

1997

Southwestern Willow Flycatcher
(*Empidonax traillii extimus*)
Report

Bryce Canyon National Park
Utah

February 8, 1998

Prepared by
Douglas Neighbor
Resource Management Specialist

Surveyors

Douglas Neighbor - Resource Management Specialist, National Park Service, Bryce Canyon National Park.

Bill Schreier - Natural Resource Specialist, T&E Coordinator NPS, Intermountain Support Office - Denver @ Bryce Canyon National Park.

Surveyors are authorized to conduct presence/absence population surveys as a subpermittee of USFWS Regional Blanket Permit PRT-704930 Endangered Species Subpermit 96-27 through December 15, 1997.

Introduction

In February 1995, the U.S. Fish and Wildlife Service designated the southwestern willow flycatcher (*Empidonax traillii extimus*) as an endangered species. The breeding population is estimated to be between 300 and 500 pairs. The southwestern willow flycatcher's breeding range within Utah is limited to the southern half of the state. The southwestern willow flycatcher breeds in dense riparian habitat near surface water or saturated soil.

Bryce Canyon National Park has several small riparian areas that meet the breeding range, elevation, plant species composition, and habitat structure parameters. In 1995, park staff delineated seven drainages as potential habitat. These drainages were Sheep Creek/Swamp Canyon, Yellow Creek, North Fork of Yellow Creek, Bryce Creek, Cambell Canyon, Pasture Wash, and the Mossy Cave area.

In 1995, a solitary southwestern willow flycatcher was located in Yellow Creek. In 1996, two southwestern willow flycatchers were located in Swamp Canyon and one southwestern willow flycatcher was located in Yellow Creek.

Methods

Surveyors attended required training approved by the U.S. Fish and Wildlife Service prior to conducting surveys. Surveys were conducted as per the Technical Report NPS/NAUCPRS/NRTR-97/12, *A Southwestern Willow Flycatcher Natural History Summary and Survey Protocol*.

Yellow Creek, Swamp Canyon, Bryce Creek and the Mossy Cave areas were surveyed. Bill Schreier and Doug Neighbor conducted the first survey of Yellow Creek and Swamp Canyon. The remaining surveys were conducted by Doug Neighbor. Surveys were conducted as per protocol with the exception that third survey at Yellow Creek and Swamp Canyon were conducted after 10 July.

Equipment used for broadcasting the southwestern willow flycatcher vocalization tape were a Sony Sports Walkman and a Radio Shack Musical Powerhorn fitted with an external plug. The powerhorn enabled surveyors to provide directional sound with the tape playback vocalization. Also, surveyors took precautions to ensure sound levels were similar to natural settings and were not distorted.

Identification of avian species present during surveys was ocularly and auricularly. Surveyor Bill Schreier utilized an electronic amplification listening device to detect and identify of avian species. Surveyor Doug Neighbor referenced the National Geographic Society, *Field Guide to the Birds of North America*, and Peterson Field Guides, *A Field Guide to Western Bird Songs* Compact Discs for identification of unknown avian species.

Results

No southwestern willow flycatchers were located in areas surveyed.

A cordilleran flycatcher (*Empidonax occidentalis*) was observed on May 23 and June 21 in Yellow Creek. The cordilleran flycatcher was located in the same area where southwestern willow flycatchers were observed in 1995 and 1996. Brown-headed cowbirds (*Molothrus ater*) were observed during the first two site visits. Two Cooper's hawks (*Accipiter cooperii*) were observed near the site during the third visit to Yellow Creek.

During the first Swamp Canyon site visit numerous Hammond's flycatchers (*Empidonax hammondi*) were observed throughout the survey area. Fewer Hammond's flycatchers were observed during the second visit, however brown-headed cowbirds were observed during this site visit. The Hammond's flycatchers were probably migrating through the area.

Mossy Cave and Bryce Creek were surveyed but no *Empidonax* flycatchers were observed or responded to the vocalization tape playback. Both areas have marginal habitat due to lack of suitable vegetation structure.

Recommendations for the Park

In the future, Yellow Creek and Swamp Canyon should be surveyed because of the presence of suitable habitat and southwestern willow flycatchers during previous surveys. Site visits should occur more frequently than protocol dictates. This would increase the chance of detection of southwestern willow flycatchers, particularly at the Swamp Canyon site due to the size of the survey area.

Mossy Cave and Bryce Creek do not warrant future surveys since both sites lack suitable habitat. Running water is present year round at the Mossy Cave site, however vegetation is lacking due to soil type and steepness of the slopes adjacent to the stream.

Additionally, vegetation is kept in a early successional stage an in smll clumps due to frequent flashfloods. Bryce Creek has unsuitable habitat due to the lack of water. Water does flow during Spring snow melt, however due to course materials (alluvium) in the streambed surface water dissappears underground in late Spring. Vegetation adjacent to the site consists primarily of pinyon, juniper, gambel oak, and ponderosa pine.

References

Sogge, Mark K., Robert M. Marshall, Susan J. Sferra, and Timothy J. Tibbitts. May 1997. *A Southwestern Willow Flycatcher Natural History Summary and Survey Protocol*. Technical report NPS/NAUCPRS/NRTR-97/12. National Park Service, Colorado Plateau Research Station at Northern Arizona University.

National Geographic Society. 1988. *Field Guide to the Birds of North America*, 2nd. ed. Washington D.C.: National Geographic Society.

Peterson Field Guide Series. *A Field Guide to Western Bird Songs*, 2nd. ed. Cornell Laboratory of Ornithology and Interactive Audio. Compact Discs.

Willow Flycatcher Survey and Detection Form (rev. 4/97)

Site Name YELLOW CREEK Was site surveyed in previous year? ☒ Yes ☐ No
 If yes, what site name was used? YELLOW CREEK

County GARFIELD State UT USGS Quad Name BRYCE POINT, UTAH

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? ☒ Yes ☐ No

Coordinates 4159140 N 398500 E Lat Long / Township-Range (UTM) (circle one)
 Elevation 6840 (feet) / meters (circle one)

**** Fill in additional site information on back of this page ****

Survey # Observer(s)	Date (m/d/y) Survey time	Number of WIFLs Found	Estimated Number of Pairs	Estimated Number of Territories	Nest(s) Found? Y or N	Cowbirds Detected? Y or N	Comments about this survey (e.g., evidence of pairs or breeding, number of nests, nest contents, potential threats, cowbird abundance, presence of livestock, etc.)
1 <u>BILL SCHREIER</u> <u>DOUG NEIGHBOR</u>	date <u>5/23/97</u> start <u>05:55</u> stop <u>08:40</u> total hrs <u>2.75</u>	NONE	NONE	NONE	N	Y	06:08 HEARD COOPERS HAWK 07:11 ♂ BROWN-HEADED COWBIRD 07:31 Possible Cordilleran Flycatcher 07:50 ♀ BROWN-HEADED COWBIRD 08:09 CORDILLERAN FLYCATCHER
2 <u>DOUG NEIGHBOR</u>	date <u>6/21/97</u> start <u>08:20</u> stop <u>11:00</u> total hrs <u>2.75</u>	NONE	NONE	NONE	N	Y	OBSERVED CORDILLERAN FLYCATCHER IN SAME AREA. OBSERVED SEVERAL BROWN-HEADED COWBIRDS COW TRACK WERE PRESENT
3 <u>DOUG NEIGHBOR</u>	date <u>7/18/97</u> start <u>08:50</u> stop <u>10:10</u> total hrs <u>1.25</u>	NONE	NONE	NONE	N	N	NO CORDILLERAN FLYCATCHERS AND NO BROWN-HEADED COWBIRDS. OBSERVED 2 COOPERS HAWKS
_____	date _____ start _____ stop _____ total hrs _____						
_____	date _____ start _____ stop _____ total hrs _____						
Overall Summary Total survey hrs <u>6.75</u>							Were any WIFLs color-banded? Yes ☐ No ☒ If yes, report color combination(s) in the comments section on back of form

Name of Reporting Individual DOUGLAS NEIGHBOR Date Report Completed 12/1/97

Submit the original of this form. Retain a copy for your records.

Fill in the following information completely. Submit original form. Retain copy for your records.

Name of Reporting Individual DOUGLAS NEIGHBOR Phone # (435) 834-4901
Affiliation BRYCE CANYON NATIONAL PARK Email doug-neighbor@nps.gov

Site Name YELLOW CREEK
Did you verify that this site name is consistent with that used in previous years? (Yes) No (circle one)

Management Authority for Survey Area (circle one): (Federal) Municipal/County State Tribal Private

Name of Management Entity or Owner (e.g., Tonto National Forest) BRYCE CANYON NATIONAL PARK

Length of area surveyed: 2080 m (specify units, e.g., miles = mi, kilometers = km, meters = m)

Did you survey the same general area during each visit to this site this year? (Yes) No If no, summarize in comments below.
If site was surveyed last year, did you survey the same general area this year? (Yes) No If no, summarize in comments below.

Vegetation Characteristics: Overall, are the species in tree/shrub layer at this site comprised predominantly of (check one):

- ☒ Native broadleaf plants (entirely or almost entirely) ☐ Mixed native and exotic plants (mostly native)
☐ Mixed native and exotic plants (mostly exotic) ☐ Exotic/introduced plants (entirely or almost entirely)

Identify the 2-3 predominant tree/shrub species: GAMBEL OAK (80%), WESTERN WATER BIRCH (20%)

Average height of canopy: 6 METERS (specify units)

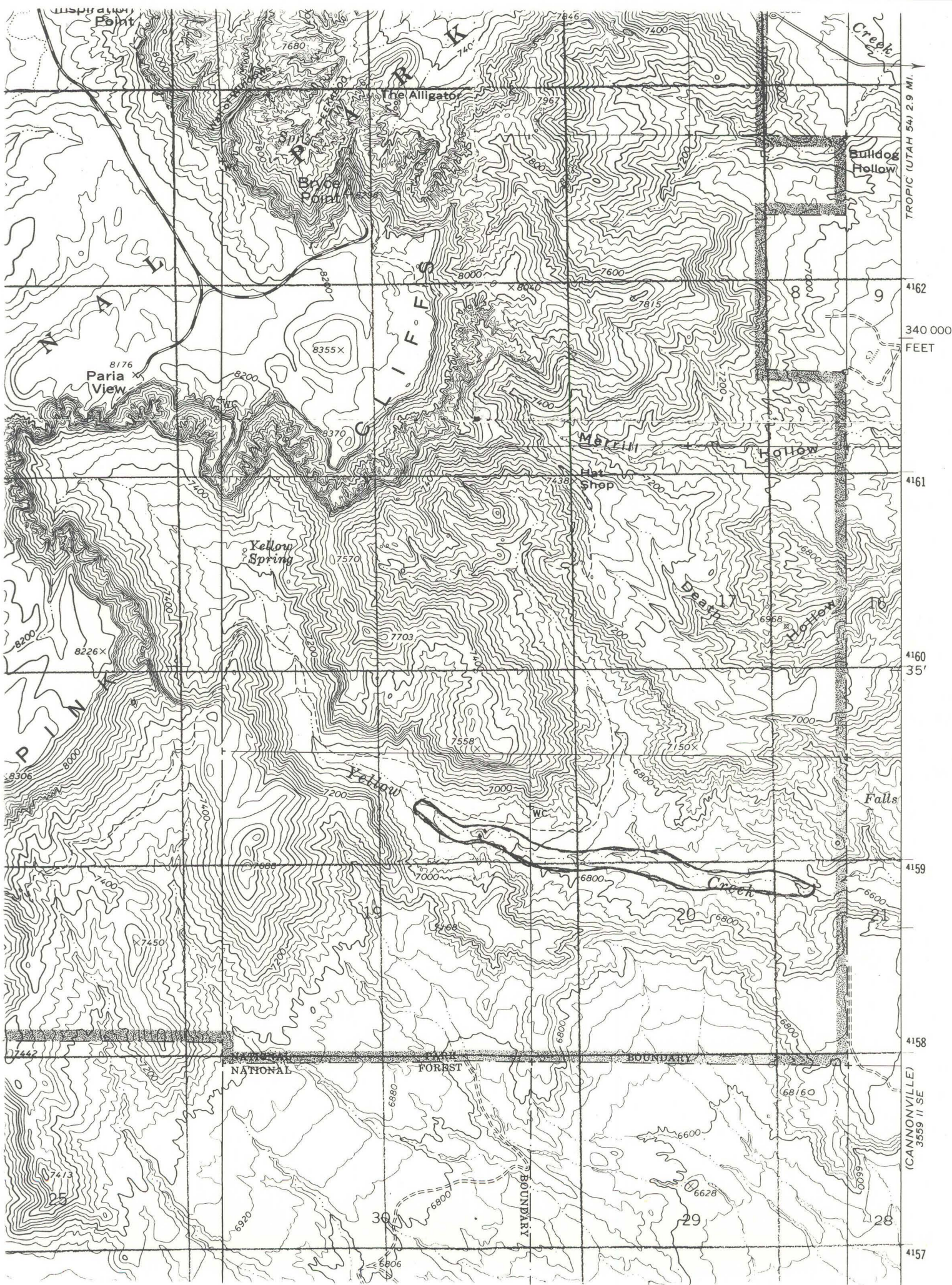
Was surface water or saturated soil present at or adjacent to site? (Yes) No (circle one)

Distance from the site to surface water or saturated soil: 3 METERS (specify units)

Did hydrological conditions change significantly among visits (did the site flood or dry out)? Yes (No) (circle one)
If yes, describe in comments section below.

Remember to attach a xerox copy of a USGS quad/topographical map (REQUIRED) of the survey area, noting the survey site and location of WIFL detections. You may also include a sketch or aerial photograph showing details of site location, patch shape, survey route in relation to patch, and location of any willow flycatchers or willow flycatcher nests detected. Such sketches or photographs are welcomed, but DO NOT substitute for the required USGS quad map.

Comments (attach additional sheets if necessary): LAST YEARS SURVEY HAD NO POSITIVE I.D. ON WILLOW FLYCATCHER. LAST YEARS SURVEY INDICATED THAT FLYCATCHER COULD BE A CORDILLERAN. POSITIVE I.D. AS CORDILLERAN FLYCATCHER IN THIS YEARS SURVEY.



TROPIC (UTAH SW) 2.9 MI.

340 000
FEET

(CANNONVILLE)
3559 11 SE

Willow Flycatcher Survey and Detection Form (rev. 4/97)

Site Name SWAMP CANYON Was site surveyed in previous year? ☒ Yes ☐ No
 If yes, what site name was used? SWAMP CANYON

County GARFIELD State UT USGS Quad Name BRYCE POINT, UTAH

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? ☒ Yes ☐ No

Coordinates 4159000 N 393700 E Lat Long / Township-Range / UTM (circle one)
 Elevation 7320 feet / meters (circle one)

**** Fill in additional site information on back of this page ****

Survey # Observer(s)	Date (m/d/y) Survey time	Number of WIFLs Found	Estimated Number of Pairs	Estimated Number of Territories	Nest(s) Found? Y or N	Cowbirds Detected? Y or N	Comments about this survey (e.g., evidence of pairs or breeding, number of nests, nest contents, potential threats, cowbird abundance, presence of livestock, etc.)
1 <u>BILL SCHRETER</u> <u>DOUG NEIGHBOR</u>	date <u>5/31/97</u> start <u>06:00</u> stop <u>10:00</u> total hrs <u>4</u>	NONE	NONE	NONE	N	Y	NUMEROUS HAMMOND'S FLYCATCHERS (14+) WERE HEARD AND OBSERVED THROUGHOUT ENTIRE SURVEY AREA
2 <u>DOUG NEIGHBOR</u>	date <u>6/20/97</u> start <u>08:15</u> stop <u>10:08</u> total hrs <u>1.75</u>	NONE	NONE	NONE	N	Y	FEWER HAMMOND'S FLYCATCHERS WERE OBSERVED THAN PREVIOUS SURVEY. 3 BROWN-HEADED COWBIRDS WERE OBSERVED
3 <u>DOUG NEIGHBOR</u>	date <u>7/19/97</u> start <u>0800</u> stop <u>10:15</u> total hrs <u>2.25</u>	NONE	NONE	NONE	N	N	NO FLYCATCHERS WERE OBSERVED.
	date _____ start _____ stop _____ total hrs _____						
	date _____ start _____ stop _____ total hrs _____						
Overall Summary							Were any WIFLs color-banded? Yes ☐ No ☒
Total survey hrs <u>7</u>							If yes, report color combination(s) in the comments section on back of form

Name of Reporting Individual DOUGLAS NEIGHBOR Date Report Completed 12/1/97

Submit the original of this form. Retain a copy for your records.

Fill in the following information completely. Submit original form. Retain copy for your records.

Name of Reporting Individual DOUGLAS NEIGHBOR Phone # (435) 834-4901
Affiliation BRYCE CANYON NATIONAL PARK Email doug-neighbor@nps.gov

Site Name SWAMP CANYON

Did you verify that this site name is consistent with that used in previous years? (Yes) No (circle one)

Management Authority for Survey Area (circle one): (Federal) Municipal/County State Tribal Private

Name of Management Entity or Owner (e.g., Tonto National Forest) BRYCE CANYON NATIONAL PARK

Length of area surveyed: 700 m (specify units, e.g., miles = mi, kilometers = km, meters = m)

Did you survey the same general area during each visit to this site this year? (Yes) No If no, summarize in comments below.
If site was surveyed last year, did you survey the same general area this year? (Yes) No If no, summarize in comments below.

Vegetation Characteristics: Overall, are the species in tree/shrub layer at this site comprised predominantly of (check one):

- ☒ Native broadleaf plants (entirely or almost entirely) ☐ Mixed native and exotic plants (mostly native)
☐ Mixed native and exotic plants (mostly exotic) ☐ Exotic/introduced plants (entirely or almost entirely)

Identify the 2-3 predominant tree/shrub species: NARROWLEAF WILLOW, RED-OSIER DOGWOOD

Average height of canopy: 4 METERS (specify units)

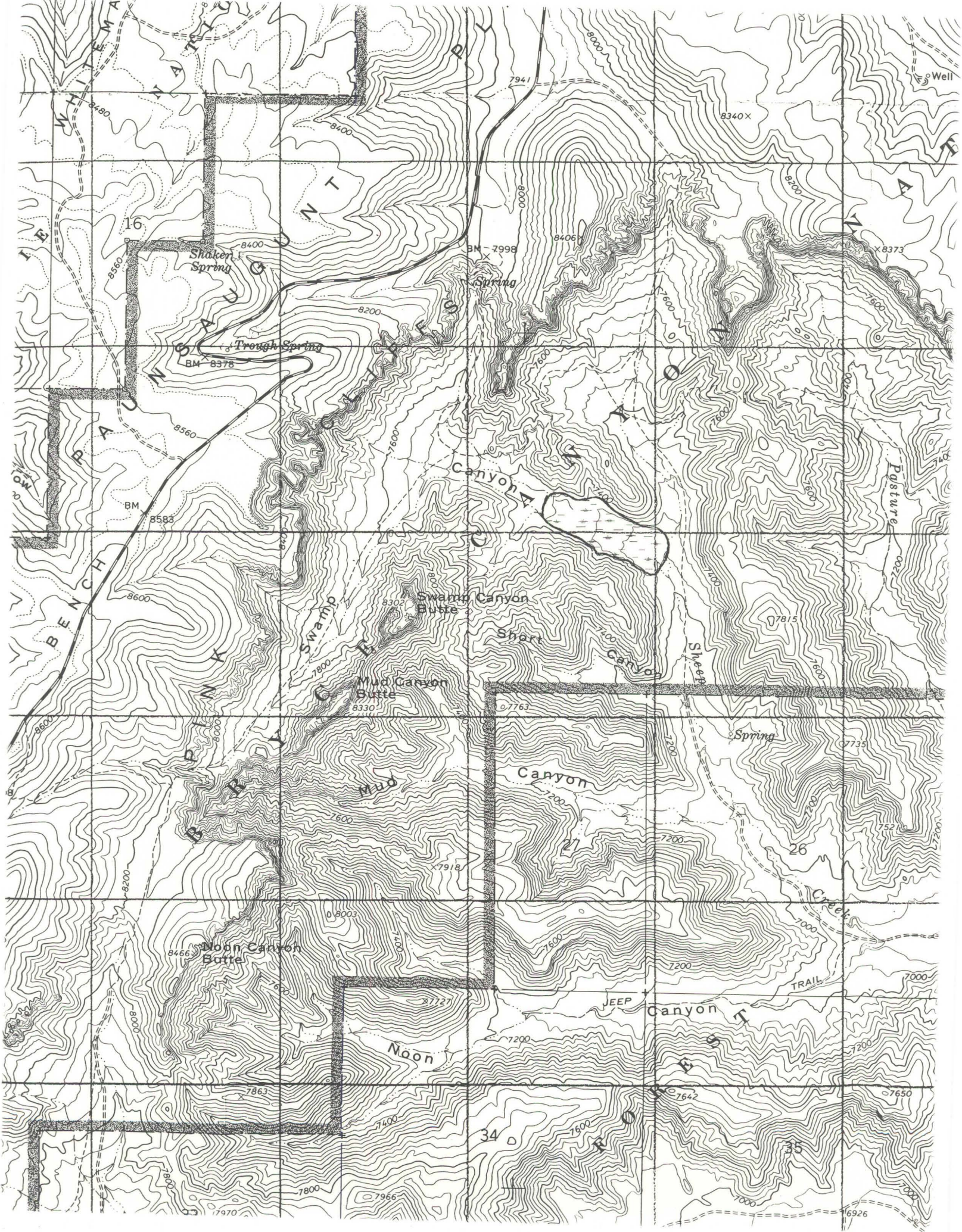
Was surface water or saturated soil present at or adjacent to site? (Yes) No (circle one)

Distance from the site to surface water or saturated soil: ENTIRE AREA (specify units)
WET

Did hydrological conditions change significantly among visits (did the site flood or dry out)? Yes (No) (circle one)
If yes, describe in comments section below.

Remember to attach a xerox copy of a USGS quad/topographical map (REQUIRED) of the survey area, noting the survey site and location of WIFL detections. You may also include a sketch or aerial photograph showing details of site location, patch shape, survey route in relation to patch, and location of any willow flycatchers or willow flycatcher nests detected. Such sketches or photographs are welcomed, but DO NOT substitute for the required USGS quad map.

Comments (attach additional sheets if necessary): NUMEROUS FLYCATCHERS UTILIZE
AREA. IT APPEARS AS THOUGH THE HAMMONDS FLYCATCHER WERE
MIGRATING THROUGH AREA. NO "FITZ-BEWS" WERE HEARD. THIS AREA
HAS THE HIGHEST POTENTIAL FOR SUITABLE HABITAT WITHIN THE
PARK. LAST YEAR WILLOW FLYCATCHERS WERE OBSERVED HERE LAST
YEAR.



Willow Flycatcher Survey and Detection Form (rev. 4/97)

Site Name MOSSY CAVE Was site surveyed in previous year? ☒ Yes ☐ No
 If yes, what site name was used? MOSSY CAVE

County GARFIELD State UT USGS Quad Name TROPIC CANYON, UTAH

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? ☒ Yes ☐ No

Coordinates 4168920 N 401800 E Lat Long / Township-Range UTM (circle one)
 Elevation 6920 (feet) / meters (circle one)

**** Fill in additional site information on back of this page ****

Survey # Observer(s)	Date (m/d/y) Survey time	Number of WIFLs Found	Estimated Number of Pairs	Estimated Number of Territories	Nest(s) Found? Y or N	Cowbirds Detected? Y or N	Comments about this survey (e.g., evidence of pairs or breeding, number of nests, nest contents, potential threats, cowbird abundance, presence of livestock, etc.)
1 <u>DOUG NEIGHBOR</u>	date <u>5/30/97</u> start <u>08:40</u> stop <u>09:50</u> total hrs <u>1.1</u>	<u>NONE</u>	<u>NONE</u>	<u>NONE</u>	<u>N</u>	<u>N</u>	<u>VERY FEW BIRDS WERE PRESENT DURING SURVEY.</u>
2 <u>DOUG NEIGHBOR</u>	date <u>6/6/97</u> start <u>07:10</u> stop <u>08:20</u> total hrs <u>1.1</u>	<u>NONE</u>	<u>NONE</u>	<u>NONE</u>	<u>N</u>	<u>N</u>	<u>HABITAT IS NOT SUITABLE FOR WILLOW FLYCATCHERS DUE TO LACK OF SUITABLE VEG. STRUCTURE</u>
3 <u>DOUG NEIGHBOR</u>	date <u>6/25/97</u> start <u>08:00</u> stop <u>08:40</u> total hrs <u>0.8</u>	<u>NONE</u>	<u>NONE</u>	<u>NONE</u>	<u>N</u>	<u>N</u>	
	date _____ start _____ stop _____ total hrs _____						
	date _____ start _____ stop _____ total hrs _____						
Overall Summary							Were any WIFLs color-banded? Yes ☐ No ☒
Total survey hrs <u>3.0</u>							If yes, report color combination(s) in the comments section on back of form

Name of Reporting Individual DOUGLAS NEIGHBOR Date Report Completed 12/1/97

Submit the original of this form. Retain a copy for your records.

Fill in the following information completely. Submit original form. Retain copy for your records.

Name of Reporting Individual DOUGLAS NEIGHBOR Phone # (435) 834-4901
Affiliation BRYCE CANYON NATIONAL PARK Email doug-neighbor@nps.gov

Site Name MOSSY CAVE
Did you verify that this site name is consistent with that used in previous years? ☒ Yes ☐ No (circle one)

Management Authority for Survey Area (circle one): ☒ Federal ☐ Municipal/County ☐ State ☐ Tribal ☐ Private

Name of Management Entity or Owner (e.g., Tonto National Forest) BRYCE CANYON NATIONAL PARK

Length of area surveyed: 430m (specify units, e.g., miles = mi, kilometers = km, meters = m)

Did you survey the same general area during each visit to this site this year? ☒ Yes ☐ No If no, summarize in comments below.
If site was surveyed last year, did you survey the same general area this year? ☒ Yes ☐ No If no, summarize in comments below.

Vegetation Characteristics: Overall, are the species in tree/shrub layer at this site comprised predominantly of (check one):

- ☒ Native broadleaf plants (entirely or almost entirely) ☐ Mixed native and exotic plants (mostly native)
☐ Mixed native and exotic plants (mostly exotic) ☐ Exotic/introduced plants (entirely or almost entirely)

Identify the 2-3 predominant tree/shrub species: NARROWLEAF WILLOW (VERY SCATTERED)

Average height of canopy: 2.5 METERS (specify units)

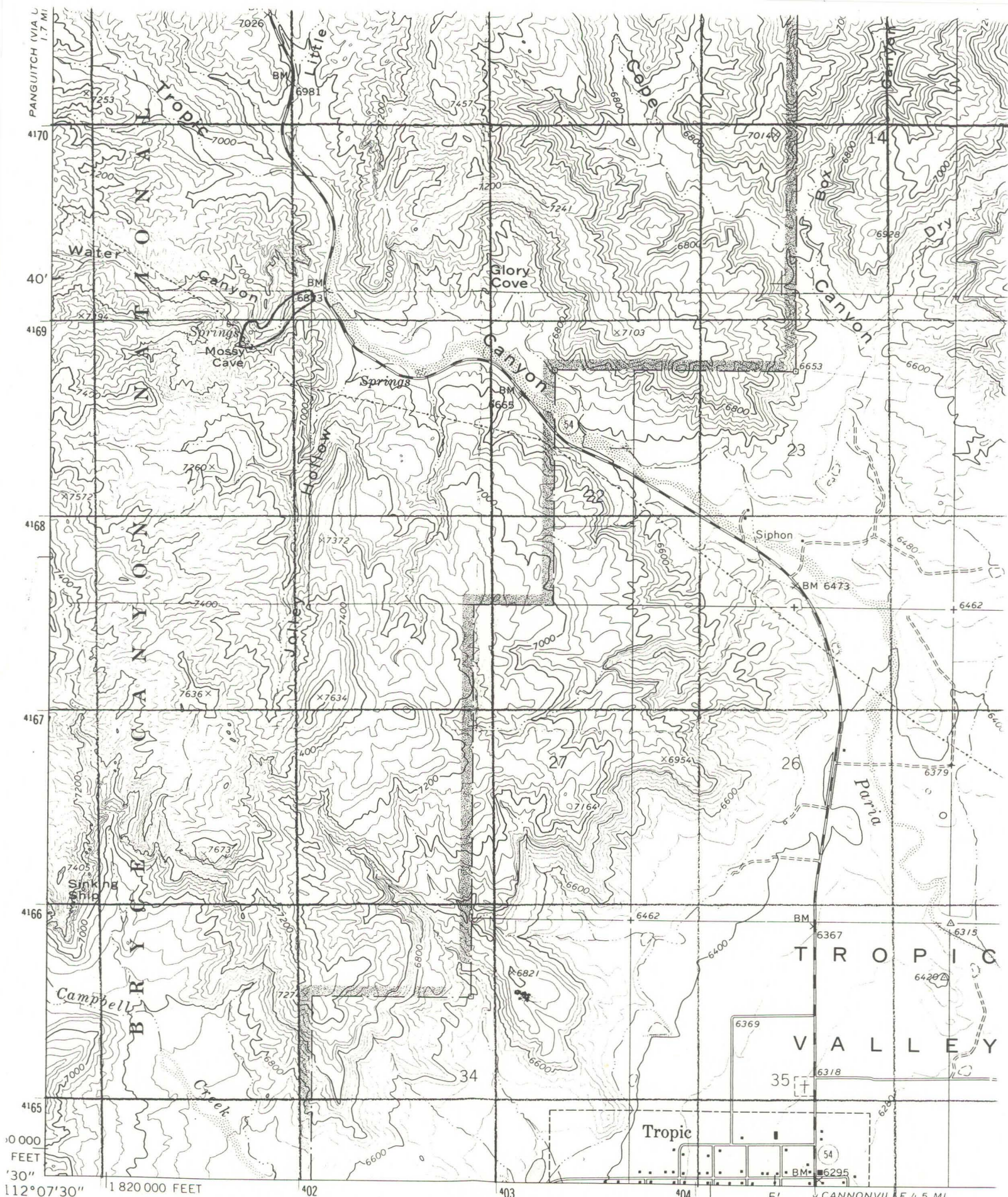
Was surface water or saturated soil present at or adjacent to site? ☒ Yes ☐ No (circle one)

Distance from the site to surface water or saturated soil: 3 METERS (specify units)

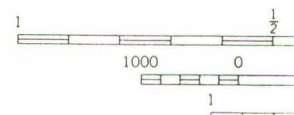
Did hydrological conditions change significantly among visits (did the site flood or dry out)? Yes ☒ No ☐ (circle one)
If yes, describe in comments section below.

Remember to attach a xerox copy of a USGS quad/topographical map (REQUIRED) of the survey area, noting the survey site and location of WIFL detections. You may also include a sketch or aerial photograph showing details of site location, patch shape, survey route in relation to patch, and location of any willow flycatchers or willow flycatcher nests detected. Such sketches or photographs are welcomed, but DO NOT substitute for the required USGS quad map.

Comments (attach additional sheets if necessary): HABITAT IS NOT SUITABLE FOR SW
WILLOW FLYCATCHERS DUE TO SIZE OF WILLOW VEGETATION.
STEEP, NARROW CANYON AND FREQUENT FLOODING PREVENTS
ADEQUATE VEGETATION STRUCTURE FROM FORMING.



Mapped, edited, and published by the Geological Survey
 Control by USGS and USC&GS
 Topography by photogrammetric methods from aerial
 photographs taken 1963. Field checked 1966



Willow Flycatcher Survey and Detection Form (rev. 4/97)

Site Name BRYCE CREEK Was site surveyed in previous year? ☒ Yes ☐ No
 If yes, what site name was used? BRYCE CREEK

County GARFIELD State UT USGS Quad Name BRYCE POINT, UTAH

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? ☒ Yes ☐ No

Coordinates 4163700 N 400010 E Lat Long / Township-Range / UTM (circle one)
 Elevation 6920 (feet) / meters (circle one)

**** Fill in additional site information on back of this page ****

Survey # Observer(s)	Date (m/d/y) Survey time	Number of WIFLs Found	Estimated Number of Pairs	Estimated Number of Territories	Nest(s) Found? Y or N	Cowbirds Detected? Y or N	Comments about this survey (e.g., evidence of pairs or breeding, number of nests, nest contents, potential threats, cowbird abundance, presence of livestock, etc.)
1 <u>DOUG NEIGHBOR</u>	date <u>5/30/97</u> start <u>06:00</u> stop <u>08:20</u> total hrs <u>2.25</u>	<u>NONE</u>	<u>NONE</u>	<u>NONE</u>	<u>N</u>	<u>N</u>	<u>HABITAT IS MARGINAL DUE TO VEGETATION STRUCTURE. DRY STREAM BED</u>
2 <u>DOUG NEIGHBOR</u>	date <u>6/6/97</u> start <u>08:40</u> stop <u>10:00</u> total hrs <u>1.25</u>	<u>NONE</u>	<u>NONE</u>	<u>NONE</u>	<u>N</u>	<u>N</u>	
3 <u>DOUG NEIGHBOR</u>	date <u>6/25/97</u> start <u>09:00</u> stop <u>09:40</u> total hrs <u>0.8</u>	<u>NONE</u>	<u>NONE</u>	<u>NONE</u>	<u>N</u>	<u>N</u>	
	date _____ start _____ stop _____ total hrs _____						
	date _____ start _____ stop _____ total hrs _____						
Overall Summary							Were any WIFLs color-banded? Yes ☐ No ☒
Total survey hrs <u>4.3</u>							If yes, report color combination(s) in the comments section on back of form

Name of Reporting Individual DOUGLAS NEIGHBOR Date Report Completed 12/1/97

Submit the original of this form. Retain a copy for your records.

Fill in the following information completely. Submit original form. Retain copy for your records.

Name of Reporting Individual DOUGLAS NEIGHBOR Phone # (435) 834-4901
Affiliation BRYCE CANYON NATIONAL PARK Email doug-neighbor@nps.gov

Site Name BRYCE CREEK

Did you verify that this site name is consistent with that used in previous years? (Yes) No (circle one)

Management Authority for Survey Area (circle one): (Federal) Municipal/County State Tribal Private

Name of Management Entity or Owner (e.g., Tonto National Forest) BRYCE CANYON NATIONAL PARK

Length of area surveyed: 670 m (specify units, e.g., miles = mi, kilometers = km, meters = m)

Did you survey the same general area during each visit to this site this year? (Yes) No If no, summarize in comments below.
If site was surveyed last year, did you survey the same general area this year? (Yes) No If no, summarize in comments below.

Vegetation Characteristics: Overall, are the species in tree/shrub layer at this site comprised predominantly of (check one):

- ☐ Native broadleaf plants (entirely or almost entirely) ☒ Mixed native and exotic plants (mostly native)
☐ Mixed native and exotic plants (mostly exotic) ☐ Exotic/introduced plants (entirely or almost entirely)

Identify the 2-3 predominant tree/shrub species: DOGWOOD, RUSSIAN OLIVE

Average height of canopy: 6-8 METERS (specify units)

Was surface water or saturated soil present at or adjacent to site? Yes (No) (circle one)

Distance from the site to surface water or saturated soil: N/A (specify units) CREEK NOT FLOWING

Did hydrological conditions change significantly among visits (did the site flood or dry out)? Yes No (circle one)

If yes, describe in comments section below.

Remember to attach a xerox copy of a USGS quad/topographical map (REQUIRED) of the survey area, noting the survey site and location of WIFL detections. You may also include a sketch or aerial photograph showing details of site location, patch shape, survey route in relation to patch, and location of any willow flycatchers or willow flycatcher nests detected. Such sketches or photographs are welcomed, but DO NOT substitute for the required USGS quad map.

Comments (attach additional sheets if necessary): MARGINAL HABITAT DUE TO VEGETATION STRUCTURE.

BRYCE POINT QUADRANGLE
UTAH

7.5 MINUTE SERIES (TOPOGRAPHIC)

3559 II NE
TROPIC CA.

UTAH 54 & 22
N LODGE 0.2 MI.

R 4 W 10'

R 3 W

1810 000 FEET

399

400

112°07'30"

37°37'30"



TROPIC (UTAH 54) 2.9 MI.

4162
340 000
FEET

4161

4160
35'

4159



DEPARTMENT OF THE INTERIOR
U.S. FISH AND WILDLIFE SERVICE

AMENDMENT# 4

3-201
(10/86)

FEDERAL FISH AND WILDLIFE PERMIT

1. PERMITTEE

FISH & WILDLIFE SERVICE, REGION 6
GARD's - COKANUT, MT/WY, & ND/SD
P.O. BOX 25486, DFC
DENVER CO 80225

2. AUTHORITY-STATUTES

16 USC 1539 (a)
16 USC 1533 (d)

REGULATIONS (Attached)

50 CFR 17.22
50 CFR 17.32

3. NUMBER PRT-704930

4. RENEWABLE

☒ YES
☐ NO

5. MAY COPY

☒ YES
☐ NO

6. EFFECTIVE

3/ 1/95

7. EXPIRES

3/31/98

8. NAME AND TITLE OF PRINCIPAL OFFICER (If #1 is a business)

JOE WEBSTER,
PAUL GERTLER, SKIP LADD

9. TYPE OF PERMIT

ENDANGERED/THREATENED SPECIES

10. LOCATION WHERE AUTHORIZED ACTIVITY MAY BE CONDUCTED

REGION 6

11. CONDITIONS AND AUTHORIZATIONS:

A. GENERAL CONDITIONS SET OUT IN SUBPART D OF 50 CFR 13, AND SPECIFIC CONDITIONS CONTAINED IN FEDERAL REGULATIONS CITED IN BLOCK #2 ABOVE, ARE HEREBY MADE A PART OF THIS PERMIT. ALL ACTIVITIES AUTHORIZED HEREIN MUST BE CARRIED OUT IN ACCORD WITH AND FOR THE PURPOSES DESCRIBED IN THE APPLICATION SUBMITTED. CONTINUED VALIDITY, OR RENEWAL, OF THIS PERMIT IS SUBJECT TO COMPLETE AND TIMELY COMPLIANCE WITH ALL APPLICABLE CONDITIONS, INCLUDING THE FILING OF ALL REQUIRED INFORMATION AND REPORTS.

B. THE VALIDITY OF THIS PERMIT IS ALSO CONDITIONED UPON STRICT OBSERVANCE OF ALL APPLICABLE FOREIGN, STATE, LOCAL OR OTHER FEDERAL LAW.

C. VALID FOR USE BY PERMITTEE NAMED ABOVE.

And any other person(s) under the direct control of, employed by or under contract to the permittee only to the extent necessary in accomplishing the purpose authorized in this permit.

D. Acceptance of this permit serves as evidence that the permittee understands and agrees to abide by the "Special Conditions for Marine Mammals and Native Endangered and Threatened Species" (copy attached).

E. Permittee is authorized to take listed species identified on the attached sheet for scientific purposes or the enhancement of propagation or survival for approved recovery activities and as conditioned below.

...Continued...

☐ ADDITIONAL CONDITIONS AND AUTHORIZATIONS ON REVERSE ALSO APPLY

12. REPORTING REQUIREMENTS

FIRST ANNUAL REPORT DUE 1/31/96
SUBMIT COMPLETE REPORT TO: AD/ES, 4001 N. FAIRFAX DR., RM. 400
ARLINGTON, VA 22203, BY 1/31 FOLLOWING EA YR PERMIT IS IN EFFECT

ISSUED BY

Terry Terrell

DEPUTY

TITLE REGIONAL DIRECTOR, REGION 6

DATE

3/ 1/95

ORIGINAL

F. Prior to conducting any activities not excluded under the Service's NEPA categorical exclusions (516 DM 6, Appendix I) the permittee must ensure that all NEPA requirements have been satisfied.

G. Permittee must monitor each action taken under this permit to assure that the limits specified in each subpermit are not exceeded and that research efforts and handling of individual species is not duplicated by overlapping research.

H. This permit is conditioned upon all applicable policy and guidance..

I. Subpermittee's must be designated in writing.

J. Subpermittee's must be required to hold and transport living specimens captured in the wild according to the provisions and procedures outlined in professionally established protocols for the handling and transport of the affected species.

K. Procedures must be instituted to ensure that disease transmission does not occur during tissue sampling or other invasive procedures and that such activities are only performed by persons skilled in the techniques of handling the affected species.

L. The permittee must ensure that all appropriate Section 7 consultation requirements have been completed prior to initiating any otherwise permitted activities and that no

action taken under this permit will violate subsection 7(a)(2) of the U.S. Endangered Species Act.

M. The Assistant Regional Director of Law Enforcement, Region 6, will make the final determination on the disposition of any threatened or endangered species accidentally taken under authority of this permit.

N. Permittee, or designee(s), shall submit an annual report to AD/ES, 4401 N. Fairfax Drive, Room 400, Arlington, Virginia 22203.

Joe Webster, COKANUT
Paul Gertler, MT/WY
Skip Ladd, ND/SD

Endangered/Threatened Species
PRT-704930



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Mountain-Prairie Region

IN REPLY REFER TO:

FWS/R6
ES/TE/Permit
Subpermit 96-27
CO/KS/NE/UT

MAILING ADDRESS:
Post Office Box 25486
Denver Federal Center
Denver, Colorado 80225-0486

STREET LOCATION:
134 Union Blvd.
Lakewood, Colorado 80228-1807

JUN 25 1996

Memorandum

To: William J. Schreier, Colorado Plateau System Support Office,
National Park Service, Bryce Canyon National Park, Utah

From: Assistant Regional Director, Colorado/Kansas/Utah/Nebraska

Subject: Authorization for Use of Regional Blanket Permit PRT-704930

This memorandum authorizes you and designated members of your staff, as subpermittees (subpermit 96-27) under the authority of permit PRT-704930, to conduct the following activities for the purpose of scientific research through December 15, 1997, under the following conditions:

1. Conduct presence/absence surveys for the southwestern willow flycatcher (Empidonax traillii extimus) in Mesa Verde National Park, Black Canyon of the Gunnison National Monument, and Curencanti National Recreation Area, Colorado; and Canyonlands, Capitol Reef, Bryce Canyon, and Zion National Parks, and Glen Canyon National Recreation Area, Utah. All surveys shall be conducted according to the following protocol or subsequent revisions:

Tibbitts, T.J., M.K. Sogge, and S.J. Sferra. 1994. A Survey Protocol for the Southwestern Willow Flycatcher (Empidonax traillii extimus). Technical Report NPS/NAUCPRA/NRTR-94/04. National Park Service, Colorado Plateau Research Station, Flagstaff, Arizona.

- a. Southwestern willow flycatcher survey protocol training must be completed prior to conducting surveys.
- b. If a singing or territorial willow flycatcher is located, you may observe the bird from a distance to detect nesting activity. You are not authorized to approach nesting birds or suspected nests.

- c. If southwestern willow flycatcher breeding territories or nest sites are confirmed, immediately notify the appropriate Fish and Wildlife Service's (Service) Ecological Services Office of the number of birds and locations of territories and/or nest sites.
1. In Colorado, contact the Assistant Field Supervisor at 764 Horizon Drive, South Annex A, Grand Junction, Colorado, 81506, telephone (970) 243-2778, facsimile (970) 245-6933.
 2. In Utah, contact the Field Supervisor at Lincoln Plaza, Suite 404, 145 East, 1300 South, Salt Lake City, Utah, 84115, telephone (801) 524-5001, facsimile (801) 524-5021.
- d. No capture, handling, banding, or collection of genetic materials (blood, tissues, feathers, etc.) from any southwestern willow flycatchers observed is authorized.
2. Acquire quantitative measurements of habitat containing nest sites. Measurements should include nesting substrate, nest height and placement, distance to water, canopy cover, and foliage volume. Contact the Service representative within your State (see addresses above) prior to conducting habitat measurements to discuss appropriate methodologies. All habitat measurements must be conducted after the breeding season (August 15) but prior to leaf drop.

Coverage under this subpermit is provisional under the following restrictions:

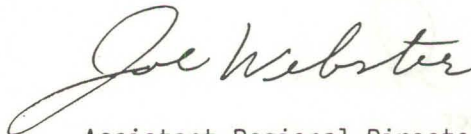
1. You will obtain the required permits and conduct your activities in compliance with all the laws and regulations of the State of Colorado and Utah and those Federal and tribal agencies upon whose lands you work. This subpermit does not grant the right to trespass. Such permission to enter and work on lands (e.g., adjacent to Park Service lands) must be obtained from private landowners or the land management agency.
2. All activities will be coordinated with the appropriate Field Supervisor/Assistant Field Supervisor (see addresses above). You are to inform that office of all activities conducted under this subpermit.
3. Any threatened or endangered species that is accidentally killed (taken) while conducting activities authorized by this subpermit must be reported within 24 hours to the appropriate Field Supervisor/Assistant Field Supervisor (see addresses above). Species and/or the parts of species that are taken remain the property of the Service. If the disposal of species is not identified in the above conditions, the Service's Assistant Regional Director, Law Enforcement, P.O. Box 25486, Denver Federal Center, Denver, Colorado, 80225.

telephone (303) 236-7540, will make the final determination on disposition of any threatened or endangered species taken during authorized activities.

4. If you wish to continue work with endangered or threatened species after expiration of this subpermit, your request for subpermit renewal must be received by the Assistant Field Supervisor, Grand Junction, Colorado (see address above) on or before November 15, 1997. Meeting this requirement allows you to continue authorized activities until your renewal application is acted upon. If this requirement is not met, the subpermit becomes invalid on the date of expiration. You may appeal any permit modification if you believe it is unacceptable. The Code of Federal Regulations, Title 50, Section 13.32, appeal procedure is attached for your guidance. Any new activities or changes in activities with threatened or endangered species will require that your subpermit be amended. You are not authorized to conduct any new activities or to change any permitted activities until you have requested and have received a new or an amended subpermit.
5. Annual reports of all activities conducted under the authority of this subpermit must be submitted to the appropriate Field Supervisor/Assistant Field Supervisor (see addresses above) by December 31, 1996, and December 31, 1997. Failure to submit annual reports will invalidate this subpermit. Your reports should include complete accounts of all activities conducted under this subpermit. A renewal request will not be processed until the reports are received.
6. A copy of permit PRT-704930 is attached; the conditions of this permit must be adhered to. This memorandum and the attached copy of permit PRT-704930 must be in your possession, or in the possession of designated members of your staff, while conducting all authorized activities.

Please reference subpermit 96-27 when submitting renewal requests and activity reports. If you have any questions about this authorization or need additional information, please contact the appropriate Field Supervisor/Assistant Field Supervisor (see addresses above).

Sincerely,



Assistant Regional Director
Colorado/Kansas/Nebraska/Utah

Attachments

United States Department of the Interior
NATIONAL PARK SERVICE

INTERMOUNTAIN REGION
Intermountain Support Office
Satellite Office @
Post Office Box 170001
Bryce Canyon, Utah 84717
(435)834-4108 FAX:(435)834-4102

IN REPLY REFER TO:

October 30, 1997

Utah Field Supervisor
U. S. Fish and Wildlife Service
Lincoln Plaza, Suite 404
145 E. 1300 S.
Salt Lake City, UT 84115
Attn: Ted Owens

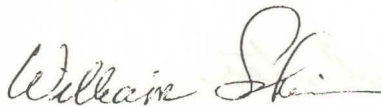
Pursuant to the conditions of Subpermit 96-27, the following is the 1997 seasonal survey results for southwestern willow flycatcher (*Empidonax trailii extimus*) in eight National Park Service units in both Utah and Colorado.

Under the authority of this subpermit presence/absence surveys were conducted for southwestern willow flycatcher endangered species only within the boundaries of Bryce Canyon National Park. No surveys were conducted in the other seven of the authorized parks under the subpermit. All surveys and detection methodology in Bryce Canyon National Park were conducted by Doug Neighbor and/or William Schreier and in compliance with USFWS subpermit (96-27) issued to William Schreier, Natural Resource Specialist, National Park Service. Data sheets for 1997 are available from Bryce Canyon National Park, Doug Neighbor, (435)834-4901.

Surveys are planned in 1998 in Bryce Canyon NP, Capitol Reef NP, Glen Canyon NRA, and Colorado NM. Personnel from these parks have attended the required training.

I hope you find this information useful for your coordination efforts. If you have any questions please feel free to contact me at the above number.

Sincerely,



William Schreier
Natural Resource Specialist, Intermountain Support Office @ Bryce Canyon