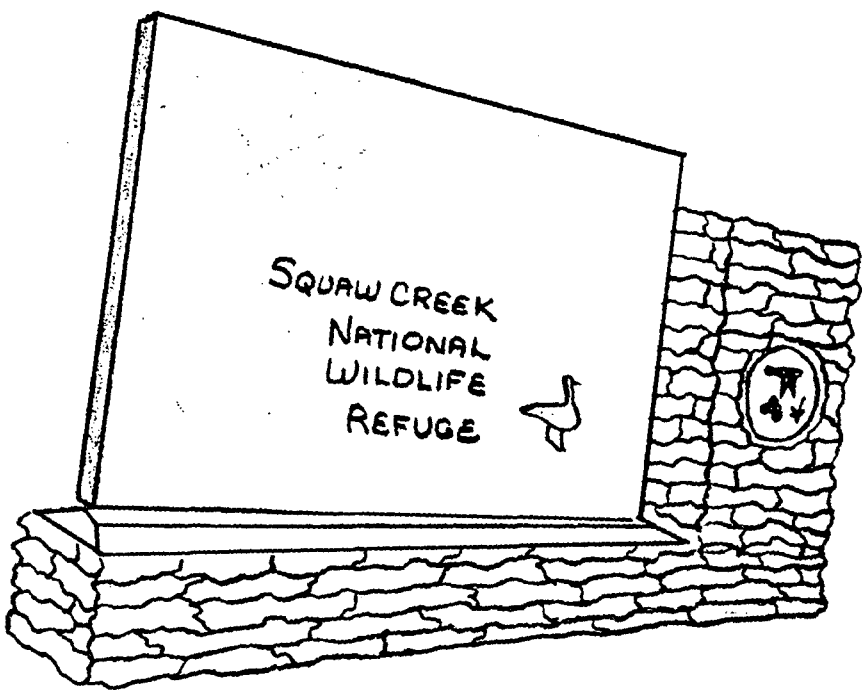


JWS

SIGN PLAN
SQUAW CREEK NATIONAL WILDLIFE REFUGE
Mound city, Missouri



U.S. FISH AND WILDLIFE SERVICE
JANUARY 1978

INTRODUCTION

Squaw Creek National Wildlife Refuge is located on the Missouri River floodplain of Northwest Missouri. Historically, the area was a cordgrass marsh interlaced with meandering creek channels. Attempts were made to drain the area for farmland during the late 1800's and early 1900's, however, floods, drought and the depression made farming a marginal operation. In 1935 Squaw Creek Refuge was established by Executive Order of President Franklin D. Roosevelt. Today, the refuge contains approximately 6,900 acres of man-made, semi-natural marshes, native cordgrass and upland prairies, timber and farmland.

Squaw Creek Refuge was established to help protect and preserve migratory birds by providing adequate resting and feeding areas during the fall and spring migrations. Overall objectives are to provide the best habitat possible for a wide variety of birds and animals. An equally important objective is to provide opportunities for the public to see and enjoy these wildlife, wildland resources.

To accomplish its objectives, the refuge uses a variety of habitat management practices. The major activity is marsh and water management to provide food and resting areas for waterfowl and other marshland wildlife. Farming, grazing, haying, mowing and controlled burning practices are applied as needed to provide food, cover and habitat types for the variety of wildlife using the refuge.

The variety of habitats on Squaw Creek Refuge provides food and cover for 33 kinds of mammals, 35 species of reptiles and amphibians and 289 species of birds. Fall waterfowl concentrations frequently total 200,000 snow geese, 10,000 Canada geese and 200,000 ducks; and spring concentrations may total a half million snow geese. White pelicans, great blue herons, red-tailed hawks plus numerous shorebirds also stop on the refuge during their migrations. From November to January wintering bald eagles may total 250 plus an occasional golden eagle. In addition to numerous coyotes, beavers and pheasants, approximately 200 white-tailed deer winter on the refuge.

The refuge is open year around from dawn to dusk daily. Refuge roads and foot trails provide excellent opportunities to observe, study, photograph or simply enjoy wildlife and wildlands. Seasonal activities include fishing, wild flower observation, mushroom picking and nut gathering. Picnic tables and restrooms are available at headquarters; no camping is permitted.

Loess bluff trail, located near headquarters and winding to the top of bluffs which border the refuge on the east, provides an excellent view of refuge lands and access to a truly remarkable geological formation.

Since its establishment, the refuge has provided excellent wildlife viewing opportunities to nearly 70,000 visitors annually through twenty miles of graveled road system.

Lack of interpretive signs during this period has resulted in tremendous losses in the interpretive field and confusion by visitors as to what the refuge actually offers. To date, three inadequate regulation signs (stenciled and at each entrance), a few speed limit signs (installed 1976) and a headquarters sign are all that exist in the total refuge sign inventory. Boundary signs have fared better and to date we have on hand 120 boundary signs and 40 posts. This year for the first time, temporary signs were placed at pool sites, towers, and trail entrances to inform visitors where they could hike and in part orientate them during their visit.

It is the purpose of this exercise, therefore, to provide:

(a) A sign plan which will direct people through the refuge in an orderly and safe manner. (b) A sign plan which will add to the esthetic value of the area by displaying uniformity, simpleness, yet be informative and educational. One complemented by interpretive exhibits and displays which will make visits to the refuge rewarding experiences. & (c) A plan designed to help a visitor better understand the U.S. Fish and Wildlife Service, help them to obtain a better appreciation for the area and its opportunities, and in effect show that someone cares about the appearance of the refuge and is dedicated to the management of the area for wildlife.

The following pages contain those signs proposed for Squaw Creek National Wildlife Refuge. They are designed to complement each other and are intended to be as simple and informative as possible, yet not clutter roadsides and viewing areas. All signs will be constructed of 3/4" high density overlaid plywood with brown facing material and white reflective helvetica style letters, excluding traffic control and regulation signing which will comply to MUTCD standards at signing level B. Interpretive displays, for all practical purposes, will involve special attention and shall, with coordination of I&R specialists and refuge staff, later be designed and added to this sign plan.

It will be the responsibility of the outdoor recreation planner to inspect annually each sign and make repair recommendations to refuge maintenance personnel.

An additional responsibility will be to maintain a current inventory of signs and make recommendations for new signing needs.

MASTER LIST CONTINUED...

Quantity & sign no.#	Sign series code no.#	Material code	Background color	one sided	Arrow direction	Sign size Letter size
# 27 Q2	I	SN	BROWN	X		See attached sheet
28 Q15	I	SN	BROWN	X		See attached sheet
29 Q2	I	SN	BROWN	X		See attached sheet
30 Q2	I	SN	BROWN	X		See attached sheet
31 Q2	I	SN	BROWN	X		See attached sheet
32 Q3	I	SN	BROWN	X		See attached sheet
33 Q2	I	SN	BROWN	X		See attached sheet
34 Q2	I	SN	BROWN	X		See attached sheet
35 Q2	I	SN	BROWN	X		See attached sheet
36 Q2	I	SN	BROWN	X		See attached sheet
37 Q4	I	SN	BROWN	X		See attached sheet
38 Q20	I	SN	BROWN	X		See attached sheet
39 Q20	I	SN	BROWN	X		See attached sheet
40 Q20	I	SN	BROWN	X		See attached sheet
41 Q2	I	SN	BROWN	X		See attached sheet
42 Q2	I	SN	BROWN	X		See attached sheet

* TRAFFIC CONTROL SIGNS Type Quantity Size (in.)

a. W1-1L curve to left (90)-	2	24" x 24"	reflectorized	} COMPOSITE SIGN
b. W1-2L curve to left-	2	24" x 24"	reflectorized	
c. W1-1R curve to right (90)	2	24" x 24"	reflectorized	
d. W1-2R curve to right-	2	24" x 24"	reflectorized	
e. W1-3L reverse turn sign -	2	24" x 24"	reflectorized	
f. R1-1 stop sign-	2	24" x 24"	reflectorized	
g. R2-1 35 mph speed limit-	20	18" x 24"	reflectorized	

* Letters a-g correspond to those on traffic control sign map included.

43 Q6	I	SN	BROWN	X	See attached sheet
44 Q6	I	SN	BROWN	X	See attached sheet
45 Q6	I	SN	BROWN	X	See attached sheet
46 Q6	I	SN	BROWN	X	See attached sheet
47 Q4	I	SN	BROWN	X	See attached sheet

CONTINUED...

MASTER LIST....SIGN SPECIFICATIONS

Quantity & Sign no.#	Sign series code no.#	Material code	Background color	One sided	Arrow direction Sign size Letter size See sheet
# 1,6 Q4	E-3	SN	BROWN	X	See attached sheet
2,5,12 Q4	I	SN	BROWN	X	See attached sheet
3 Q1	I	SN	BROWN	X	See attached sheet
4 Q1	I	SN	BROWN	X	See attached sheet
7 Q1	I	SN	BROWN	X	See attached sheet
10 Q1	I	SN	BROWN	X	See attached sheet
14,15 Q2	I	SN	BROWN	X	See attached sheet
8a Q1	I	SN	BROWN	X	See attached sheet
8b Q1	I	SN	BROWN	X	See attached sheet
8c Q1	I	SN	BROWN	X	See attached sheet
9a Q1	I	SN	BROWN	X	See attached sheet
9b Q1	I	SN	BROWN	X	See attached sheet
9c Q1	I	SN	BROWN	X	See attached sheet
11 Q1	I	SN	BROWN	X	See attached sheet
13 Q2	E-1	SN	BROWN	X	See attached sheet
16 Q2	I	SN	BROWN	X	See attached sheet
17 Q15	I	SN	BROWN	X	See attached sheet
18 Q1	I	SN	BROWN	X	See attached sheet
19 Q1	I	SN	BROWN	X	See attached sheet
20 Q10	RS034	SN	BROWN	X	RS034 Message incorporated 1' x 16"
21 Q10	RS006	SN	BROWN	X	RS006 Message incorporated 1' x 16"
22 Q2	RS021	SN	BROWN	X	RS-021 Symbol only 8" x 8"
23 Q2	RS023	SN	BROWN	X	RS-023 Symbol only 8" x 8"
24 Q2	RS022	SN	BROWN	X	RS-022 Message incorporated 8" x 10½"
25 Q20	R-8	13" x 15"	Blue on white		
26 Q50	R-6	11" x 14"	Blue on white		
48 Q6	I	SN	BROWN	X	See attached sheet

IMPORTANT

All signs contained in this plan and illustrated on the following pages (excluding traffic control signs and interpretive signs) will have these characteristics:

- (a) All signs will display white reflective letters on brown background material.
- (b) Letter size varies but letter style will always be helvetica medium. Use of upper or lower case letters is illustrated on individual sign drawings. Please refer to these guidelines when making up the actual sign.
- (c) If there are any questions, feel free to contact John Guthrie, Squaw Creek NWR, 816/442-3570.

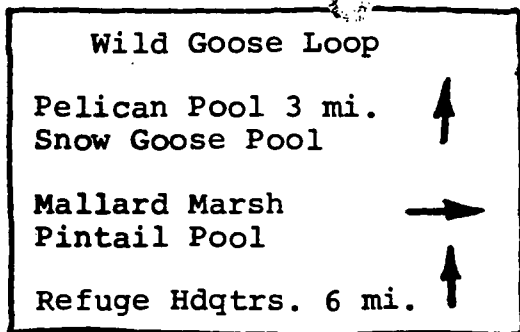
Sign No.

- 2 Foot
Travel
Only 1'w x 16"l 2½" Letters

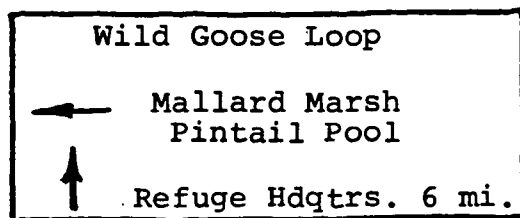
 - 33 Refuge
Tour Route → 1'w x 2'1 2½" Letters Arrow
 - 34 ← Refuge
Tour Route 1'w x 2'1 2½" Letters Arrow
 - 35 ← Visitor
Center 10"w x 18"l 2½" Letters Arrow
 - 36 ↑ Visitor
Center 10"w x 18"l 2½" Letters Arrow
 - 37 Trail → 4"w x 12"l 2½" Letters Arrow
 - 38 ↑ Arrow only 8"w x 8"l
 - 39 → Arrow only 8"w x 8"l
 - 40 ← Arrow only 8"w x 8"l
- (Represents estimated size of sign with directional arrow on it)
- 41 Refuge Headquarters → 4"w x 30"l 2½" Letters Arrow
 - 42 ← Refuge Headquarters 4"w x 30"l 2½" Letters Arrow
 - 43 Mallard
Marsh 12"w x 18"l 2½" Letters
 - 44 Eagle
Pool 12"w x 12"l 2½" Letters
 - 45 Pintail
Pool 12"w x 18"l 2½" Letters
 - 46 Snow Goose
Pool 12"w x 18"l 2½" Letters
 - 29 Squaw
Creek 12"w x 12"l 2½" Letters
 - 30 Davis
Creek 12"w x 12"l 2½" Letters

47 U.S. Fish and Wildlife Service Size: ? 4" Letters

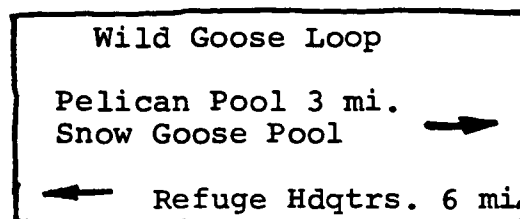
Sign # 8 (Three signs displayed at this point, mounted in the shape of a "U" with sign 8a facing north, 8b south, and 8c east)



Size: 3'w x 3½'l
Letter size: 3" for
Wild Go...and 2½"
for rest of sign
3 Arrows

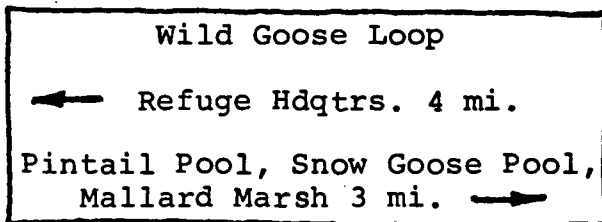


Size: 2'w x 3½'l
Letter size: 3" for
Wild Go...and 2½"
for rest of sign
2 Arrows

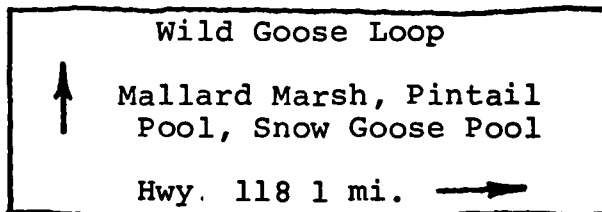


Size: 2'w x 3½'l
Letter size: 3" for
Wild Go...and 2½"
for rest of sign
2 Arrows

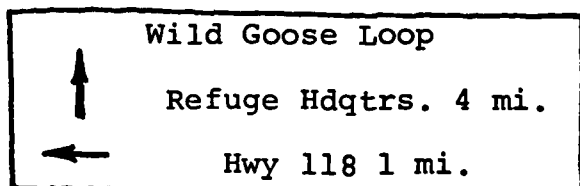
9 (Three signs displayed at this point, mounted in the shape of a "U" with sign 9a facing north, 9b east, and 9c west)



Size: 2'w x 3½'l
Letter size: 3" for
Wild Go...and 2½"
for rest of sign
2 Arrows (WORD POOL SHOULD
PROBABLY BE ON 2ND
LINE)



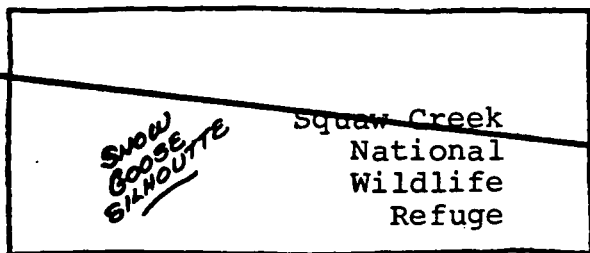
Size: 2'w x 3½'l
Letter size: 3" for
Wild Go...and 2½"
for rest of sign
2 Arrows



Size: 2'w x 3½'l
Letter size: 3" for
Wild Go...and 2½"
for rest of sign
2 Arrows

SEE OTHER ILLUSTRATION

Sign No.



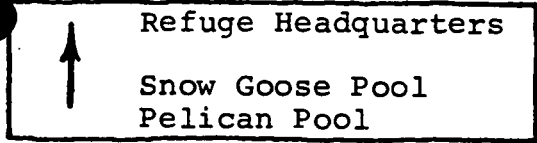
Size: 5'w x 5'l
Letter size: 6"
Silhouette: Snow goose

12,5 & 2

Squaw Creek National Wildlife Refuge	
<p>PERMITTED</p> <p><input type="checkbox"/> Fishing (in season)</p> <p><input type="checkbox"/> Wildlife Observation</p> <p><input type="checkbox"/> Trail Walking</p> <p><input type="checkbox"/> Pets on Leash</p>	<p>PROHIBITED</p> <p><input checked="" type="checkbox"/> Firearms</p> <p><input checked="" type="checkbox"/> Camping</p> <p><input checked="" type="checkbox"/> Littering</p> <p><input checked="" type="checkbox"/> Collecting</p>
Open Daily Sunrise To Sunset	

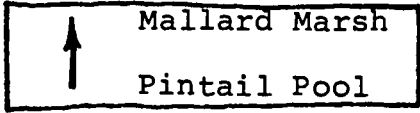
Letter size: 4"
Letter size: 2½"
Letter size: 2½"
Total sign size ?
...appropriate symbols
Letter size: 4"

3



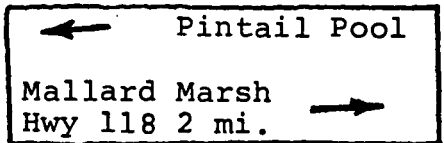
Size: 1'w x 3½'l
Letter size: 2½"
Arrow

4



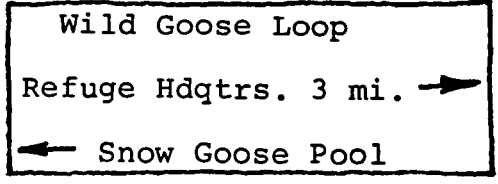
Size: 1'w x 3½'l
Letter size: 2½"
Arrow

7



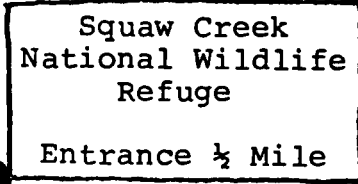
Size: 1½'w x 3½'l
Letter size: 2½"
2 Arrows

10



Size: 1½'w x 3½'l
Letter size: 2½" except Wild Go... 3" letters
2 Arrows

14 & 15



Size: 3'w x 5½'l
Letter size: all 4" except Squaw Creek in 6" letters

Sign No.

11

Eagle Overlook
Walking distance 3/4 mi. →

Size: 1'w x 3½'l
Letter size: Eagle O.=4"
Lower line of sign =2½"
Arrow

~~12~~

~~Squaw Creek
National
Wildlife
Refuge~~
*SNOW
GOOSE
SILHOUETTE*

~~SEE OTHER
ILLUSTRATION~~

~~Size: 4'w x 8'l
Letter size: 7"
Silhouette: Snow goose~~

16

Wild Goose Loop
Tour Route
← Distance 10 mi.

Size 1½'w x 2½'l
Letter size: Wild Goose..3"
all other wording=2½"
Arrow

17

Area closed
to public access
October 1
to April 15

Size: 1½'w x 3'l
Letter size: 2½"

18

Loess
Bluff
Trail

Size: 2½'w x 2'l
Letter size: 4"

19

Squaw Creek
Visitor Center
Hours:

Size: 2'w x 4½'l
Letter size: 4" except
for Hours=2½"

27

Employees Only

4" w x 2' l 2½" Letters

31

Headquarters

6" w x 4' l 4" Letters

32

Information

4" w x 2' l 2½" Letters

48

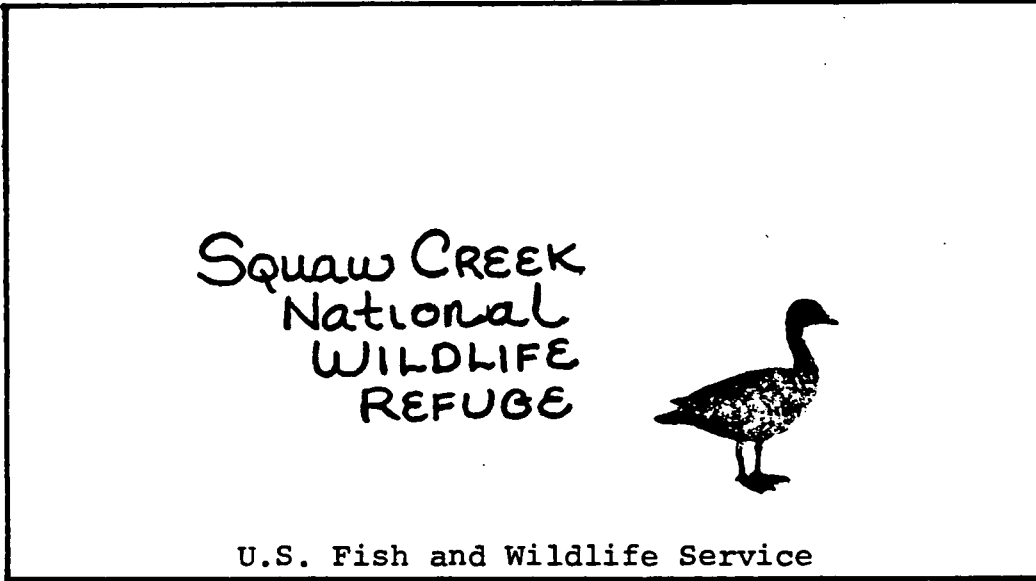
Pelican
Pool

12" w x 18" l 2½" Letters

Refuge entrance sign illustration:

Silhouette: Snow goose
Size: 4'w x 8'l
Letter size: 7" for refuge
name, 2½" for U.S.
Fish and Wildlife Ser.
(CENTERED)

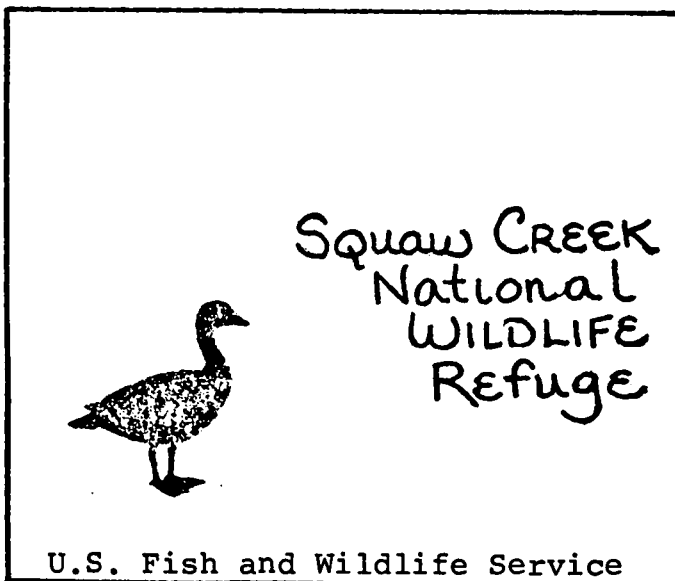
Sign No.
13



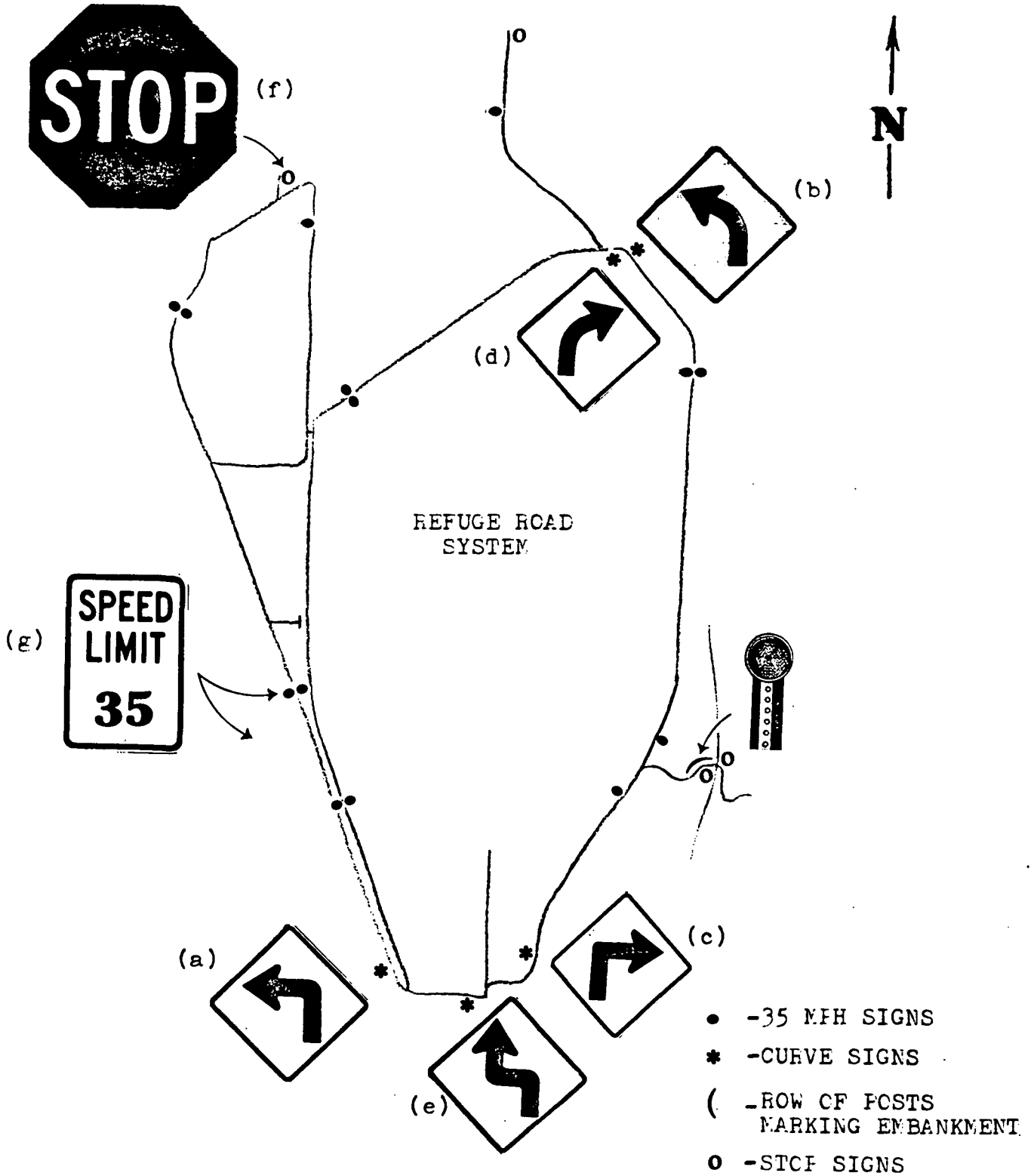
Refuge entrance sign illustration:

Size: 5'w x 5'l
Letter size: 6"
Silhouette: Snow goose
2½" LETTERS FOR U.S. FISH
AND WILDLIFE SERVICE
(CENTERED)

Sign No.
1 & 6



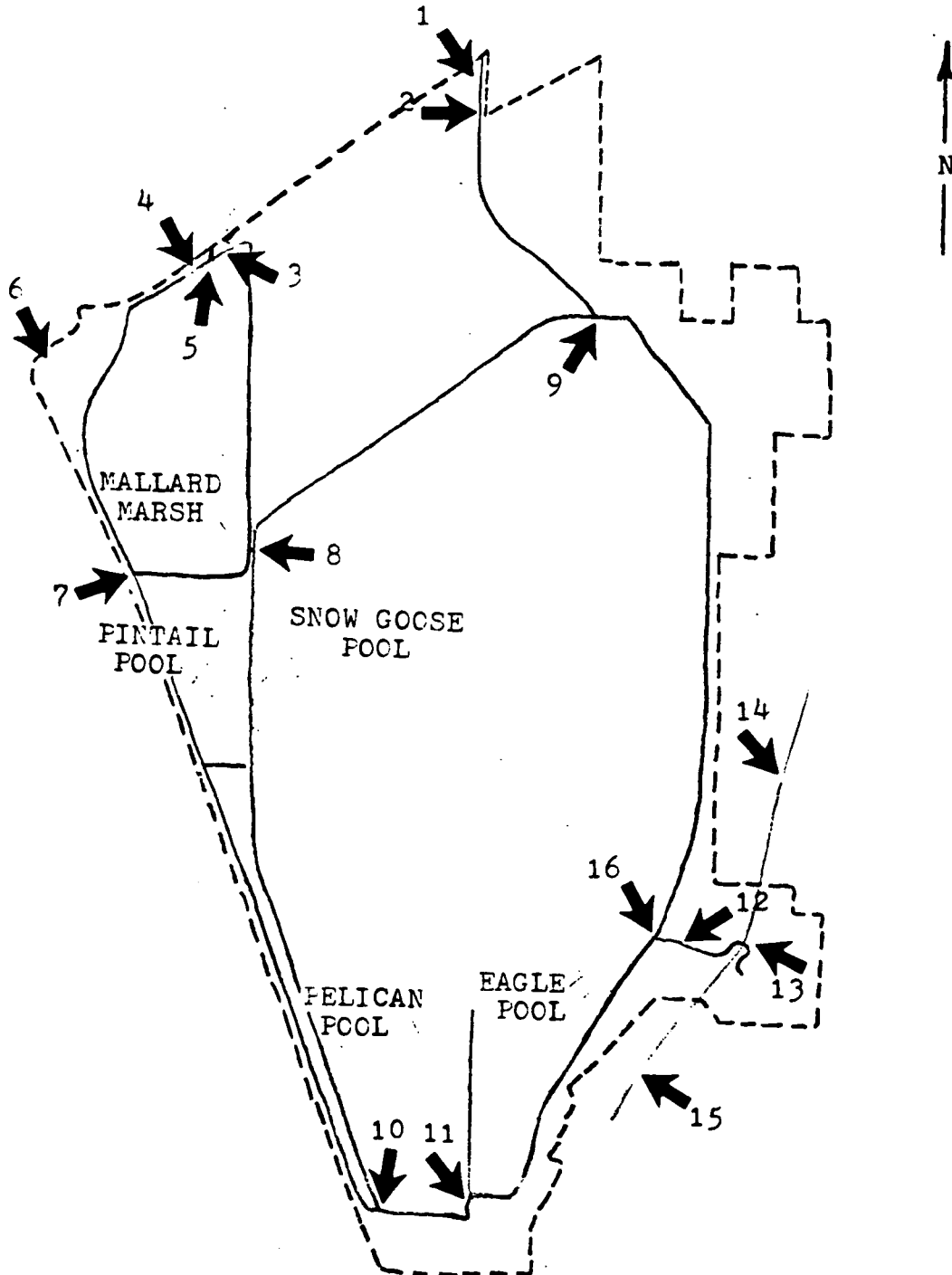
TRAFFIC CONTROL SIGNS (REGULATORY)
LOCATION MAP



SQUAW CREEK NATIONAL WILDLIFE REFUGE

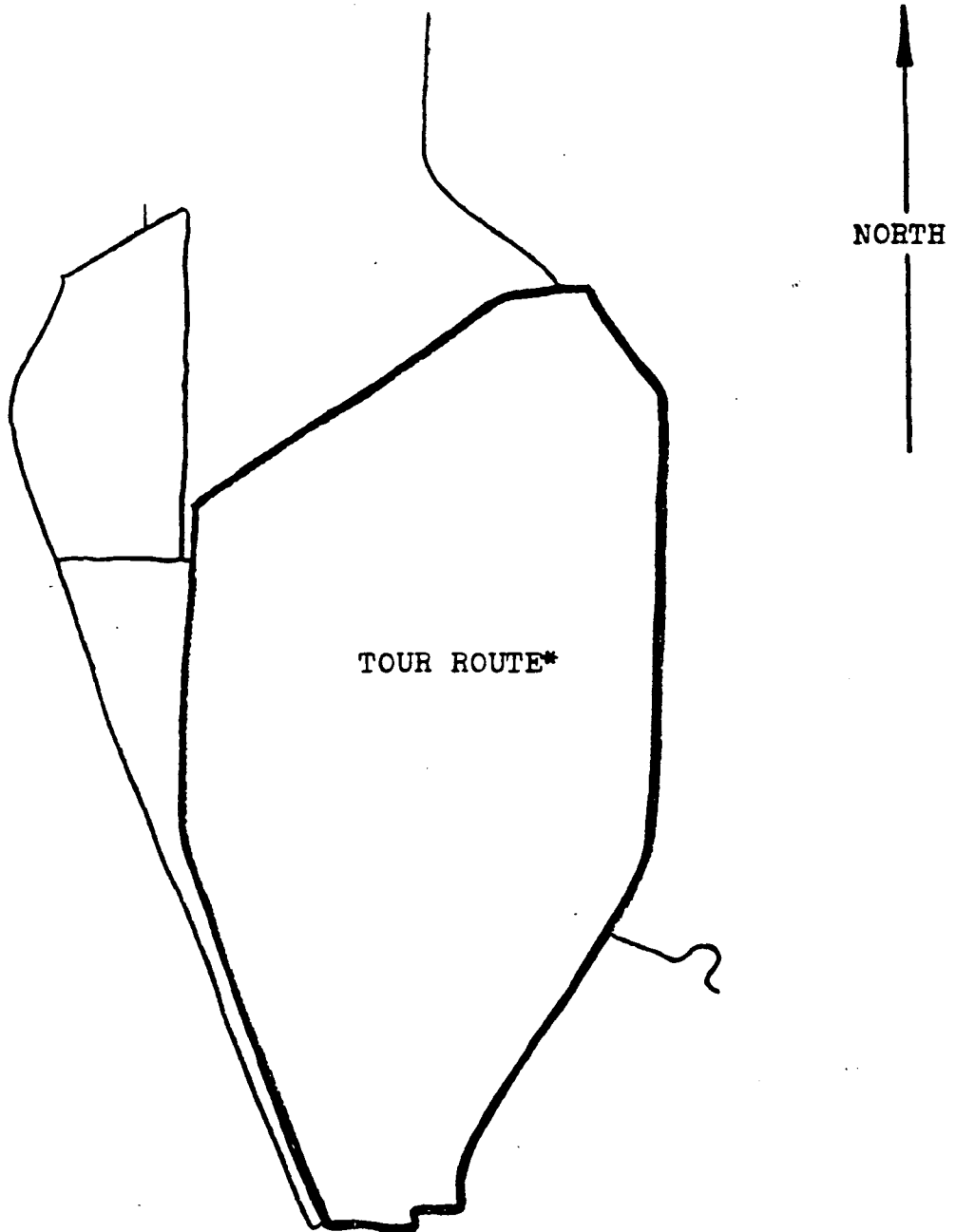
DIRECTIONAL & REGULATION SIGNING*

LOCATION MAP



SEE ATTACHED SHEET...

REFUGE ROAD SYSTEM.....THE "LOOP ROAD" TOUR ROUTE
(WILD GOOSE LOOP)



* MANY OF THE DIRECTIONAL SIGNS ILLUSTRATED IN THIS PLAN
ARE BASED ON THE MAIN TOURING ROAD OF THE REFUGE OR
"LOOP ROAD" TOUR ROUTE AS SHOWN IN GREEN ABOVE.
(WILD GOOSE
LOOP)

Squaw Creek National Wildlife Refuge

Sign Plan

Prepared By:

John Lusk

Submitted By:

B. A. Heck 1/17/78

Reviewed:

James W. Salzer - AHM-RW, KC AD 4/12/78

Carol A. Smith - Reg. Sign Coordinator. 5/30/78

Mawin L. Plenum BHP coordinator 6/5/78

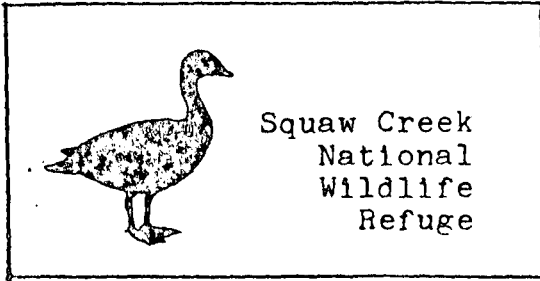
Approved:

Donald D. Wilson 6/5/78

Assistant Regional Director
Refuges & Wildlife

15N No.#

1. 6



Size: 5'w x 5'l
 Letter size: 6"
 Silhouette: Snow goose

SQUAW CREEK NATIONAL WILDLIFE REFUGE

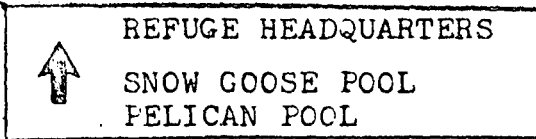
.12

PERMITTED	PROHIBITED
○ Fishing (in season)	⊘ Firearms
○ Wildlife Observation	⊘ Camping
○ Trail Walking	⊘ Littering
○ Pets On Leash	⊘ Collecting

OPEN DAILY SUNRISE TO SUNSET

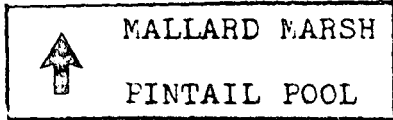
Letter size: 4"
 Letter size: 2½"
 Letter size: 2½"
 Total sign size ?
 ...appropriate symbols

3



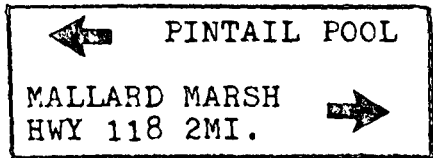
Size: 1'w x 3½'l
 Letter size: 2½"
 Arrow

4



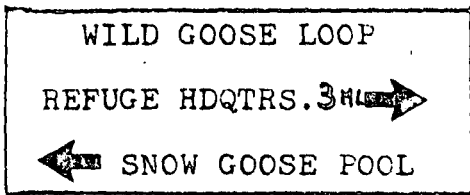
Size: 1'w x 3½'l
 Letter size: 2½"
 Arrow

7



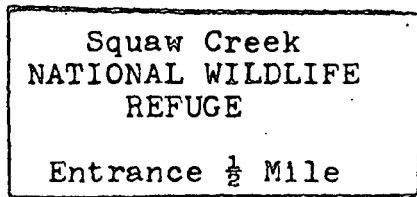
Size: 1½'w x 3½'l
 Letter size: 2½"
 2 Arrows

10



Size: 1½'w x 3½'l
 Letter size: 2½" except
 WILD GO...3" letters
 2 Arrows

.15



Size: 3'w x 5½'l
 Letter size: all 4" except
 Squaw Creek in 6" let

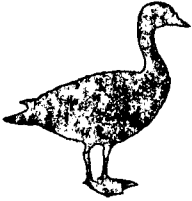
11

EAGLE OVERLOOK
 Walking distance 3/4 mi. →

Size: 1'w x 3 1/2'l
 Letter size: EAGLE O..= 4"
 Lower line of sign= 2 1/2"
 Arrow

13

Squaw Creek
 National
 Wildlife
 Refuge



Size: 4'w x 8'l
 Letter size: 7"
 Silhouette: Snow goose

16

WILD GOOSE LOOP
 Tour Route
 ← Distance 10 Mi.

Size: 1 1/2'w x 2 1/2'l
 Letter size: WILD GOOSE...
 all other wording= 2 1/2"
 Arrow

17

Area closed
 to public access
 October 1
 to April 15

Size: 1 1/2'w x 3'l
 Letter size: 2 1/2"

18

LOESS
 BLUFF
 TRAIL

Size: 2 1/2'w x 2'l
 Letter size: 4"

19

SQUAW CREEK
 VISITOR CENTER
 Hours:

Size: 2'w x 4 1/2'l
 Letter size: 4" except
 for Hours= 2 1/2"

27

Employees Only

4"w x 2'l 2 1/2" Letters

31

Headquarters

6"w x 4'l 4" Letters

32






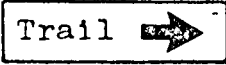



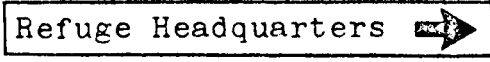
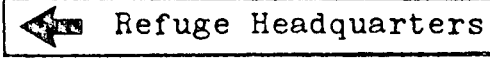




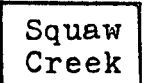
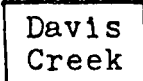
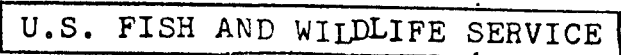
Information

4"w x 2'l 2 1/2" Letters

48

PELICAN
 POOL

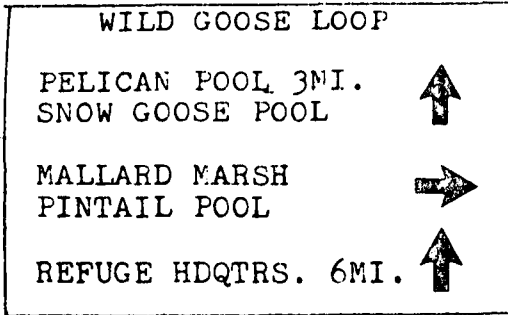
12"w x 18"l 2 1/2" Letters

28		ok	1'w x 16"l	2 1/2" Letters	
33		ok	1'w x 2'1	2 1/2" Letters	Arrow
34		ok	1'w x 2'1	2 1/2" Letters	Arrow
35		ok	10"w x 18"l	2 1/2" Letters	Arrow
36		ok	10"w x 18"l	2 1/2" Letters	Arrow
37		ok	4"w x 12"l	2 1/2" Letters	Arrow
38			Arrow only	8"w x 8"l	
39			Arrow only	8"w x 8"l	(Represents estimated size of sign with directional arrow on it)
40			Arrow only	8"w x 8"l	
41		ok	4" w x 30"l	2 1/2" Letters	Arrow
42			4" w x 30"l	2 1/2" Letters	Arrow
43			12"w x 18"l	2 1/2" Letters	
44			12"w x 12"l	2 1/2" Letters	
45			12"w x 18"l	2 1/2" Letters	
46			12"w x 18"l	2 1/2" Letters	
29			12"w x 12"l	2 1/2" Letters	
30			12"w x 12"l	2 1/2" Letters	
47				Size: ? 4" Letters	

Upper Induct Case

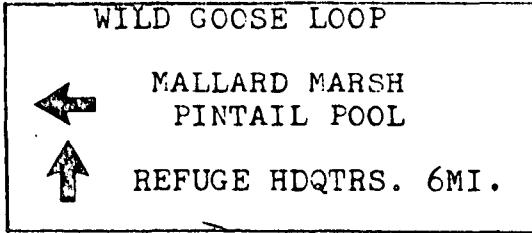
Silver Case

9a



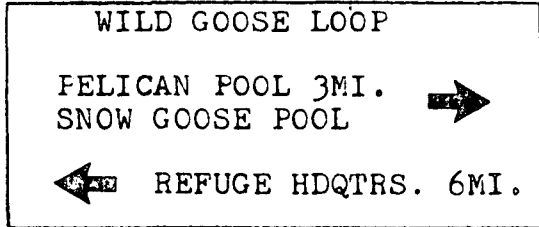
Size: 3'w x 3½'l
Letter size: 3" for
WILD GO... and 2
for rest of sign
3 Arrows

9b



Size: 2'w x 3½'l
Letter size: 3" for
WILD GO... and 2
for rest of sign
2 Arrows

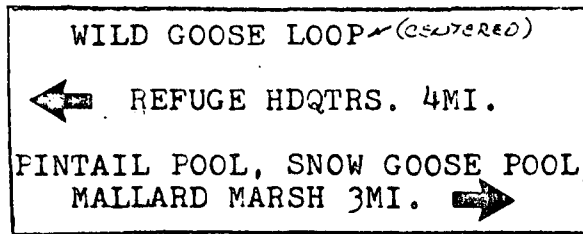
9c



Size: 2'w x 3½'l
Letter size: 3" for
WILD GO.. and 2
for rest of sign
2 Arrows

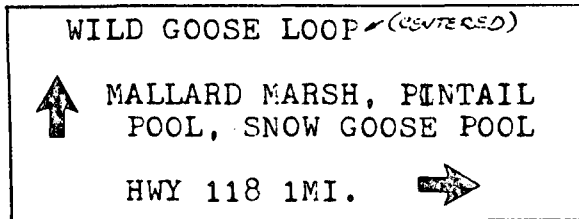
(Three signs displayed at this point, mounted in the shape of a "9" with sign 9a facing North, 9b East, and 9c West)

9a



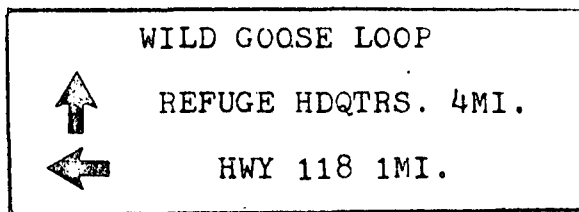
Size: 2'w x 3½'l
Letter size: 3" for
WILD GO... and
for rest of sign
2 Arrows (WORD POOL PROBABLY SECOND)

9b



Size: 2'w x 3½'l
Letter size: 3" for
WILD GO... and
for rest of sign
2 Arrows

9c



Size: 2'w x 3½'l
Letter size: 3" for
WILD GO... and
for rest of sign
2 Arrows

This page... All upper and lower case on all signs

Rules for Capitalization

1. Destinations are always spelled in upper and lower-case letters.
2. Directions are spelled in upper and lower-case letters, if they are the only message on the sign.
3. Directions are spelled in capital letters, if they occur together with destinations on the same sign.

In these instances, the letter size to be used for the capital letters of the direction is one size smaller than the letter size for the destination.

4. If a directional expression is part of a destination, it will be spelled in upper and lower-case letters.

IMPORTANT

All signs contained in this plan and illustrated on the following pages (excluding traffic control signs and interpretive signs) will have these characteristics:

- (a) All signs will display white reflective letters on brown background material.
- (b) Letter size varies but letter style will always be helvetica medium. Use of upper or lower case letters is carefully illustrated in individual sign drawings. Please refer to these guidelines when making up the actual sign.