shore of Side Knob - 7:10 pm.
("entrance to Gorge").

(Species Account)

Wednesday
24 June 1970

Reptiles:

"Turtles"

Snapping turtle - large snapper observed in Steele Creek backup waters into Bend - was attracted and possibly feeding on dead white duck which was near the shore.

E. Sp~~ring~~ Softshell turtle - Observed basking on log in Bend - 8:45 am.

E. Box Turtle - Three box turtles were found along the trail followed above the Gorge on the ridges to the dam. One of the three was feeding on huckleberries found just off the trail. Another was found under a large Blackberry bush.

(Species Account)

Saturday
27 June 1970

Reptiles:

On June 26 constructed turtle trap as described by attendant at Boat Dock. Trap was set on evening of 26 June tied to log in middle of Bend. Trap was checked on 27 June - empty - Trap was rebaited with 4 live Bluegills.

Black Rat Snake? One observed by Emmet Haley near Boat Dock on 25 June, at 10:15 a.m.

(Species Account)

Tuesday
30 June 1970

Reptiles:

Snapping Turtle - Small Snapper (2 1/3" approx.) found in shallow water of shoreline below the railroads Tunnel of Love.

Turtle Trap - checked 8:30 am - empty.
Large Snapper observed near the trap.

(Species Account)

Thursday
2 July 1970

Reptiles:

Eastern Spiry Softshell turtle- Two observed basking on log
in Bend 2:30 pm. (8"-12" shells)

(Species Account)

Friday
3 July 1970

Turtle Trap- took trap to Bend and reset in some position against log. George Hicks checked the trap on Wed. 1 July and found Snapping turtle (8" approx.). He had brought the trap back to the boat dock where the turtle escaped or was released the same day.

Eastern Spring Softshell- One on log in Bend (11:00).

(Species Account)

Sunday
5 July 1970

Reptiles:

E. Box Turtle - One observed on trail on Back Spur Ridge.

(Species Account)

Monday
6 July 1970

E. Box Turtle - One observed in Honeysuckle adjacent Little Lane.

(Species Account)

Saturday
11 July 1970

Reptiles:

Black Racer - One captured in grassy area adjacent Bogey
Knob near green no. 4 (rough end of fainway) time 2:30 p.m.
- weather, Sunny-hot with slight breeze.
Black Racer is a locally abundant species.

(Species Account)

Sunday
12 July 1970

Reptiles:

E. Spiny Softshell Turtle - Three large softshells observed
on log in Bend.

Fowler's Toad - One observed on bank off Golf Course fair-
way no. 3 - 10:30 a.m.

(Species Account)

Friday
17 July 1970

Reptiles:

Set trot line along length of log in Bend. Liver used as bait to catch turtles.

Snapping Turtle - 10" Snapper hooked on trot line - released at Boat Dock.

E. Spiny Softshell Turtle - 15"-18" - Hooked on trot line in Bend. The turtle escaped from the line while we tried to pull him into the boat.

(Species Account)

Saturday
18 July 1970

Reptiles:

Snapping Turtle - G. Hicks caught 9" Snapper with hook,
jug, and liver below Side Ridge Knob.

(Species Account)

Wednesday
22 July 1970

Reptiles:

E. Box Turtle - Discovered under Blackberry bush where feeding on blackberries at 2nd switchback of Pratt's Knob Trail.

Hatched eggs of some type were found near holes in a grassy bank near Rock Quarrey above Mill's Creek off Flat Ridge Trail. The egg shells were about $1\frac{1}{2}$ " long and curled up. The shell material was flexible and leathery.

(Species Account)

Thursday
6 August 1970

Reptiles:

Two snakes of unknown identity dead on Gorge Road.

(Species Account)

Saturday
8 August 1970

E. Spiny Softshell Turtle - very large (15-18 ") female in shady
area of Hemlocks on Gorge across from
Deep Cove.

(Species Account)

Wednesday
12 August 1970

Reptiles:

Queen Snake - A small Queen snake (8") was captured below the dam under a rock adjacent Steele Creek. The snake's eyes were clouded - possibly indicating a shedding period. 1:50 p.m.

E. Spiny Softshell Turtle - A small softshell (5") was found dead lying in the middle of Steele Creek on a rock. The turtle seemed to have been eaten by a heron.

(Species Account)

Saturday
15 August 1970

Reptiles:

- E. Box Turtle - One, Flat R. Trail below Hidden Hollow.
- E. Box Turtle - One, Powerline Cut
- E. Box Turtle - Trail, below 2nd powerline tower
- E. Box Turtle - Gorge Road-Deep Cove

Snapping Turtle - One observed in water of Deep Cove.

Fence Swift - One observed near shore Deep Cove.

(Species Account)

Sunday
16 August 1970

Reptiles:

Black Racer - One observed crossing Lake to White Oak Cove-
approx. length-5'

E. Box Turtle - One observed Lakeshore across from Deep
Cove.

(Species Account)

Tuesday
18 August 1970

Reptiles:

E. Garter Snake - One caught by Sonny Morris (maintenance)
near one of the springs in Three Springs.
Snake was approx. 20".

(Species Account)

Saturday
22 August 1970

Reptiles:

E. Box Turtle - One observed in Short Branch this morning.

Queen Snake - One observed into water from lakeshore opposite Deep Cove (approx. 20").

SUMMARY ON THE STUDY OF MAMMALS

Opossum
Didelphis marsupialis

The Opossum is probably not as rare in the park as the one record would indicate. This nocturnal mammal most likely escaped observation. On 25 July, an Opossum was found dead on Broad Street between the old stables and Mill's Creek. It was apparently killed by an automobile.

Smoky Shrew
Sorex fumeus

Little is known about the Smoky Shrew in the park; it should be considered very rare. One specimen was found dead on Flat Ridge Trail in Hidden Hollow (elevation 1975 ft.) on 30 May. This shrew had cuts along its dorsal surface and the skull was broken.

Shorttail Shrew
Blarina brevicauda

Shorttail Shrews were found only on the northeast side of The Gorge, but they are probably abundantly distributed on both sides and in parts of the main recreational area. Many runways were found while rolling over logs for salamanders on both sides of The Gorge; runways were found around the Boat Dock and near the Ball Field. On 6 July, a Shorttail was found dead on Flat Ridge Trail. A shrew was also trapped in a field below the Rock Quarry on 6 August.

Hairytail Mole
Parascalops breweri

This mammal should be considered rare at Steele Creek Park. An individual was found dead and being buried by Sexton Beetle (see list of insects) on Flat Ridge Trail 30 May, is the only record. Mole tunneling was noted in Hidden Hollow and in the picnic areas. The Eastern Mole, Scalopus aquaticus a., is suspected to be responsible for some of the tunneling. Charles R. Smith noted, on 22 August, that crayfish-like holes near Green 3 could be the work of the Starnos^e Mole, Condylura cristata.

Eastern Cottontail
Sylvilagus floridanus

A common inhabitant of the park, the Cottontail is found in similar habitats principally near the recreational area. Locations where grasses grow tall usually contain rabbits in the park. Three were observed in this type habitat above the Boat Dock; three more were seen from the Gate in a field, directly across Broad Street. Cottontails are probably common around the old stables as runways were found at this location. Droppings were found on 16 May at the old homeplace field area adjacent Three Springs Picnic Area. A Cottontail was observed in Short Branch, occupying more of a woodland habitat on 12 August.

Woodchuck
Marmota monax

The Woodchuck and his burrows were easily located at the park. Although probably not present in the recreational area, the Wood-

chuck occupied mainly other areas. One was observed on 11 June carrying leaves to a burrow in the dry bank above The Gorge Road between The Bend and The Gorge, and on 2 July, a Woodchuck was spotted sitting on top of a stump next to large brush piles next to the Rock Quarrey. A Woodchuck was also seen peering up from the large boulders at the dam (9 June). Burrows were found in steep, dry banks on Pratt's Knob, Back Spur Ridge, and in Short Branch.

Eastern Chipmunk
Tamias striatus

Probably the most easily seen mammal in the park, the E. Chipmunk is abundant in parts of the recreation area. In picnic areas along Steele Creek, Chipmunks were observed throughout the period (1-8 individuals). At these picnic grounds the Chipmunks often burrowed in the grass and under the tables. The mammals were often observed eating picnicker's leftovers. Chipmunks crossed the roadways often, and on 6 July, one was found dead on Dogwood Drive below the Pro Shop. A Chipmunk was trapped along Little Lane on 16 July.

Eastern Grey Squirrel
Sciurus carolinensis

The Grey Squirrel is fairly common in the deciduous knobs area of the park, but they seemed more abundant on the dry northeast side of The Gorge. Nine were observed near or adjacent Flat Ridge Trail during the summer. On 21 June, one squirrel was spotted 20 ft.

above the lake on Side Knob at the "entrance" to The Gorge, and on 19 August, one was seen high in a White Pine behind one of the deep coves near the dam.

Deer Mouse
Peromyscus maniculatus

Status of the Deer Mouse is practically unknown except for one individual trapped on Bogey Knob on 11 July. The mouse can probably be found in similar woodland habitat in other parts of the park.

Meadow Vole
Microtus pennsylvanicus

The Meadow Vole is probably abundant in similar habitats throughout the recreational area of the park. In the grassy and weed filled area behind White Oak Cove, eight individuals were trapped from 13 July to 15 July, and two specimens were taken along Little Lane (15-17 July).

Gray Fox
Urocyon cinereoargenteus

Gray Foxes seem to be fairly common based on reports of park employees and field signs. At intervals during the summer, James Slusher, Emmet Haley, and Louis King (Gate Attendants) each reported seeing foxes assumed to be Urocyon, during the night around the Golf Course. Scats believed to be Grey Fox scats were frequently found on Flat Ridge Trail.

Muskrat
Ondatra zibethicus

Although a live animal was not observed, Muskrat "slides" and "holes" were present throughout the summer along the shoreline between the Beach and The Bend and along the banks of Steele Creek.

It is suspected that the Muskrats may have moved from areas of the park in the spring that they inhabited all winter because of the many people visiting these areas. One Muskrat was found dead in Steele Creek about 50 ft. below the Steele Creek-Broad Street Bridge on 16 July.

Striped Skunk
Mephitis mephitis

Striped Skunks are apparently abundant around parts of the recreation area and are present in other woodland habitats in the park. In late June and early July, several skunk familys were observed by Gate attendants (on night duty). They saw the skunks emerging from around the train station area, Beach, and picnic area below Lakeshore Drive. One family, (an adult and three half-size young) emerged from a pipe adjacent the chlorine house at 9:30 p.m. on 17 and 21 ^{June} July. Two sknunks were found dead on 6 July: one on Doble Knob, the other on The Gorge Road across Deep Cove.

(Species Account)

Saturday
16 May 1970

Mammals:

Eastern Chipmunk - Three observed scampering around under large trees in Three Springs Picnic area (good trapping spot)

Eastern Cottontail - One observed crossing Broad Street en-route to Gate.

Eastern Cottontail- droppings observed in grassy field adjacent Three Springs picnic area.

(Species Account)

Saturday
30 May 1970

Mammals:

Eastern Chipmunk - Very Common throughout the Park. They often climb on picnic tables and use bridges. Chipmunks made burrows in open grass in picnic areas.

Muskrat - Slides noted along Steele Creek near the Ball Field.

Shrew (genus Sorex) - One of these rare shrews was found lying dead on Flat Ridge Trail (Hidden Hollow) The Shrew's body was damaged and the skull seemed crushed.

Fox (Probably Grey Fox) - Scats found commonly along Flat Ridge trail.

Mole (mole) - One found dead on Flatridge Trail (Flat Ridge). approx. 6" Other Mole "work" could be seen on the trail.

(Species Account)

Tuesday
9 June 1970

Mammals:

Woodchuck - One observed peering up from rocks at right side
(Side Knob side) of dam.

White tail Deer - Eddie Childress reports seeing about three
deer at the Park over the summers.

(Species Account)

Wednesday
10 June 1970

Mammals:

Whitetail Deer - Visitors from Bristol, England camping in the Park on 6 June reported having seen 2 deer at the base of Front Knob in the evening.

Grey Squirrel - Five observed. Two seen from canoe at the base of Front Knob (toward the Gorge) and the remaining three observed along Flat Ridge Trail (Lake Spur Ridge).

- Some type of "den" or runway in dirt mound near the chlorine house on the lake.

Mole - Activity in grass between Beach and Bend

Mushrat - Slides seen in area along lakeshore between Beach and Bend.

(Species Account)

Thursday
11 June 1970

Mammals:

Cottontail - One seen in grassy area behind White Oak Cove. Cottontails seem to inhabit the tall grassy areas in the Park.

Woodchuck - Seen running through woods to his burrow on Front Knob between the Bend and the Gorge. This woodchuck is sometimes quite often and easily seen-Could be shown to people.

(Species Account)

Sunday
14 June 1970

Mammals:

Bats: Probably little brown bats observed flying over water near minnow trap set (side knob near Pqr Bay) There were about six bats seen. They were diving for insects found over the water
Time: 9:20 pm.

(Species Account)

Tuesday
16 June 1970

Mammals:

Mole - Unidentified as yet. Head and arms of mole found on Flat Ridge Trail. Two Mammals have been found along this region of the trail; both had damage or separation to the head region. It is likely that some predatory bird hunts around Hidden Hollow. Owls usually sever the head of a small mammal like the mole.

(Species Account)

Wednesday
17 June 1970

Mammals:

In a field opposite the Park and Golf Course boundaries below Sapling and Bogey Knobs, mouse and vole runways were found. Also found in this field near the base of the knobs and about 30 yards from the Park boundary is an animal den of some type. This den is under a circle of trees and forms a small "cave" in limestone. Other animal dens were found under an old log cabin in the field, 200 yds. from the Park boundary. This field and its adjacent areas are habitats of interest.

Striped Skunk - Four skunks (one adult and three young) were observed at 9:30 pm. They emerged from a pipe, laid between the chlorine house and the Beach. The adult wandered up the bank forward the road while the fairly well developed young "played" around the pipe.

(Species Account)

Sunday
21 June 1970

Mammals:

Grey Squirrel - One observed in trees 20 ft. above water on Side Knob at "entrance" to the Gorge.

Striped Skunk - Family (one adult, 3 young) observed again near Chlorine house and Beach area. Skunks observed emerging from pipe at 9:20 pm.

(Species Account)

Wednesday
24 June 1970

Mammals:

E. Cottontail - One observed in field across Broad Street-
visible from Gate.

Grey Squirrel - One observed (8:30 am) at Hidden Gap.

(Species Account)

Tuesday
30 June 1970

Mammals:

Cottontail- One rabbit observed in field opposite Gate across
Broad Street (7:30 am).

(Species Account)

Thursday
2 July 1970

Mammals:

Striped-Skunks - tracks scattered over Sandy Beach area.

-Animal Dens of some type present in "Rock Quarry" above Mills Creek in large limestone formations.

-Almost all animal scats observed at this time show signs of the animal having eaten Blackberries.

Woodchuck- One observed on stump next to large brush pile on edge of Rock Quarry.

(Species Account)

Monday
6 July 1970

Mammals:

E. Chipmunk - One dead in road below Pro Shop.

E. Grey Squirrel - Two observed off Flat Ridge near Double Knob.

Short-tailed Shrew - One dead on Flat Ridge Trail near Double Knob. Shrew lying next to fox scats.

Striped Skunk - One dead (killed by predator? - only fur remained) off Flat Ridge Trail on Double Knob. Cleared area of leaves around fur and bones-looked like a fight tool place.

Striped Skunk - One dead on Gorge Rd. above Deep Cove.

(Species Account)

Thursday
16 July 1970

Mammals:

Muskrat - One lying dead in Steele Creek about 50 ft.
below Steele Creek-Broad Street Bridge.

(Species Account)

Saturday
18 July 1970

Mammals:

E. Cottontail - One crossing Rd. at Beach house end of
Little Lane - 10:45 am.

(Species Account)

Tuesday
21 July 1970

Mammals:

Grey Fox - Louis King (employee at Gate) reports seeing
2 foxes on Golf Course in early morning of 15 July (4:30 am)

(Species Account)

Wednesday
22 July 1970

Mammals:

Woodchuck - "Den" off 1st 100 ft. of Pratt's Knob Trail.
Another at 1st switchback of the same trail.

(Species Account)

Saturday
25 July 1970

Mammals:

Opossum - One dead on Broad Street, 50 ft. past Stables moving toward the park.

E. Mole? Hairytail Mole? - Mole burrowing under picnic area below Pines on opposite side of Steele Creek.

E. Cottontail - One observed in "field" above W. Oak Cove.

(Species Account)

Sunday
26 July 1970

Mammals:

Meadow Vole - One found in canoe at Boat Dock.

(Species Account)

Tuesday
4 August 1970

Mammals:

Trapping - All traps (25) were set in late afternoon. Seven rat traps were set along Mill's Creek next to the water. Some mammal, possibly muskrat was travelling along paths close to the water. Eighteen mouse size trap were set along posts in field next to Broad St. and along pines just above Mill's Creek. Overall, runways were poor and hard to find; some good shrew runways could be found.

(Species Account)

Thursday
6 August 1970

Mammals:

E. Cottontail - One observed in woods just below maintenance shelter.

E. Grey Squirrel - One observed in Hidden Hollow.

Short-tailed Shrew - One trapped night 5 Aug. in mouse trap set in area previously described.

Hind foot - 12mm

Tail - 26mm

Head to base tail - 60mm approx.

Total length - 86mm approx.

(Species Account)

Friday
8 August 1970

Mammals:

- 25 small mammal traps (7 - rat size)
(18 - mouse size)

pulled today - no mammals captured except for a single
Short-tailed Shrew (see 6 Aug.)

total trap nights: 75

- weather throughout trapping period was partly cloudy
with high midday temperatures. Temperatures at night and
morning in 60's - no precipitation - Sets in honeysuckle
tangles and on carpet of pine needles (White Pine).

E. Cottontail - runways abundant in overgrown and un-
mowed areas around Stables; some runways lead into Stables.

(Species Account)

Wednesday
12 August 1970

Mammals:

E. Cottontail - One was observed in hollow above Short Branch.

(Species Account)

Saturday
15 August 1970

Mammals:

E. Grey Squirrel - One observed below trail below 2nd
powerline tower.

(Species Account)

Wednesday
19 August 1970

Mammals:

E. Grey Squirrel - One observed in cove (unnamed) adjacent
dam.

SUMMARY ON THE STUDY OF FISH
1970

Carp, Cyprinus carpio

Carp were present in all summer waterways of the park (Steele Creek Lake, Steele Creek, Mill's Creek); most commonly caught in shallow parts of the lake and lower portions of Steele Creek. Carp were caught more frequently than any other fish in the park; most of them having been taken below Lakeshore Drive and along this shore to "A" picnic shelter. On the 16th and 23rd of May, Carp were observed spawning in shallow water along the northwest shores of the lake. The Carp caught by fishermen seemed to be of a uniform size, about 12 to 15 inches in length. No very large or very small Carp were observed. Fishermen mostly used canned corn as bait for the Carp.

Bluegill, Lepomis macrochirus

Bluegill were commonly observed in all parts of the lake; observed in greatest numbers around the Boat Dock and the dam. Bluegill were recorded in pools in the waterfalls below the dam on 16 May. Few Bluegill were observed in Steele Creek or Mill's Creek, but on 16 May, a Northern Water Snake, Natrix sipedon, was seen under the Steele Creek - Broad Street Bridge, holding a small (2"-3") Bluegill in its jaw. Small Bluegill (from 2"-3") were caught in amminnow trap (standard cylindrical trap, baited with bread) along the shores of Side Knob, The Gorge, and the Front Knob. The Bluegill was the second most often caught fish (Carp first). Bluegill seemed to frequent clearer and deeper waters than Carp.

Common Sucker, Catostomus commersoni

Occasionally Suckers were seen darting along in Steele Creek, and on 14 August, a 5" specimen and a 16" specimen were caught in Steele Creek.

Blacknose Dace, Rhinichthys atratulus

Blacknose Dace were seldom recorded in the park waters. On 21 July, eight Dace were seined from pools of the waterfalls below the dam, and on the 14 August, a few were seined from Steele Creek.

Gizzard Shad, Dorosoma cepedianum

Shad were observed in large schools during parts of the summer. In July, large schools of Shad "surfaced" all over the lake; but these were small (2"-3"). On 21 July, thousands of these small Shad were found packed into pools of the waterfalls below the dam. Green Herons and Kingfishers probably preyed on these fish. On 14 August, many larger Shad (3"-4") were recorded in Steele Creek near the bridge adjacent "A" picnic shelter. Small boys were able to snag some of these with triple hooks. Occasionally larger Shad (est. 8") were observed under this same bridge during the summer.

Bullhead, Ameiurus sp.

The Bullhead was rarely observed in the park waters. On 30 June three small Bullhead (1 in. to 3 in.) were captured by the

naturalist in White Oak Cove. These small specimens were found under small logs and roots of the grass along the shoreline; the small Bullheads would not venture out into deeper water. On 14 August, a six-inch specimen was caught by hand in Steele Creek and on 18 July, Sonny Morris, a park employee, reported to the naturalist as having caught a large catfish (1 lb. - 2 lb.) on a trotline strung across a log in the middle of The Bend.

Largemouth Bass, Huro floridana

Largemouth Bass were present in the lake during the summer, although the naturalist seldom came in contact with this fish. Few persons fished for Bass, but local fishermen who knew where to look for the Bass were able to catch a few. Bass were caught on artificial lures; they were most frequently fished for by boat in the Gorge or along the shores of Side Knob or Front Knob during the early morning. Leslie Ager, a Boat Dock Attendant, caught three Bass weighing from 1½ lb. to 4 lb.

(Species Account)

Saturday
16 May 1970

Fishes:

Carp- Observed spawning on edges of water adjacent pump and boat houses.

Bluegill - Commonly seen - all parts of the lake - abundant near dam and inside small pools of the "falls" of the dam.

(Species Account)

Saturday
23 May 1970

Fishes:

Carp- Spawning near shore near Chlorine and Boat house.

(Species Account)

Thursday
11 June 1970

Fishes:

Minnow trap purchased by Wallace Coffey is cylindrical with small openings of both ends. The "cage" is about 18" long and 8" in diameter. The trap was set from canoe near shore of Side Knob close to Por Bay. It was hung by wire from a branch at a submerged tree limb. The trap hung at about 4' in depth. Bread made into a doughball was used as bait. The trap was first set at 1:30 p.m. It was checked at about 8:30 p.m., but no minnows were captured.

(Species Account)

Friday
12 June 1970

Fishes:

Minnow Trap was checked and rebaited. Three bluegill minnows were caught in trap (trap set on 11 June). Bluegill were small-possibly very young. Checked 8:30 p.m.

(Species Account)

Saturday
20 June 1970

Fishes:

Minnow trap was checked 2 p.m. (set below Side Knob near Por Bay). Three Bluegill minnows (3" in length)

Trap was reset under first large log below Side Knob at "entrance" to the Gorge. Trap set about 4 ft. from shore at a depth of 3 ft.

(Species Account)

Sunday
21 June 1970

Fishes:

Minnow Trap checked 11:45 a.m. (set under log "entrance" to Gorge). Four small Bluegill (2"-2½") captured.

(Species Account)

Saturday
27 June 1970

Fishes:

Minnow trap check-one Bluegill minnow 1", one unidentified minnow-purple mottled color.

Seining of Mill's Creek-produced no minnows, but crawfish were seined. Much difficulty in seining Mill's Creek because of its small width.

Carp-Four observed in Mill's Creek.

(Species Account)

Tuesday
30 June 1970

Fishes:

Minnow Trap-Checked trap 9:50 a.m.-six minnows caught (2nd location). Minnows to be put in aquarium if possible and identified.

Bullhead-(catfish) Collected three Bullhead minnows from under logs and grass in White Oak Cove against the shore Line (lengths-1"-3")-Possible spawning of catfish in White Oak Cove?

(Species Account)

Friday
3 July 1970

Fishes:

Minnow Trap-Checked trap (at 3rd location)-no minnows caught
(11:20 a.m.)

Carp-15-25 Carp in Steele Creek just below the Pines-not
previously observed this far up the creek.

(Species Account)

Tuesday
21 July 1970

Fishes:

Minnow trap check-(Little Cove) 3 Bluegill (3")

Seining below dam:

Gizzard Shad, Dorosoma cepedianum

Blacknose Dace, Rhinichthys atratulus

Bluegill, Lepomis macrochirus

Shad were netted by the hundreds in pools below the dam.

About 8 Blacknose Dace were netted along with a few large Bluegill.

(Species Account)

Friday
14 August 1970

Fishes:

Steele Creek seined within the boundaries of the Park;
these fishes were caught and observed.

Common Sucker, Catostomus commersonii, from 5" to 16"

Bullhead Catfish, , 6"

Black-nosed Dace, Rhinichthys astronotus, 4"

Gizzard Shad, , 3" and growing

SUMMARY ON THE STUDY OF INSECTS
1970

Butterflies:

Common Wood Nymph, Minois alope - often observed during the summer.

Sulphur, Colias philodice - frequently observed this summer

Anglewing, Polygonia sp. - often noted along Flat Ridge Trail

Blue, Everes sp. - recorded along Flat Ridge Trail 30 May

Moths:

Underwing Moth, Euparthenos nubilis - One was found lying on Flat Ridge Trail in Hidden Hollow. The moth could not fly.

Io Moth, Automeris io - This handsome moth was found near the Boat Dock on 27 June. An Eastern Phoebe hovered over the moth, but did not catch it, possibly because it was frightened by the Io Moth's large "eye spots".

Waved Sphinx Moth, Ceratomia undulosa - A specimen of this moth was found at night (14 June) under the street lights of lake-shore Drive.

Beetles:

Sexton Beetle, Neocrophorus americanus - Two of these large beetles were found under a dead Hairytail Mole, Paraschlops breveri, on Flat Ridge Trail, 30 May.

Tiger Beetle, Cicindela sp. - Several Tiger Beetles were noted on Sandy, dry banks of the powerline cut on 30 May.

Horn Beetle, Passalus cornutus - A Horn Beetle was found inside a rotting log on 11 June along Flat Ridge Trail.

Elder Borer, ? - This beetle was found on Flat Ridge adjacent Flat Ridge Trail, 11 June.'

Other insects:

Damselflies, ? - noted commonly along Flat Ridge Trail in Hidden Hollow.

Cicada, Tibicen sp. - A specimen was found on the ground near the railroad tunnel, 3 July.

Whirligig Beetle, Gyrinidae - A few Whirligig Beetles were noted on the lake below the chlorine house (10 June).

Spittlebug, Philaenus sp. - On 16 May, these insects were noted "infesting" the small White Pines next to the Gate.

(Species Account)

Saturday
16 May 1970

Insects:

Spittlebug - Observed "infesting" White Pines at Gate.

Unidentified "nymphs" (larva stage) - In small pools
behind deep cove-Would make fisherman
excellent bait.

(Species Account)

Saturday
30 May 1970

Insects:

Sexton Beetle - Two of these large beetles were observed feeding on the dead mole found on Flat Ridge. They were under the mole-possibly burying it. (carrion beetles).

Tiger Beetle - Several were observed "hunting" the sandy, dry area above Hidden Hollow on Flat Ridge Trail. They were green colored.

Anglewings - These butterflies were found very common along Flatridge Trail.

Damsel Flies - A type of damselflies were also found common along Flat Ridge Trail.

Blues - These butterflies were observed along Flat Ridge Trail.

(Species Account)

Wednesday
10 June 1970

Insects:

Whirligig Beetle - noted on lake near Chlorine House.
Few have been seen.

(Species Account)

Thursday
11 June 1970

Insects:

Elder Borer - Found along Hidden Hollow - an impressive beetle.

Horn Beetle - Found (8") digging in logs on Flat Ridge along Flat Ridge Trail.

(Species Account)

Sunday
14 June 1970

Insects:

Waved Sphinx Moth - collected from under spot lights on beach area. This is a very large moth.

(Species Account)

Wednesday
24 June 1970

Insects:

Underwing Moth - uncertain species - topwings dark and purpleish, underwings closely match the Alobiah. The moth was found lying on the trail just entering Hidden Hollow. The moth could not fly and it seemed to be injured in some way.

(Species Account)

Saturday
27 June 1970

Insects:

IO Moth - This large handsome, moth found by Mr. Hicks, was lying in one of the paddleboats at the Boat Docks. The moth was releade; an E. Phoebe swooped to where the moth landed and hovered over the spot. It did not capture the moth. The bird may have been frightened by the moth's two large "eye spots", immitating a predator.

(Species Account)

Thursday
2 July 1970

Insects:

Common Wood Nymph - (butterfly) observed near Rock Quarry-
seems fairly common in Park - also many.

Sulphur Butterflies

(Species Account)

Friday
3 July 1970

Insects:

Cicada - One found on ground near RR tunnel (11:10 a.m.)
seems most like-

Annual Cicada

Periodical Cicada?

-needs measuring

SUMMARY ON THE STUDY OF FLORA
1970

The following tables list the plants that were identified in the park and give the general area in which they can be found. For more detail on the plants' locations refer to "Species Account - Flora".

The areas of the park indicated in the tables are:

- A. Picnic areas and golf course.
- B. Along Mill's Creek to stables.
- C. Flat Ridge.
- D. Southeastern shore of reservoir.
- E. Northwestern shore of reservoir.
- F. Slagle Hollow near western boundary.
- G. Northeast end of Slagle Hollow.
- H. Knobs southeast of Slagle Hollow.

TREES

COMMON NAME	SCIENTIFIC NAME	A	B	C	D	E	F	G	H
Ash, White	<u>Fraxinus americanus</u>	X		X				X	
Basswood, American	<u>Tilia americana</u>			X			X		X
Beech	<u>Fagus grandifolia</u>	X		X	X	X	X	X	X
Blackgum	<u>Nyssa sylvatica</u>	X		X				X	X
Box Elder	<u>Acer negundo</u>			X			X		
Buckeye, Yellow	<u>Aesculus octandra</u>	X		X			X	X	
Catalpa Cedar, Red	<u>Juniperus virginiana</u>			X				X	
Cherry, Wild	<u>Prunus sp.</u>	X		X			X	X	
Dogwood, Flowering	<u>Cornus florida</u>	X		X	X	X	X	X	X
Elm, American	<u>Ulmus americana</u>	X		X			X		
Hawthorn	<u>Crataegus spp.</u>			X				X	X
Hemlock, Eastern	<u>Tsuga canadensis</u>					X			
Hickory, Mockernut	<u>Carya tomentosa</u>	X		X	X	X		X	X
Pignut	<u>Carya glabra</u>	X		X	X	X		X	X
Shagbark	<u>Carya ovata</u>							X	
Holly, Deciduous	<u>Ilex decidua</u>			X					
Hop - hornbeam	<u>Ostrya virginiana</u>			X				X	
Ironwood	<u>Carpinus caroliniana</u>			X				X	
Locust, Black	<u>Robinia pseudo - acacia</u>		X	X					X
Magnolia, Cucumber	<u>Magnolia acuminata</u>	X							
Maple, Red	<u>Acer rubrum</u>	X	X	X	X	X	X	X	X
Sugar	<u>Acer saccharum</u>	X	X	X	X	X		X	X
Mimosa	_____					X			
Mulberry, Red	<u>Morus rubra</u>			X					X
Oak, Black	<u>Quercus velutina</u>	X		X			X	X	X
Blackjack	<u>Quercus marilandica</u>			X			X	X	X
Chestnut	<u>Quercus prinus</u>	X		X				X	X
Red	<u>Quercus rubra</u>	X		X	X	X		X	X
Post	<u>Quercus stellata</u>	X						X	
Scarlet	<u>Quercus coccinea</u>	X		X				X	X
Southern red	<u>Quercus falcata</u>	X							X
White	<u>Quercus alba</u>	X		X	X	X	X		

TREES - continued

COMMON NAME	SCIENTIFIC NAME	A	B	C	D	E	F	G	H
Pawpaw, Tall	<u>Asimina triloba</u>						X		
Peach	<u>Prunus sp.</u>					X			
Perssimon	<u>Diospyros virginiana</u>			X					X
Pine, Scrub	<u>Pinus virginiana</u>	X		X	X	X	X	X	X
White	<u>Pinus strobus</u>	X		X	X	X	X	X	
Redbud	<u>Cercis canadensis</u>	X	X	X	X	X	X	X	X
Sassafras	<u>Sassafras albidum</u>				X	X	X	X	X
Serviceberry	<u>Amelanchier arborea</u>	X		X					X
Sourwood	<u>Oxydendrum arboreum</u>	X		X		X	X	X	X
Sumac, Smooth	<u>Rhus glabra</u>			X			X		X
Staghorn	<u>Rhus typhina</u>	X	X	X	X		X		
Winged	<u>Rhus copallina</u>			X			X		X
Sycamore	<u>Platanus occidentalis</u>	X		X	X	X	X	X	
Tree-of-heaven	<u>Ailanthus altissima</u>			X					
Tulip tree	<u>Liriodendron tulipifera</u>			X	X		X	X	
Walnut, Black	<u>Juglans nigra</u>	X	X	X					
Willow	<u>Salix spp.</u>				X	X			
Witch-hazel, Common	<u>Hamamelis virginiana</u>	X	X		X	X	X	X	

HERBS

COMMON NAME	SCIENTIFIC NAME	A	B	C	D	E	F	G	H
Agrimony	<u>Agrimonia sp.</u>		X	X		X	X		X
Angelica	<u>Angelica atropurea</u>					X	X		
Arrowhead, Broad-leaved	<u>Sagittaria latifolia</u>				X	X			
Asters	<u>Aster spp.</u>	X	X	X	X	X	X	X	X
Baneberry, White	<u>Actaea pachypoda</u>							X	
Basil	<u>Satureja vulgaris</u>		X	X			X		
Bean, Wild	<u>Phaseolus polystachios</u>	X	X			X	X	X	X
Bedstraw, Rough	<u>Galium asprellum</u>						X		
Beardtongue	<u>Penstemon sp.</u>			X	X				
Beggar-ticks	<u>Bidens frondosa</u>						X		
Bellflower, Tall	<u>Campanula americana</u>			X		X			
Bergamot, Wild	<u>Monarda fistulosa</u>			X	X	X			
Blackberry-lily	<u>Belamcanda chinensis</u>					X			
Black-eyed Susan	<u>Rudbeckia hirta</u>		X	X		X	X		
Bloodroot	<u>Sanguinaria canadensis</u>					X		X	X
Bluets	<u>Houstonia spp.</u>			X		X			
Boneset	<u>Eupatorium perfoliatum</u>		X		X				
Bowman's-root	<u>Gillenia trifoliata</u>			X			X		
Buckwheat, False	<u>Polygonum scandens</u>			X	X	X		X	
Butterfly-weed	<u>Asclepias tuberosa</u>	X			X	X			X
Cat-tail	<u>Typha latifolia</u>				X				
Chicory	<u>Cichorium intybus</u>		X						
Chicory (white form)	<u>Cichorium intybus alba</u>		X						
Cinquefoil, Rough-fruited	<u>Potentilla recta</u>		X	X	X				
Clintonia	<u>Clintonia borealis</u>							X	X
Clover, Red	<u>Trifolium pratense</u>	X	X	X	X	X	X	X	X
White Sweet	<u>Melilotus alba</u>		X			X			
Yellow Sweet	<u>Melilotus officinalis</u>		X						
Crown-Beard	<u>Verbesina occidentalis</u>		X	X		X	X		X
Dandelion, Dwarf	<u>Krigia virginica</u>			X					
Day-lily	<u>Hemerocallis fulva</u>		X			X			
Dodder	<u>Cuscuta gronovii</u>				X	X			
Galax	<u>Galax aphylla</u>						X		

HERBS - continued

Common Name	Scientific Name	A	B	C	D	E	F	G	H
Geranium, Wild	<u>Geranium maculatum</u>			X		X	X	X	X
Gerardia, Smooth	<u>Gerardia laevigata</u>			X					X
Ginger, Wild	<u>Asarum canadense</u>								X
Goat's - beard	<u>Tragopogon pratensis</u>							X	
Goat's - rue	<u>Tephrosia virginiana</u>								X
Goldenrod	<u>Solidago sp.</u>			X		X			
Harebell, Southern	<u>Campanula divaricata</u>				X	X			
Heal - all	<u>Frunella vulgaris</u>	X	X	X	X	X	X	X	X
Hepatica, Sharp - lobed	<u>Hepatica autiloba</u>							X	
Hop - peanut	<u>Amphicarpa bracteata</u>								X
Hyssop, Giant	<u>Agastache scrophulariaefolia</u>			X					
Yellow Giant	<u>Agastache nepetoides</u>					X			
Honewort	<u>Cryptotaenia canadensis</u>								X
Horsenettle	<u>Solanum carolinense</u>	X	X	X		X	X		
Indian - pipes	<u>Monotropa uniflora</u>							X	
Iris, Dwarf	<u>Iris verna</u>					X	X	X	
Ironweed, New York	<u>Vernonia noveboracensis</u>					X			
Jack - in- the - pulpit	<u>Arisaema atrorubens</u>	X				X			X
Joe - pye weed	<u>Eupatorium fistulosum</u>					X	X		
Lettuce, Prickly	<u>Lactuca scariola</u>	X					X		
Tallwhite	<u>Prenanthes altissima</u>				X		X	X	X
Wild	<u>Lactuca canadensis</u>						X		
Licorice, White Wild	<u>Galium circaezans</u>			X					X
Lily, Turk's cap	<u>Lilium superbum</u>					X			
Lobelia, Great	<u>Lobelia siphilitica</u>		X			X			
Loosestrife, Fringed	<u>Lysimachia ciliata</u>			X					
Whorled	<u>Lysimachia quadrifolia</u>		X		X	X	X	X	
Lousewort	<u>Pedicularis canadensis</u>			X				X	X
May - apple	<u>Podophyllum peltatum</u>							X	X
Milkweed, Common	<u>Asclepias syriaca</u>			X			X		
Monkey - flower, Sharp - winged	<u>Mimulus alatus</u>					X			
Mullien, Common	<u>Verbascum thapsus</u>		X	X	X	X	X		

HERBS - continued

Common Name	Scientific Name	A	B	C	D	E	F	G	H
Mullien, Moth	<u>Verbascum blattaria</u>		X						
Nettle, False	<u>Boehmeria cylindrica</u>		X	X	X				
Stinging	<u>Urtica dioica</u>						X	X	X
Ox - eye Daisy	<u>Chrysanthemum leucoanthemum</u>								
		X	X	X			X		
Panic grass	<u>Panicum spp.</u>							X	
Partridgeberry	<u>Mitchella repens</u>							X	X
Pennyroyal, American	<u>Hedeoma pulegioides</u>				X				
Phlox, Wild	<u>Phlox sp.</u>		X						
Pink, Deptford	<u>Dianthus armeria</u>	X	X	X					
Fire	<u>Silene virginica</u>				X				
Pokeweed	<u>Phytolacca americana</u>		X	X					
Poor - man's - pepper	<u>Lepidium virginicum</u>			X					
Potato - vine, Wild	<u>Ipomoea pandurata</u>	X	X	X	X				X
Primrose, Evening	<u>Oenothera biennis</u>	X			X	X			
Queen Anne's Lace	<u>Daucus carota</u>	X	X	X		X	X		
Ragweed	<u>Ambrosia artemisiifolia</u>		X	X			X		X
Ragweed, Great	<u>Ambrosia trifida</u>						X		
Rattlesnake - plantain, Downy	<u>Goodyera pubescens</u>							X	X
Robin - plantain	<u>Erigeron pulchellus</u>		X						
Rose - mallow, Swamp	<u>Hibiscus palustris</u>				X				
Rose, Wild	<u>Rosa spp.</u>	X	X	X	X	X	X	X	X
Rushes	<u>Juncus spp.</u>		X		X	X			
St. John'swort, Spotted	<u>Hypericum punctatum</u>		X			X	X		
Sedges	<u>Carex spp.</u>		X		X	X			
Sensitive - plant, Wild	<u>Cassia nictitans</u>		X	X			X		
Snakeroot, Black	<u>Cimicifuga racemosa</u>			X	X	X			X
White	<u>Eupatorium rugosum</u>			X					
Solomon's Seal	<u>Polygonatum biflorum</u>						X	X	
Solomon's Seal, False	<u>Smilacina racemosa</u>			X				X	X
Speedwell, Common	<u>Veronica Officinalis</u>			X					X
Spurge, Flowering	<u>Euphorbia corollata</u>								X
Squawroot	<u>Conopholis americana</u>			X					X

HERBS - continued

Common Name	Scientific Name	A	B	C	D	E	F	G	H
Stonecrop	<u>Sedum sarmentosum</u>					X		X	X
Strawberry, Common	<u>Fragaria virginiana</u>		X			X	X		
Sunflower, Woodland	<u>Helianthus divaricatus</u>								X
Teaberry	<u>Gaultheria procumbens</u>								X
Thimbleweed	<u>Anemone virginiana</u>			X		X	X		
Thistle, Bull	<u>Cirsium vulgare</u>			X			X		
Tick - trefoil, Named - flowered	<u>Desmodium nudiflorum</u>					X	X	X	X
Panicled	<u>Desmodium paniculatum</u>						X		
Touch - me - not, Spotted	<u>Impatiens capensis</u>				X	X	X		
Twisted stalk	<u>Streptopus amplexifolius</u>							X	
Venus' looking - glass	<u>Specularia perfoliata</u>		X						
Virgin's bower	<u>Clematis virginiana</u>					X			
Wintergreen, Round - leaved	<u>Pyrola rotundifolia</u>							X	
Spotted	<u>Chimaphila Maculata</u>			X				X	X
Wood - sorrel, Yellow	<u>Oxalis europaea</u>						X		
Yarrow	<u>Achillea millefolium</u>		X	X		X			

SHRUBS

Common Name	Scientific Name	A	B	C	D	E	F	G	H
Alder, Smooth	<u>Alnus serrulata</u>				X	X			
Azalea, Flame	<u>Rhododendron calendulaceum</u>								
Blueberry	<u>Vaccinium spp.</u>			X				X	X
Brambles	<u>Rubus spp.</u>	X	X	X	X	X	X	X	X
Coralberry	<u>Symphoricarpos orbiculatus</u>		X						
Gooseberry	<u>Ribes sp.</u>		X	X					X
Elderberry, A common	<u>Sambucus canadensis</u>		X			X			
Huckleberry	<u>Gaylussacia spp.</u>			X					X
Hydrangea, Wild	<u>Hydrangea arborescens</u>			X	X	X		X	
Laurel, Mountain	<u>Kalmia Latifolia</u>			X	X	X			X
Spicebush, Common	<u>Lindera benzoin</u>		X		X	X	X	X	X
Strawberry bush, American	<u>Euonymus Americanus</u>					X	X	X	X
Viburnum, Maple - leaved	<u>Viburnum acerifolium</u>			X	X	X		X	

VINES

Common Name	Scientific Name	A	B	C	D	E	F	G	H
Grapes	<u>Vitis</u> spp.		X	X	X	X	X	X	X
Greenbriar (Damnit briar)	<u>Smilax</u> spp.	X	X	X	X	X	X	X	X
Honeysuckle	<u>Lonicera</u> sp.	X	X		X	X	X		
Honeysuckle, Trumpet	<u>Lonicera sempervirens</u>			X					
Poison ivy	<u>Rhus radicans</u>	X	X	X	X	X	X	X	X
Virginia creeper	<u>Parthenocissus quinquefolia</u>	X	X	X			X	X	X

FERNS

Common Name	Scientific Name	A	B	C	D	E	F	G	H
Bracken	<u>Pteridium aquilinum</u>								
Christmas fern	<u>Polystichum acrostichoides</u>	X	X	X	X	X	X	X	X
Christmas fern (ineisel variety)	<u>Polystichum acrostichoides incisum</u>								X
Ebony Spleenwort	<u>Asplenium platyneuron</u>	X	X	X	X	X	X	X	X
Hayscented fern	<u>Dennstaedtia punctilobula</u>							X	X
Maiden hair fern	<u>Adiantum pedatum</u>					X		X	
Rattlesnake fern	<u>Botrychium virginianum</u>	X						X	X

FUNGI

Common Name	Scientific Name	Area*
Bolete, two-color	<u>Boletus bicolor</u>	A
Clitocybe, Club-footed	<u>Clitocybe clavipes</u>	A
Coprinus, Glistening	<u>Coprinus micaceus</u>	A
Marasmius, White	<u>Marasmius candidus</u>	A
Mushroom, Sylvan	<u>Agaricus sylvicola</u>	A
Mycenes	<u>Mycena sp.</u>	A
Poly pore, Angular-pored	<u>Polyporus arcularius</u>	A

*Mushrooms found in the picnic areas were the only ones identified, however, several mushrooms were seen along Flat Ridge Trail and in Slagle Hollow.

COLLOQUIL NAME	SCIENTIFIC NAME	NE	SW	EF	SI	L	R	LOC. NO.
Indian Pipe	<u>Monotropa uniflora</u>		X			X		1
Squawroot	<u>Conopholis americana</u>	X	X		X	X		2
Heal-all	<u>Prunella vulgaris</u>	X	X	X				
Spotted Touch-me-Not	<u>Impatiens capensis</u>	X	X		X			3,4
White Wood (Aster)	<u>Aster divaricatus</u>	X	X	X				4
Purple Joe-Pye-Weed	<u>Eupatorium purpureum</u>	X	X	X				
Ox-Eye	<u>Heliopsis helianthoides</u>	X		X				
Great Lobellia	<u>Lobellia siphilitica</u>		X		X			3
Southern Harebell	<u>Campanula divaricata</u>	X		X				
New York Ironweed	<u>Veronia nove boracensis</u>	X	X	X				
Morning Glory	<u>Ipomoea pandurata</u>	X			X			5
Tall Milkweed	<u>Asclepias exaltata</u>	X	X		X			
Bull Thistle	<u>Cirsium vulgare</u>	X	X		X			
Pipsisiwa	<u>Chimaphila maculata</u>	X	X		X			6
Evening Primrose	<u>Oenothera biennis</u>	X	X		X			
Wild Bergamot	<u>Monarda fistulosa</u>		X		X			
Large-leaved Aster	<u>Aster macrophyllus</u>	X		X				
Goldenrod	<u>Solidago sp.</u>	X		X				
Black-eyed Susan	<u>Rudbeckia hirta</u>	X		X				
Horse Nettle,	<u>Solanum carolinense</u>	X			X			
Queen Ann's Lace	<u>Daucus carota</u>	X		X				
White Snakeroot	<u>Eupatorium rugosum</u>	X				X		7
Common Mullion	<u>Verbascum thapsus</u>	X			X			5
Boneset	<u>Eupatorium perfoliatum</u>	X				X		7
Daisy	<u>Chrysanthemum leucanthemum</u>	X			X			
Robins Plantain	<u>Erigeron pulchellus</u>	X		X				
Virgin's Bower	<u>Clematis virginiana</u>	X	X			X		8,3
Common Ragweed	<u>Ambrosia artemisiifolia</u>	X		X				
Tall Bellflower	<u>Campanula americana</u>	X			X			
Floweing Spurge	<u>Euphorbia corollata</u>	X			X			5
Butterfly Weed	<u>Asclepias tuberosa</u>	X			X			+5
Chicory	<u>Cichorium intybus</u>	X			X			+9

CHART CONTINUED

COLLOQUILL NAME	SCIENTIFIC NAME	NE	SW	EF	SI	L	R	LOC. NO.
Cardinal Flower	<u>Lobelia cardinalis</u>		X				X	10,4
White Turtlehead	<u>Chelone glabra</u>						X	3
Jack-in-the-Puipit	<u>Arisaema triphyllum</u>		X			X		17
Teaberry	<u>Gaultheria procumbens</u>	X				X		18
Maple-leaved Viburnum	<u>Viburnum acerifolium</u>		X		X			19
Strawberry Bush	<u>Euonymus americanus</u>		X				X	3
Blueberry	<u>Vaccinium sp.</u>	X	X	X				14
Fire Pink	<u>Silene virginica</u>	X			X			11
Buttercup	<u>Ranunculus sp.</u>				X			9
Flame Azalea	<u>Rhododendron calendulaceum</u>	X					X	12
Mountain Laurel	<u>Kalmia latifolia</u>	X	X		X			13,14
Golden Groundsel	<u>Senecio aureus</u>	X						8,15
Vein-leaf Hawkweed	<u>Hieracium venosum</u>	X			X			13
Solomon's Seal	<u>Polygonatum biflorum</u>	X	X		X			6
False Solomon's Seal	<u>Smilacina racemosa</u>	X	X		X			6
"Wild" Rose	<u>Rosa sp.</u>	X	X		X			3,16
Devil's Shoestring	<u>Tephrosia virginiana</u>	X		X				+8,+9
May-apple	<u>Podophyllum peltatum</u>	X	X		X			4
Pokeweed	<u>Phytolacca americana</u>	X		X				
Bloodroot	<u>Sanguinaria canadensis</u>	X	X		X			15,17
Downy Rattlesnake Plantain	<u>Goodyera pubescens</u>	X	X		X			6
Ginseng	<u>Panax quinquefolius</u>		X				X	1
Wild Hydrangea	<u>Hydrangea arborescens</u>	X	X	X				
Spicebush	<u>Lindera benzoin</u>		X		X			20
"Brambles"	<u>Rubus sp.</u>	X		X				+5
Winged sumac	<u>Rhus copallina</u>	X	X				X	15,3
Poison Ivy and Virginia Creeper		X	X	X				

COMPLETION OF CHART

COLLOQUIL NAME	SCIENTIFIC NAME	NE	SW	EF	SI	L	R	LOC. NO.
Ferns and Allies								
Christmas Fern	<u>Polystichum acrostichoides</u>	X	X	X				6
Maidenhair Fern	<u>Adiantum pedatum</u>		X			X		3
Brown-stemmed Spleenwort	<u>Asplenium platyneuron</u>		X			X		3
Marinal Wood Fern	<u>Dtyopteris marginalis</u>		X			X		3
S. Beech Fern	<u>Phegopteris hexagonoptera</u>		X			X		1
Sensitive Fern	<u>Onoclea sensibilis</u>		X				X	21
Rattlesnake Fern	<u>Botrychium virginianum</u>		X		X			1,22
Oblique Grape Fern	<u>Botrychium Dissectum</u>		X				X	1
Hay Scented Fern	<u>Dennstaetia punctilobula</u>		X			X		3
Spike-Moss	<u>Selacinella sp.</u>		X			X		3
Bracken	<u>Pteridium aquilinum</u>	X	X		X	X		1,18,14

KEY TO PLANT TABLE

NE - NE side of Gorge. It can be assumed that the majority of plants listed in this column are associated with dry soils; unless otherwise indicated, plants in this column were recorded adjacent or near Flat Ridge Trail.

SW - SW side of Gorge. It can be assumed that the majority of plants listed in this column are associated with more moist conditions; unless otherwise noted, these plants were recorded in Shallow Cove and/or Short Branch.

EF - EF is easily found. Plants are abundant and/or very conspicuous in the areas listed.

SI - Scattered individuals. Small number of plants distributed over large area.

L - Local. Found in specific areas (see location number).

R - Rare. Only one individual plant found (see Loc. No.).

Loc. No. - Location Number. This number is a reference to a specific location on either side of the Gorge; the numbers refer to an additional list of locations or habitat preferences. A * sign in front of a no. indicates an area in addition to the assumed area indicated in columns NE or SW.

Locations on Chart

- 1 - Short Branch
- 2 - Scattered over the NE woods, but locally abundant near Center Ridge
- 3 - Lakeshore of SW side of the Gorge
- 4 - Moist, wet areas
- 5 - Gorge Road
- 6 - Dry or moist woodland
- 7 - Hidden Hollow
- 8 - Powerline cut
- 9 - Recreation areas of Park
- 10 - End of Cove adjacent dam on SW side of Gorge
- 11 - Shale Banks above Gorge Road
- 12 - Top of cliff, beside dam
- 13 - Acid soil
- 14 - Dry woodland
- 15 - Lakeshore from front Knob to Bend
- 16 - Lakeshore - Deep Cove
- 17 - Hollow between Back Spur Ridge and Gorge
- 18 - Pine Woods above dam on NE side of Gorge
- 19 - Knobs-woodland areas out of park boundaries past Sapling Knob
- 20 - Long Hollow leading - SW out of park; along Steele Creek
- 21 - Lakeshore below a small rock cliff on Side Ridge Knob
- 22 - Edge of woods adjacent fairway no. 4

A list of Common "weeds" taken from Old Stables Area, 8 August:
(1970)

1. Pokeweed, Phytolacca decandra
2. Peppergrass, Lepidium virginicum
3. White Clover, Trifolium repens
4. Queen Ann's Lace, Daycus carota
5. Milkweed, Asclepias syriaca
6. Morning Glory, Ipomoca purpurea
7. Horse Nettle, Solanum carolinense
8. Common Plantain, Plantago major
9. Buckhorn, Plantago lanceolata
10. Goldenrod, Solidago canadensis
11. Daisy Fleabane, Erigeron annuus
12. Ragweed, Ambrosia artemisiifolia
13. Yarrow, Achillia milleofolium
14. Chicory, Cichorium intybus
15. Dandelion, Torayacum officinale
16. Wild Lettuce, Lactuca scariola

Water Plants

1. Cattail, Typita sp. A few plants are behind Deep Cove in soggy drainage area.
2. Broad-leaved Arrowhead, Sagitturia iatifolia, Sagitturia grows in Little Cove and in drainage from Short Branch on fairway no. 3.
3. Water Plantain, Alisma plantago- Aquatica- grows on shore of Deep Cove and shore of White Oak Cove.

(Species Account)

Saturday
16 May 1970

Flowering Plants:

Fire Pink - Observed on shale banks along the Gorge Road.

Buttercups - Abundant and in bloom - Grassy areas of the Park.

Azalea - (Orange Color) Observed on cliffs edge off trail overlooking dam. This would make a good photo for a folder, etc.

Other Plants, Trees, etc.

Poison Ivy - Very large vine worthy of noting growing on a tree near the concessions building. (apple tree)

(Species Account)

Saturday
23 May 1970

Other Plants, Trees, Etc.

Ferns

Christmas ferns - found abundant along shore of Gorge
(side knob shore).

Maiden - Hair Fern - Found abundant in localized areas
along shore of Gorge (side knob shore).

Other unidentified fern - found in "localized" areas
along shore of Gorge (side knob shore).

Trees(Along Steele Creek of Three Springs picnic area)

- A. White Pine
- B. White Ash? Carolina Ash?
- C. American Elm?
- D. Hickory
- E. Weeping Willow
- F. Sycamore

Help is need in this tree identification.

(Species Account)

Saturday
30 May 1970

Flowering Plants:

Mountain Laurel - Found blooming in power line cut near the top of Hidden Hollow.

Golden Groundsel - Found blooming in power line cut.

Vein - Leaf Hawkweed - Found blooming along Flat Ridge trail (Flat Ridge). Indicated an acid soil.

Soloman Seal - Found along Flat Ridge Trail

False Soloman Seal - Also found along Flat Ridge Trail.

(Species Account)

Saturday
30 May 1970

Other plants, trees, etc.

Blueberry - Found in Power Line cut - not yet ripe.

Redbud - Abundantly scattered along Flat Ridge Trail

Chestnut - Oak - Abundant along Flat Ridge Trail. One of the dominant trees.

Hickory - The other dominant tree here. Hickory nut cuttings found along the Trail.

(Species Account)

Tuesday
9 June 1970

Flowering Plants:

Rose - type of rose growing along bank of cove adjacent dam
very picturesque reddish-pink.

(Species Account)

Tuesday
9 June 1970

Other Plants, Trees, etc.

Common Weeds and grasses - Cover banks around Par Bay.

- A type of weed is common along these banks also unidentified.

Virginia Creeper - Abundant along banks of Gorge to dam.

Poison Ivy - Abundant along banks of Gorge to dam with Virginia Creeper.

(Species Account)

Wednesday
10 June 1970

Other Plants, Trees, etc.

Tree measurements (circumference) along Flat Ridge Trail (Lake Spur Ridge)

Va. Pine - 4'5" (almost dead)

Hickory - 3'5" 3/4"

Black Oak - 5'3"

Black Oak - 4' 43/4"

White Oak - 3'3"

White Oak - 5'8 1/2"

(30' from Va. Pine)

Chestnut Oak - 4'5 5/8"

Chestnut Oak - 6' 4 1/2" (15' off trail)

(Species Account)

Thursday
11 June 1970

Flowering Plants:

These plants were identified by Bill Bridgeforth from E.T.S.U. They were along the shoreline from Front Knob to the Bend.

Soloman's Seal - Not common, but present

Bloodroot - Only one plant found

Honeysuckle - Present but not abundant in this area

Queen Ann's Lace - Only a few plants found on this route.

Black-eyed Susan - Present

Shastadaisy (common summer daisy) - Present

Golden Groundsel - Present

Robin's planton - Present

(Species Account)

Tuesday
16 June 1970

Flowering Plants: (listed on Flat Ridge Trail below and in Hidden Hollow)

Flea Bane - Flower below Hidden Hollow

Summer Daisy - Very common along trail

Oxales - (Sourgrass) present below Hidden Hollow

Black-Eyed-Susan - Common along trail

Fire Pink - Present

Queen Ann's Lace - Present

Devil's Shoestring - Present (thin stemmed - purple flower)

Red Clover - Present

Solomon Seal - Present in Hidden Hollow

False Solomon Seal - Present in Hidden Hollow

May Apple - Present in Hidden Hollow

Other Plants: (listed below and found in Hidden Hollow and Flat Ridge Trail)

Polk - berries present in these plants now

Heartleaf - Present

Rhubarb - Present

(Species Account)

Wednesday
17 June 1970

Areas adjacent Park boundaries:
Flora - funa

Around the golf course boundary of Steele Creek Park, the land' seems to be used as farmland, with plowed fields and grazing land. Queen Ann's lace seems to be very abundant around this boundary. An old road (maintenance road built by Park) winds around adjacent the boundary from the maintenance building to the foot of the knobs.

White Pines are planted in rows - looks like an old nursery. This area is along the old road.

The open field area outside the golf course and park boundaries contains "typical field plants and grasses". The bird life here is also typical. This area is possibly hunted by predators such as the Red-tailed Hawk, Sparrow Hawk, Red Fox, etc. Many butterflies here; crickets heard. Field Sparrows and Meadow larks sing constantly.

(Species Account)

Wednesday
17 June 1970

Other Plants, Trees, Etc.:

Trees should be measured near hole No. 4 on Golf Course.

Here there are very large:

Black walnut

Shagbark Hickory

White Oak

(Species Account)

Thursday
2 July 1970

Trees:

Old Homeplace Field:

Black Walnut-(2 trunks)
c. 6' , c. 6'3"

Lombardy Poplar - An introduced tree from Europe sometimes
planted as a windbreak.
c. (smallest) 3'10"
2 others (larger) not measured because of poison ivy on trunks.

Black Maple-present

Sugar Maple-present

Apple or Crab Apple-present (could not make certain identification.)

(Species Account)

Friday
3 July 1970

Trees:

Three Springs Picnic Area

Hemlock (above spring)

c. 6½; c. 4'2½", 5 - (double trunk)

Unidentified tree - English Walnut?

Mockernut Hickory?

c. 7'7½"

c. 6'11"

White Oak

c. 7'3.5", c. 6'4" - both of these trees are below stairs
of the picnic shelter

White Oak (above Hemlocks)

c. 9'6"

White Oak - (other side of creek)

c. 8'3½"

White Oak

c. 7'10½"

Sycamore - (below spring next to lake)

c. 5'½"

(Species Account)

Monday
6 July 1970

Flowering Plants:

Lavender Bergamot - in bloom along Gorge Road
and other areas

Morning Glory - in bloom along Gorge Road

Thistle - in bloom along Gorge Road

(Species Account)

Monday
6 JULY 1970

Other Plants, Trees, etc.:

"Cattail" - present and "in bloom" in Deep Cove.

Reindeer Moss - present in "saddle" between the 2 knolls
of Double Knob

Polk - present and growing to 8' tall - berries not ripe
as yet.

(Miscellaneous)

Sunday
12 July 1970

Pratt's Knob Trail

Begins at several entrances at "Rock Quarry" above Mill's Creek. Steep grade with several switch backs. - Good habitat -dry. Trail comes out at same place Hidden Hollow meets powerline cut (to left coming up Hidden Hollow).

(Species Account)

Saturday
8 August 1970

Flowering Plant:

Some of the very common "weeds" and grasses - identified at Stables area.

Broom Sedge, Andropogon viriginious
Yellow Foxtail, Setaria lutesceus

"Weeds":

Pokeweed, Phytolacca decandra
Peppergrass, Lepidium viriginicum
Red Clover, ?
White Clover, Trifolium repens
Queen Ann's Lace, Daucus carota
Milkweed, Asclepias syriaca
Morning Glory, Ipomoea purpurea
Horse Nettle, Solanum carolineuse
Common Plantain, Plantago lanceolata
Buckhorn, Plantago major
Goldenrod, Solidago canadensis
Daisy Fleabane, Erigeron annuus
Ragweed, ?
Yarrow, Achillia milleofolium
Chicory, Cichorium intybus
Dandelion, Taraxacum officinale
Wild Lettuce, Lactuca scariola

(Species Account)

Wednesday
12 August 1970

Late Summers Flowers:

1. Indian Pipe, Montotropa uniflora
2. Heal-all, Prunella vulagaris
3. Spotted Touch-me-not, Impatiens capensis
4. White Wood Aster, Aster divaricatus
5. Purple Joe-Pye-Weed, Eupatorium purpureum
6. Ox-Eye, Heliopsis helianthoides
7. Great Lobellia, Lobellia siphilitica
8. Southern Harebell, Campanula divaricata
9. New York Ironweed, veronia noveboracensis
10. Wild Potato Vine (morning glory), Ipomoea pandurata
11. Tall Milkweed, Asclepias exaltata
12. Bull Thistle, Cirsium vulgare
13. Squawroot (corn), Conopholis americana
14. Pipsisiwa, Chimaphila maculata
15. Evening Primrose, Oenothera biennis

(Species Account)

Wednesday
12 August 1970

Shrubs:

1. Strawberry Bush (short branch), Euonymus americanus
2. Spicebush, (short branch & common other areas),
Lindera benzoin
3. Blueberry, Vaccinium sp.
4. Wild Hydrangea, Hydrangea arborescens

(Species Account)

Wednesday
12 August 1970

"Water" Plants:

1. Broad - leaved arrowled (little Cove; fairway no. 3) Sagittaria iatifolia
2. Water Plantain (Deep Cove), Alisma Plantago-
aquatica

(Species Account)

Wednesday
12 August 1970

Ferns:

1. Bracken (top of Short Branch & edge of Little Knob),
Pteridium aquilinum
2. Southern Beech Fern (Short Branch), Phegopteris hexagonoptera
3. Sensitive Fern (edge of Lake - Side Ridge Knob shore),
Onoclea sensibilis
4. Brown -Stemmed Spleenwort (Short Branch & Lakeshore),
Asplenium platyneuron

(Species Account)

Saturday
15 August 1970

Blooming Flowers of Flat Ridge Trail

1. Southern Harebell, Campanula divaracata
2. Large-Leaved Aster, Aster macrophyllus
3. Evening Primrose, Oenothera biennis
4. Heal-all, Prunella vulgaris
5. Goldenrod, Solidago sp.
6. Black-eyed Susan, Rudbeckia hirta
7. Horse Nettle, Solanum carolinense
8. Bull Thistle, Cirsium vulgare
9. Queen Ann's Lace, Daucus carota
10. White Snakeroot, Eupatorium rugosum
11. Common Mullion, Verbascum thapsus
12. Boneset, Eupatorium perfoliatum
13. Common Daisy, Chrysanthemum leucanthemum
14. N.Y. Ironweed, Veronia noveboracensis
15. Virgin's Bower, (vine), Clematis virginiana
16. Robin's Plantain, Erigeron pulchellus
17. Common Ragweed, Ambrosia artemisiifolia
18. Tall Bellflower, (Deep Cove and Gorge Road), Campanula americana
19. White Wood Aster, (rear Deep Cove), Aster divaricatus
20. Flowering Spurge (Gorge Rd.), Euphorbia corollata
21. Butterfly Weed, (Gorge Rd.), Asclepias tuberosa
22. Pokeweed, Phytolacca americana

(Species Account)

Saturday
15 August 1970

Ferns:

Christmas Fern, (very common adjacent parts of Flat Ridge Trail), Polystichum acrostichoides

Shrub:

Wild Hydrangea, Hydrangea arborescens

(Species Account)

Wednesday
19 August 1970

Plants, general:

Cardinal Flower - One specimen found blooming at end of 2nd cove adjacent dam (unnamed cove).

Teaberry - Present in small numbers behind creek below dam (face of Knob).

Bracken (fern) - Present in small numbers - same location as preceding.

(Species Account)

Saturday
22 August 1970

Flowering Plants, Shrubs, Ferns, etc.:

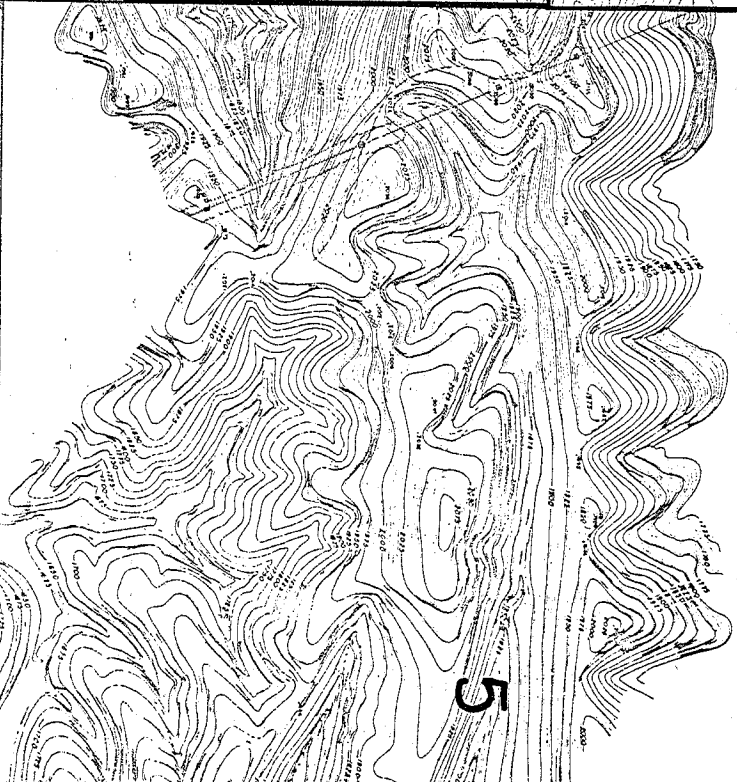
Maple-leaf viburnum
Witch Hazel
Winged Sumac - shrubs observed on hike- survey short
Spice Bush Branch, (enter Ridge; Bogey Knob.
Ginseng - found by Charlie Smith - Short Branch
Pink Lady Slipper - found by Charlie Smith behind Center
Ridge.
Wild Sasperilla - C. Smith, same hike-survey
Turtle Head - flower observed along canoe route to dam.

Ferns Observed:

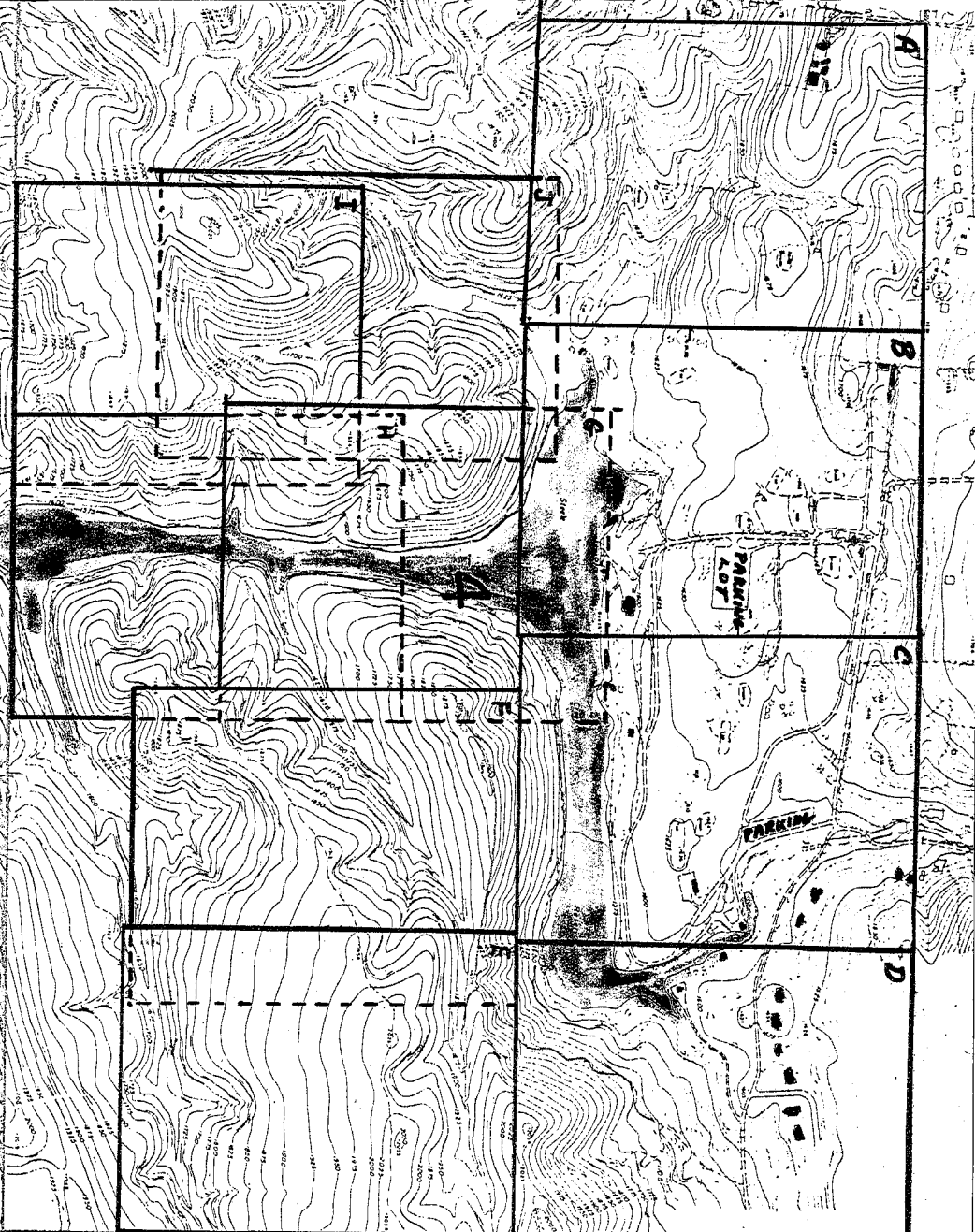
Polystichum acrostichoides
Botrychium virginianum
Phegopteris lexagonoptera
Adiantum pedatum
Botrychium dissectum
Asplenium platyneuron
Onoclea sensibilis
Deanstaedtia punctilobula
Dtyopteris marginalis

STEEL'S CREEK PARK

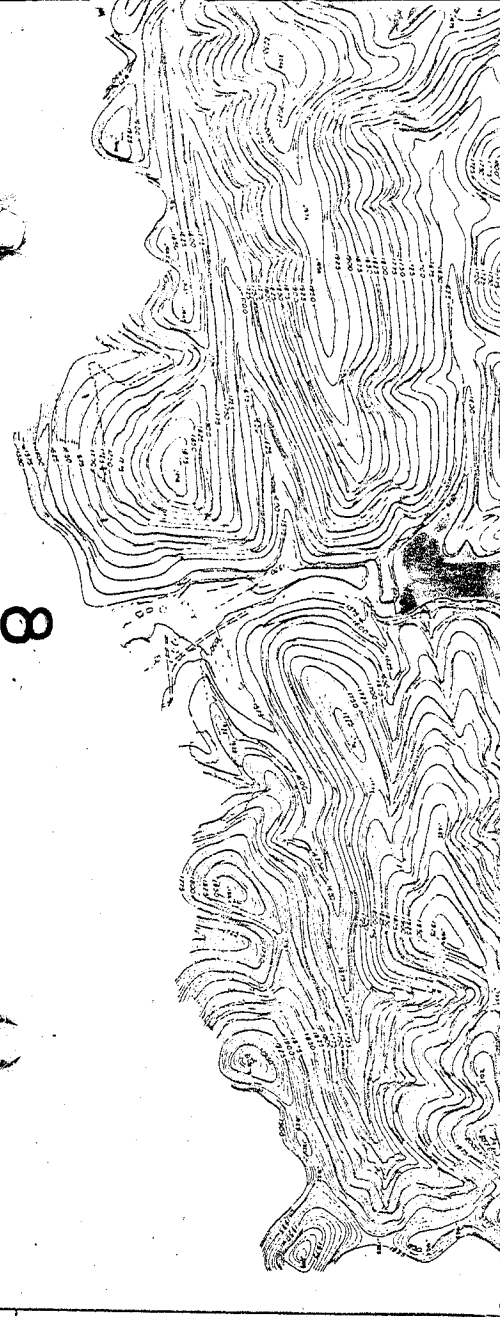
Map Key



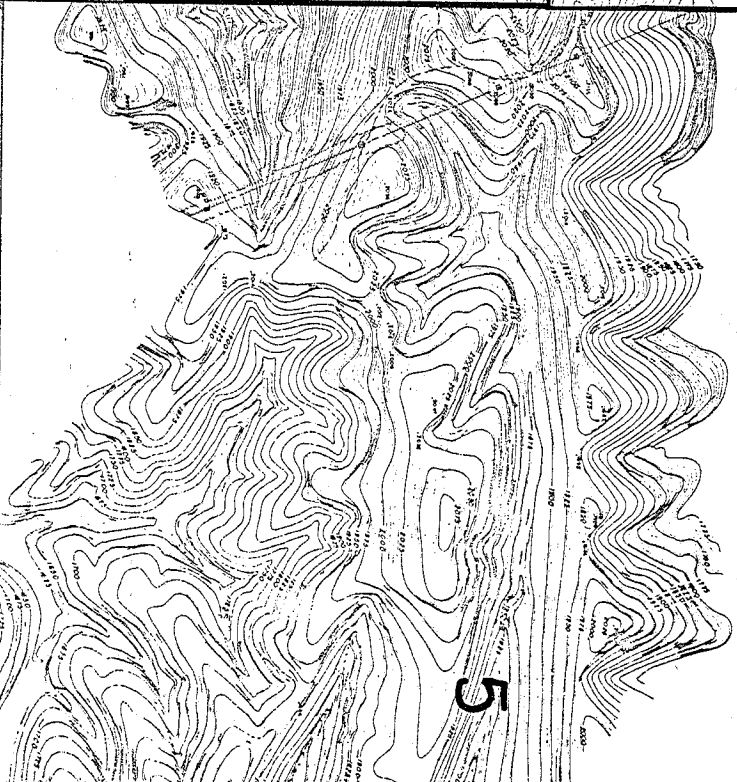
5



4



8



9

•1697

A

1675

•1699

•1698

1675

•1694

1674

1648

Green

1675

1650

Tee

Green

1625

1675

1700

1725

1750

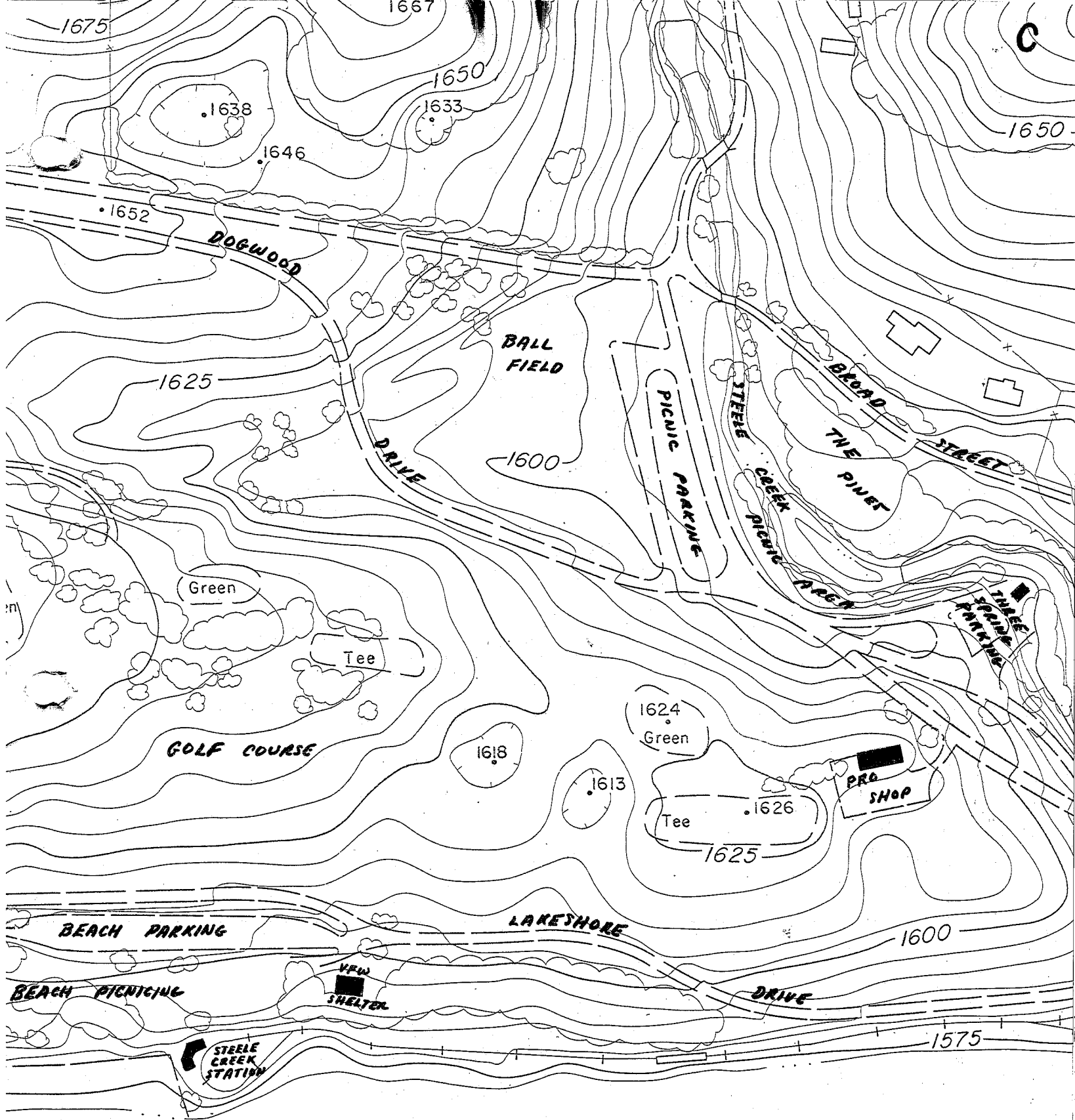
1775

1800

1825

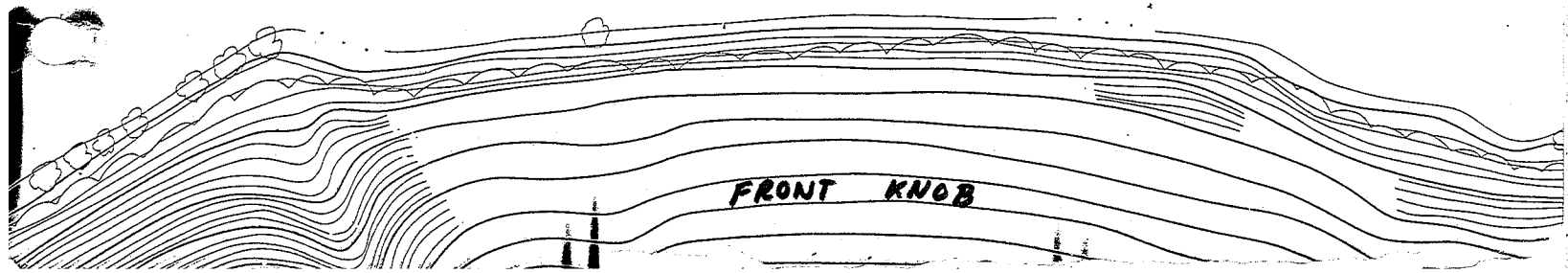
BOGEY
KNOB

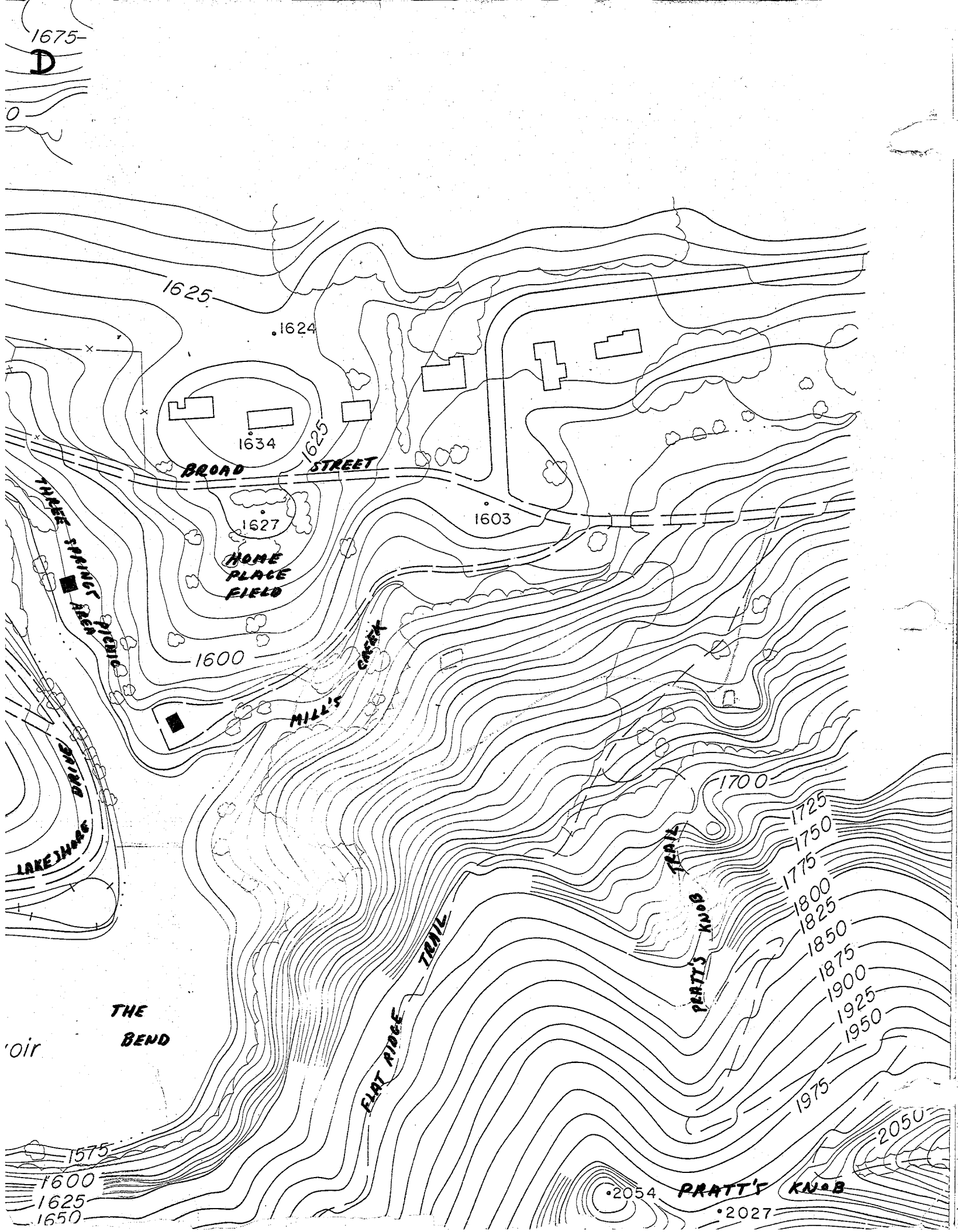
Tee

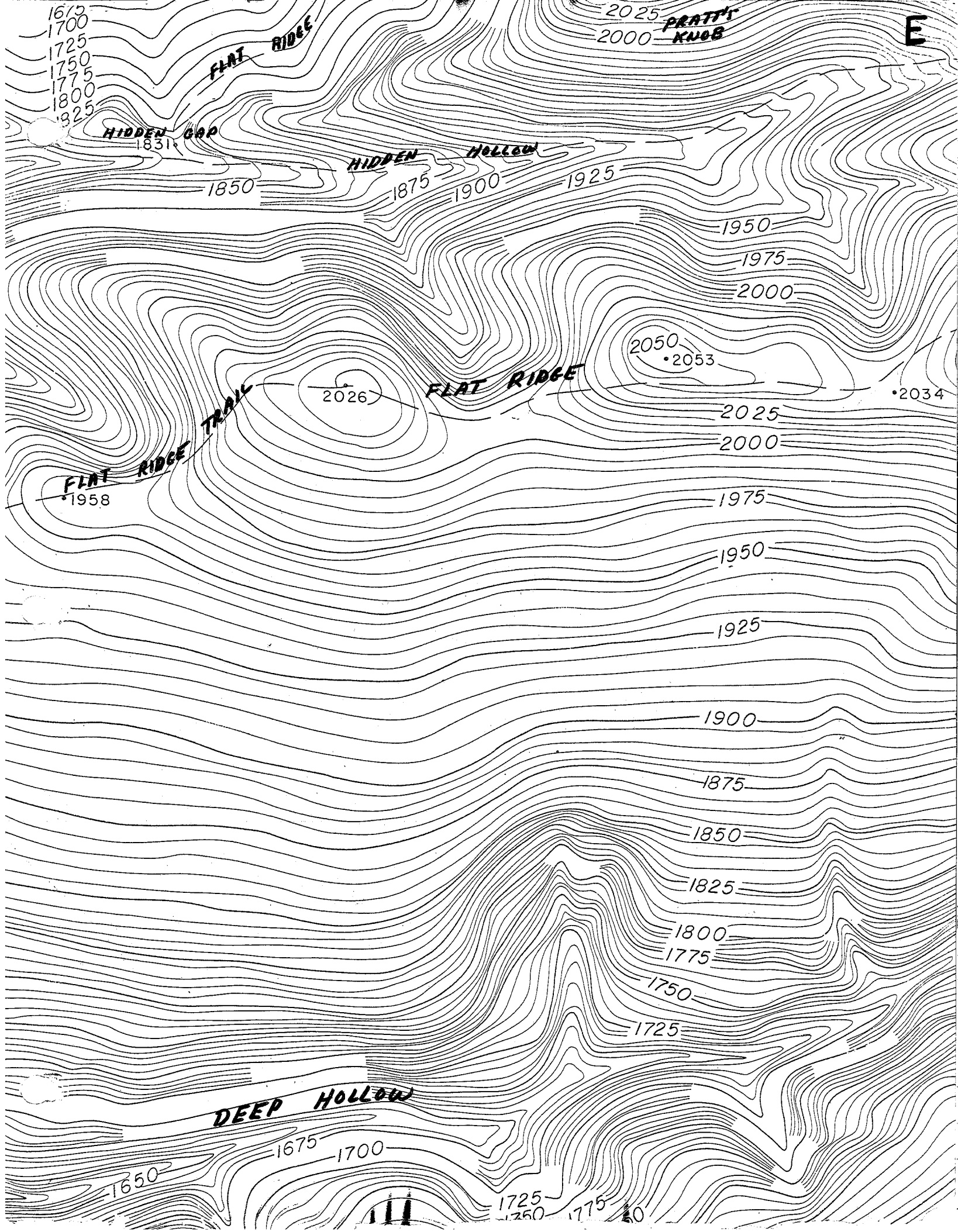


Creek

Reservoir







1675
1700
1725
1750
1775
1800
1825

2025
2000
PRATT'S KNOB

E

HIDDEN GAP
1831

HIDDEN HOLLOW

1850

1875

1900

1925

1950

1975

2000

2050
•2053

FLAT RIDGE

2026

•2034

2025

2000

FLAT RIDGE TRAIL
1958

1975

1950

1925

1900

1875

1850

1825

1800

1775

1750

1725

DEEP HOLLOW

1675

1700

1650

1725
1750

1775

1800

F

1650
1675
1700
1725
1750
1775
1800
1825

1900
•1914

FRONT
KNOB

1907
1900

HIDDEN GAP

1875

0

COVE

DRY

•1958

1650
1675

1700
1725
1750

1775
1800

1825
1850

1913
RIDGE

TRAIL

FLAT

1875

•1988

1875

1850

1825
1800

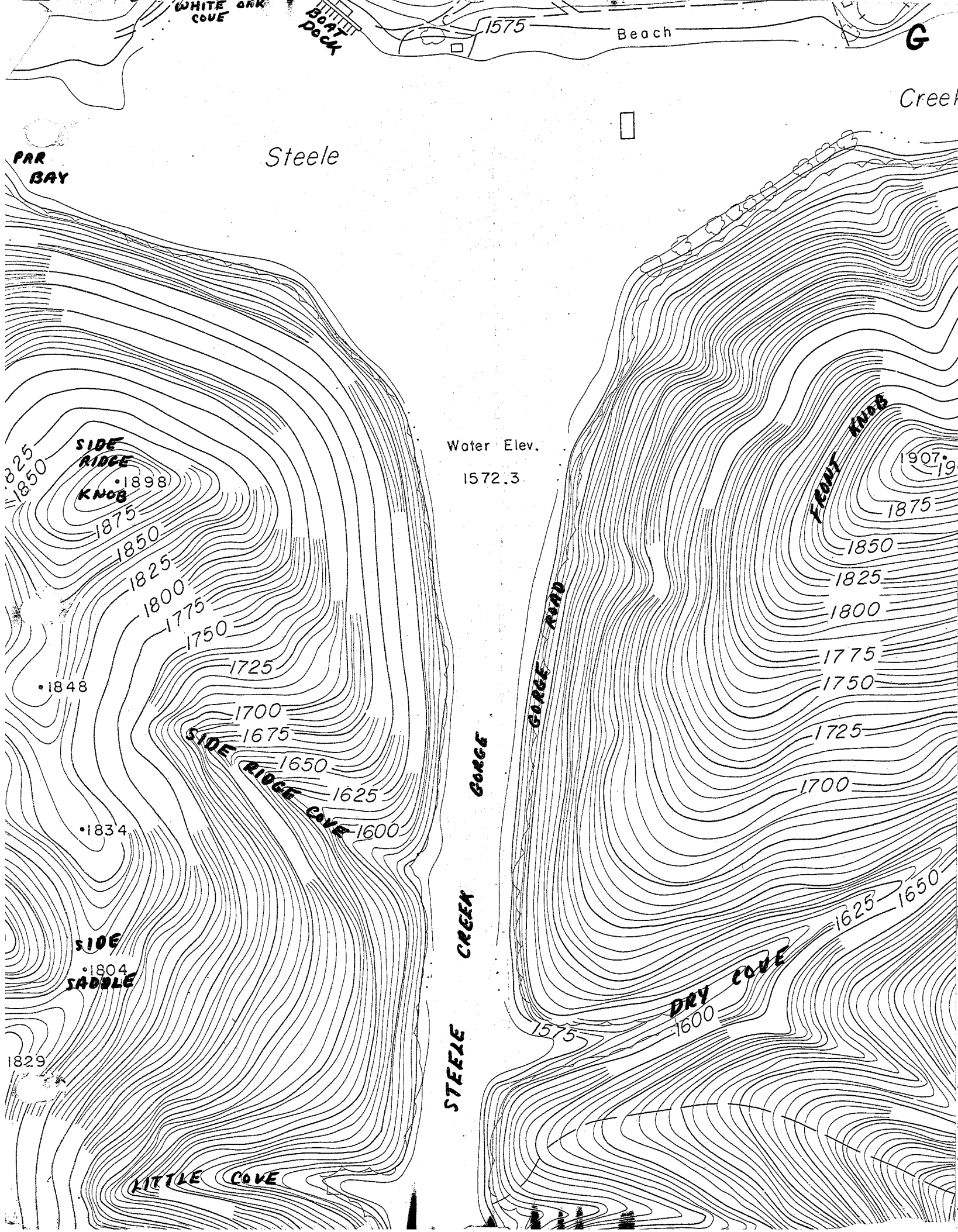
1775
1750

1725
1700

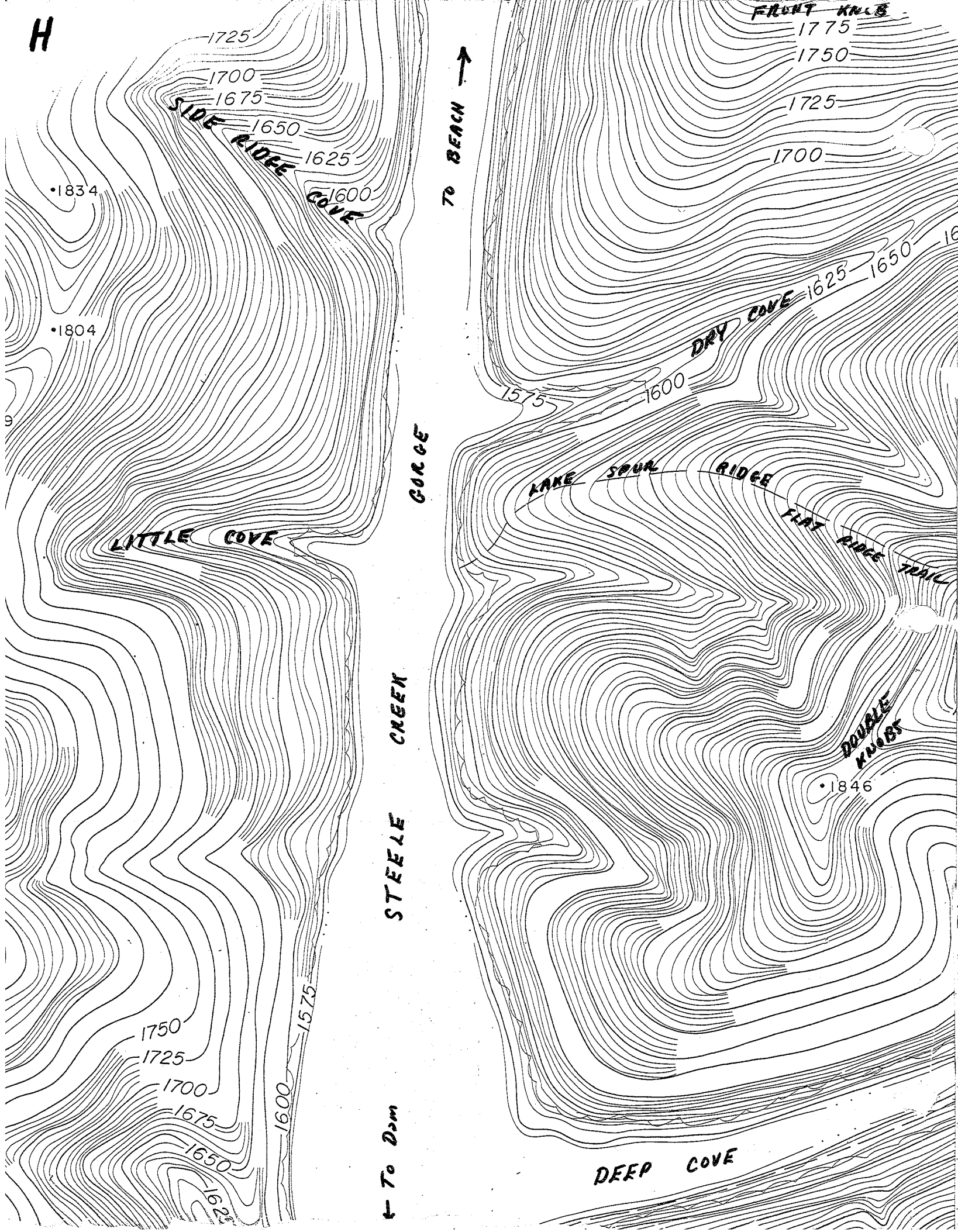
DOUBLE
KNOB

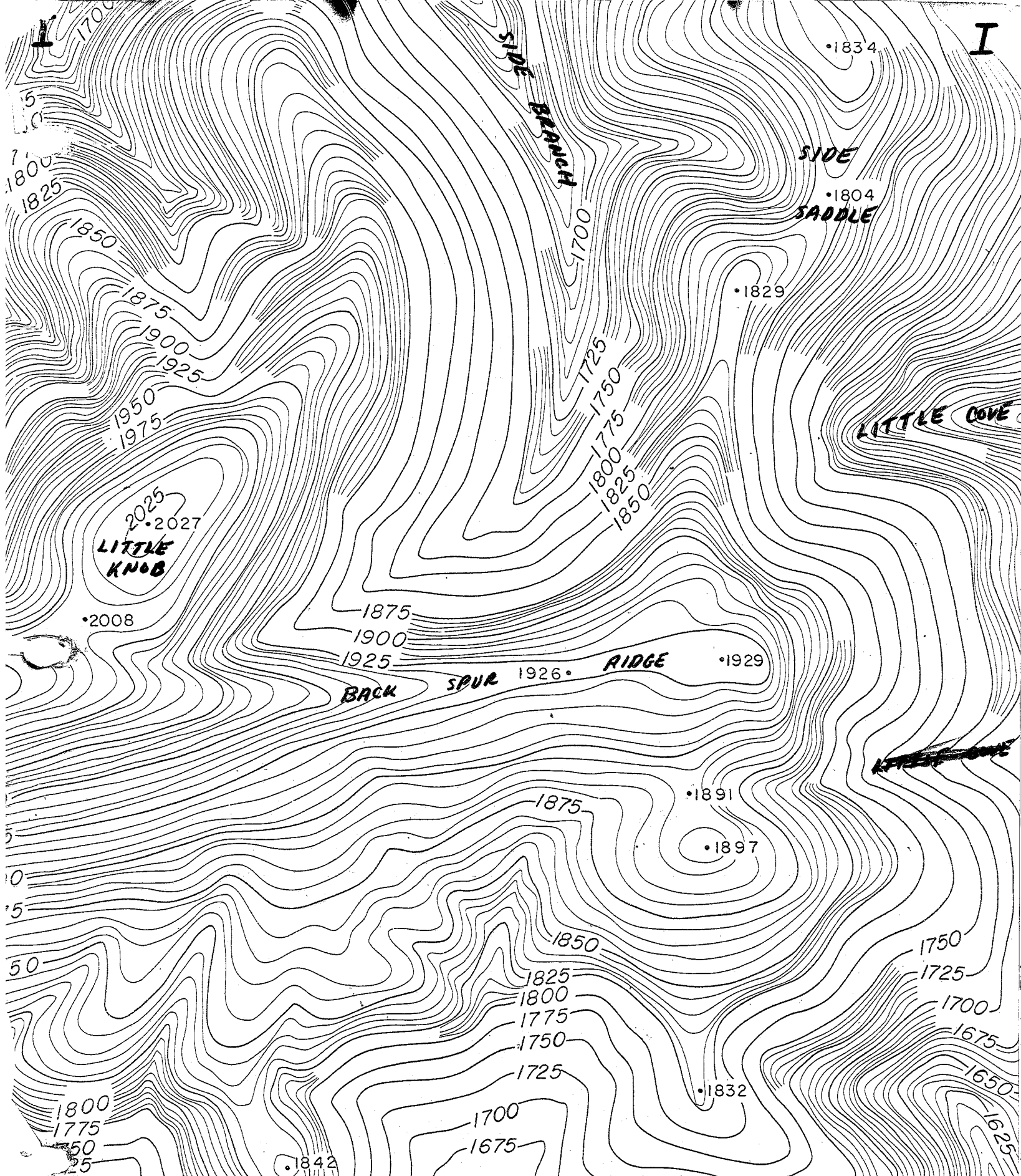
DEEP COVE
FLAT

1625 DEEP COVE HOLLOW
1650



H





J

1906

BAGGY
KNOB

(Green)

1625

SHALLOW
COVE

1600

1625

1650

1675

1700

1725

1750

1775

1800

1825

1850

SIDE
RIDGE
KNOB

1898

1875

1850

1825

1800

1775

•1848

•1834

SIDE
SADDLE

•1804

•1829

SHARP

1700

1675

BRANCH

1650

SIDE
BRANCH

1700

1725

1750

1775

1800

1825

1850

1725

1750

1775

1800

1825

1850

1875

1900

1925

1950

1975

2025

•2027

LITTLE
KNOB

•2008

1875

1900

1925

BACK SPUR 926

RIDGE

•1929