ARO-ANVR / RFN 1419.1

ANNOTATED BIRD OBSERVATIONS
ANIAKCHAK COAST
JUNE 17 - AUGUST 30, 1988
FRANK AND PENNY STARR

Considering the extremely variable conditions of our work, we feel the terms "rare, occasional, uncommon, common and abundant" are objectively indefinable; we, therefore, will use them in a subjective sense.

Common Loon	Rare	Seen singly on two separate occasions.
Red-throated Loon	Uncommon	One or two pair seen most days through June and until mid-July, then rarely until early August when 2-6 were seen daily.
Red-necked Grebe	Rare	2 observed on August 23.
Northern Fulmar	Rare	1 observed at sea on August 5
Fork-tailed Storm Petrel	Rare	1 observed at sea on August 18
Double-crested Cormorant	Uncommon	Positive identification on 5 occasions
Pelogic Cormorant	Common	Seen in large flocks at sea and on rocks often with the other cormorant species which proved impossible to distinguish at a distance.
Red-faced Cormorant	Uncommon	Positive identification on 3 occasions.
Landhill Crane	Rare	In June to common in late August; nested near ponds on the flats of Cape Ayutka moved in flocks of up to 60, up and down the Peninsula in late August.
Tundra Swan	Rare	1, 3 & 5 seen on 3 days late June and early July.
Mallard	Rare	One flock of 48 seen on Main Creek on 12 August
Green-winged Teal	Rare	Single seen on Aniakchak River on 20 July

Stellers eider	Rare	Female with young seen regularly around Aniakchak Island from 9 July to 23 July
White-winged scoter	Rare	One flock of 40 seen in Aniakchak Bay on 20 July
Surf Scoter	Uncommon	Seen twice in Amber Bay and a flock of 140 at the tip of Cape Ayutka on 28 August
Harlequin Duck	Rare	3 observed at mouth of Aniakchak River on 20 August
Red-breasted merganser	Common	Seen in flocks of up to 30 until mid August
Black Oystercatcher	Occass.	One or two seen occasionally along rocks at mouth of Aniakchak River and on the Island just off shore.
Semi-palmated plover	Rare	Seen on 3 occasions on beach.
Whimbrel	Common	Regular visitors to East Cove and beach; most have nested in the area.
Lesser yellowlegs	Uncommon	Nested on the flats of Cape Ayutka
Wandering Tattler	Rare	One and 2 pair observed along River for 5 days in mid August
Eskimo Curbu	Rare	One pair seen flying at close range along cliffs on south side of Cape Ayutka on 20 August
Red-necked phalarope	Rare	Two seen near shore on 21 August
Common snipe	Uncommon	Heard regularly until mid July
Rock sandpiper	Rare	Seen on beach or rock on 3 occasions in mid/late July
Western sandpiper	Rare	Flock of 8 seen at mouth of Main Creek on 12 August

Least sandpiper	Rare	Three individuals seen on flats of Cape Ayutka.
Farasitic jeager	Occas.	On four occasions one was observed feeding at the sea with gulls
Bonaparte's gull	Rare	2 individuals seen on 2 separate days in early August with a flock of new gulls.
New gulls	Common	Resident; seen with other gulls daily - in August a flock of 32 to 40 habituated the beach of the East Cove.
Glaucous-winged gull	Abundant	Four colonies of from 30 to 200 in the area.
Black-legged Kittiwake	Abundant	By far the most abundant bird; six colonies of from 100 to 200 in the area.
Common murre	Common	Regularly seen at sea sometimes in large flocks also, not frequently observed from shore.
Pigeon guillemot	Abundant	Large numbers observed feeding with gulls - nested individually along the cliffs.
Marbled murrelet	Common	Observed at sea on a regular basis after July
Kittilitz'a murrelet	Common	At sea after 23 July.
Ancient murrelet	Common	At sea after 23 July.
Horned puffin	Abundant	At sea after 23 July - second only in number to the Black-legged Kittiwake.
Tufted puffin	Rare	Two seen at sea on 23 July.
Bald eagle	Abundant	Sixteen nests in the area.
Northern harrier	Rare	One pair observed over the marsh of the Aniakchak River on 23 July.
Rough-legged hawk	Common	Two nests in the area.

Short-eared owl	Rare	One seen from cabin at dusk on 20 August.
Belted king fisher	Common	A pair nested along the cliffs about 1/2 mile east.
Tree swallow	Occass	Seen several times in mid to late July.
Bank swallow	Abundant	A colony of about 100 was located near the east cove about 1/2 mile away. Seen every day until 28 July from which time they were seen occasionally until 7 August and then no more.
Black-billed magpie	Common	Two pair nested in the alder area near the mouth of the Aniakchak River.
Common Raven	Common	Two pair nested in the alder at the far end of the East Coves occasionally a flock of 15 was seen.
Black-capped chickadee	Occas.	A pair seen on 3 occasions in the alder behind the cabin.
Gray-checked thrush	Occas.	A pair nested at the far end of the East Cove.
Hermit thrush	Common	At least 3 pair nested in the area; heard regularly.
Northern Shrike	Occas.	One seen in the brush above the cabin and one up Main Creek.
Water pipit	Uncommon	A pair lived in the area and were seen until mid July and again in late August.
Yellow warbler	Occas.	We believe at least on pair nested on the tundra and visited the coast occasionally.
Wilson's warbler	Uncommon	Nested regularly in late July and early August.

Savannah sparrow	Common	Several pair nested in the area and were seen and heard daily until mid July, then were not seen much until early August when they became common again. In June and July they fed in the dune grasses - in August they fed on the beach.
Long sparrow	Uncommon	One or two pair were regular until mid July, were not seen of heard after that time.
Golden crown sparrow	Common	Until mid July and rare after that time, several pair were there early nesting.
Fox sparrow	Occas.	A single seen in the East Cove several times in early July and in August.
Common red poll	Uncommon	Positive identification on 6 occasions. Another 16 times seen in flight but could have been rosy finch which have been identified here in the past but not positively this year.

ARO-ANIA-1 RFN 1419-3

1988 Coastal ~~Bird~~ ~~Nesting~~ Bird Survey
Aniakchak National Monument & Preserve
Frank & Penny Starr

Introduction

Except for the observations of Fuller & Stroud, over a three week period in ~~1984~~ June + July 1984,* no long term attempt has been made to identify ~~nesting~~ birds along the ~~An~~ coast of Aniakchak NM+P. The Pacific coast should provide good habitat for both raptors and nesting sea birds due to the rugged geological conditions and to the presence of an abundance of sea borne food. Constantly increasing human ~~pressure~~ presence and pressure makes identification of the uses of this coastal area, by bird life, an important resource management objective.

Methods

Primary surveying was done from a 16 ft Zodiac inflatable boat with a 30 hp outboard and a 4 hp emergency kicker. Foot patrols and observations from the deck of the Aniakchak Bay cabin were done when weather and or mechanical problems precluded the use of the boat.

* and Manski ~~[illegible]~~ over

We were provided one pair of armored binoculars, a 12-35 power spotting scope and a tripod to support the scope. These were supplimented by two pair of our personal binoculars.

Our intent was to complete an ~~Initial~~ survey of the entire coast by 15 July. This was to locate nesting sea bird colonies prior to the fledging of the young. That time frame was precluded by the afore mentioned weather and mechanical problems.

Results

A preliminary raptor survey of the ANIA coast was done by air on 10 June. - See enclosed report. On that survey 21 bald eagles and 2 rough-legged hawks were observed along with 10 eagle nests.

Begining on 17 June ~~75 consecutive~~ observations were made on 15 consecutive days. In that time 63 different species of birds were identified, including 3 raptors, 6 species of duck, 11 shore birds and 23 different sea birds and gulls. Sixteen active bald eagle nests and 2 active rough-

legged hawk nests were located. ☆ Pg 4
Six black-legged kittiwake colonies and
4 glaucous-wing gull colonies were
located. These were not sharply
defined colonies as those two species
often intermingled on the same sand
spit or river beaches. Mew gulls were,
not infrequently seen with the
other gulls but we did not locate
a site where we felt the mew gulls
were nesting, unless they shared the
nesting areas of the kittiwakes and
or glaucus winged gulls. See the
enclosed maps for specific nest and
colony sites. We found no indication
that colonial sea birds make use of
Aniakchak ~~National Monument and Preserve~~
NM+P for nesting purposes.

In addition to the above, nests or nesting areas, were
located for the following: red-throated
loon, pelagic cormorant, ~~tundra~~
sandhill crane ~~swan~~, Stellers eider, red-breasted merganser
whimbrel ~~wimbrel~~, lesser yellowlegs, ~~wandering tattler~~, pigeon
guillemot, belted kingfisher, bank swallow, black-
billed magpie, common raven, water pipit,
savannah sparrow, song sparrow, golden-
crowned sparrow.

From Top of pg 5

~~From top of pg 3~~

For specifics of when, how many of what was seen, please see the enclosed "Daily bird check list". Good numbers of common murre and pigeon guillemot were in residence when we arrived. Marbled murrelet were first seen in early July. Kittlitz's and ancient murrelet as well as horned and tufted puffin were first observed on 23 July. Sea bird populations increased for the next two weeks, then declined to low numbers by mid August. In early August the numbers of horned puffin was second only to the black-legged kittiwake.

To pg 5

★ from pg3 – Location of those nests appear on the enclosed maps. Eagle nests 1 through 8 and 15 + 16 were not observed ~~enough times~~ regularly enough to be certain whether or not they were successful. Nest #9 was successful and fledged two young in mid August; #10 was unsuccessful and was abandon late in July; #11 also unsuccessful was not abandon by the two young appearing eagles until the first week in August; #12 had four immatures in its immediate vacinity most of the season, on 17 August two young fledged; nest #13 was also successful with one fledgling at about the same date as #12; #14 was an unsuccessful

nest and was abandon by mid July.

To Top of pg 4

rom center of pg 4

Kittiwake colonies #1+2 were of 100 birds each, #3+4 gradually expanded all season, not just from young but, apparently, from immigration as well. They ended the season at 1800 and 1650 respectively. Colony #5 was of about 250 birds, #6 was not observed late in the season but in mid June numbered 200 individuals. Glaucus-winged gull colonie #1 averaged 30 birds, #2 consisted of 180 birds, Colony #3 contained 60 individuals, #4 was not visited late in the year but started with a count of 65 birds.

Discussion:
Our findings concur with those of Feller and Stroud in 1984 and indicate that the coast of Aniakchak NM+P is not used as a nesting area by colonial sea birds. This could be due to any number of reasons but geological conditions are the most obvious. As rugged as the Aniakchak coast is the coast from Yantarni Bay north

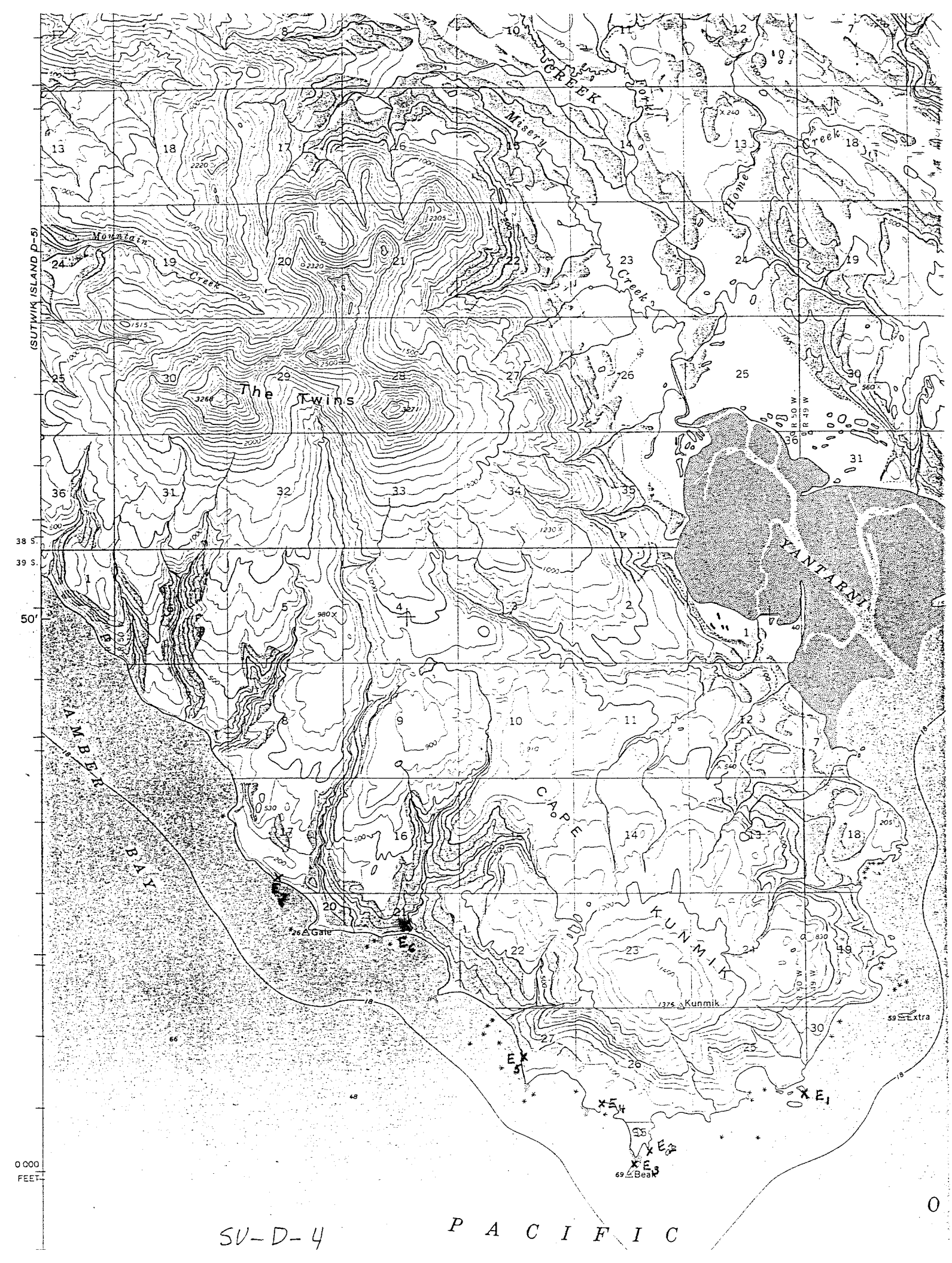
is more rugged with sharper duper bays and more islands. Geologically the Aniakchak coast is shale, and sandstone with areas of basalt interspersed. This has produced considerable area of ~~down~~ dune & beach but a minimum of cliff surface.

Sixteen bald eagle nests were located which is an average of one per 6 km. of coast line: Two rough legged hawk nests were located. ~~Habitat played~~ Configuration of the terrain played a dominating roll in nest location. It seemed as though all of the really good rock ledges were occupied and the more inaccessable those ledges were the better the chance of successful nesting.

ANIA Coastal Bird Survey 1988

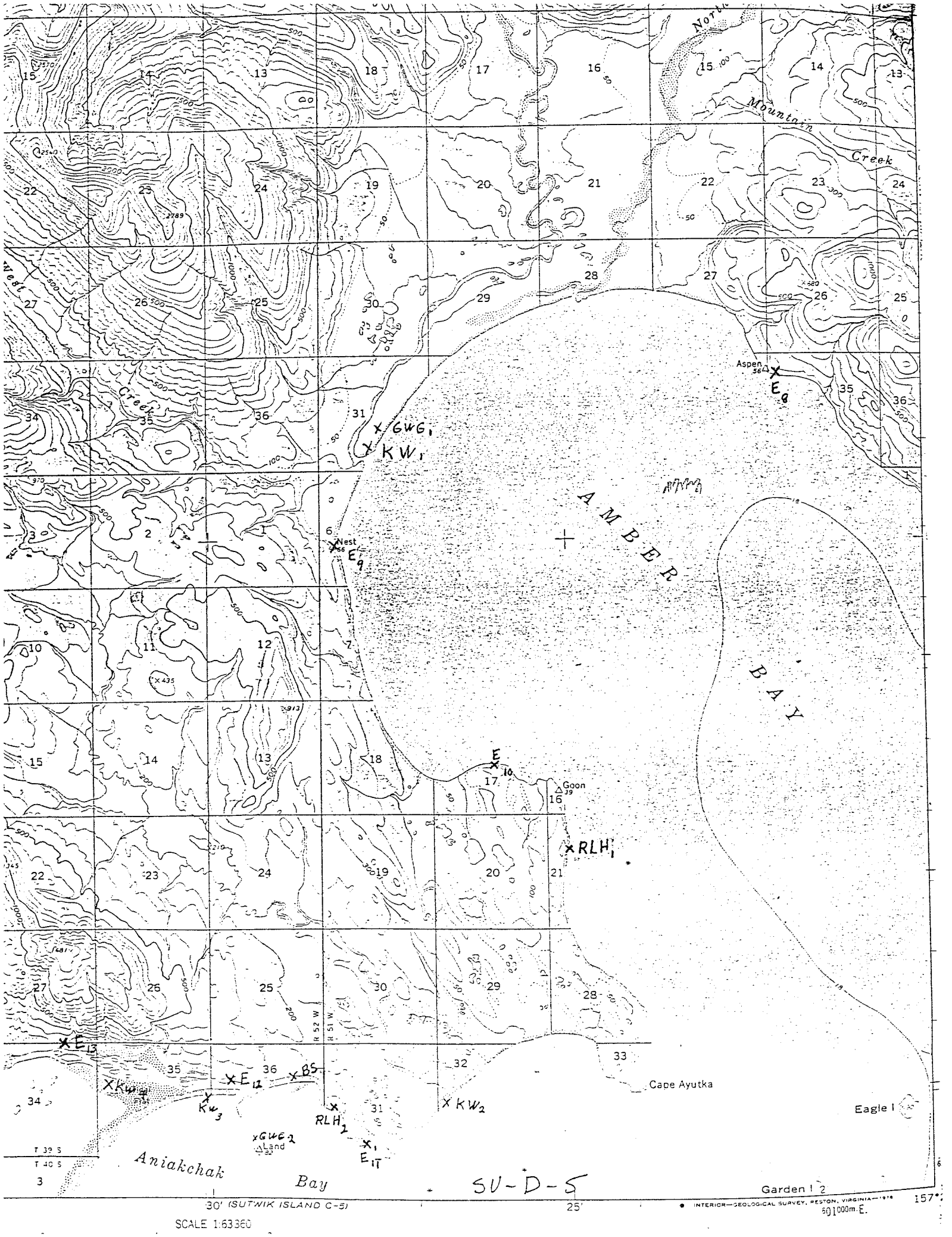
Map Index - from Sutwik Island Quadrangles D-4, D-5, C-5, C-6

E1-16 - Bald Eagle nests
RL-H1+2 - Rough-legged Hawk nests
KW 1-6 - Black-legged Kittiwake nesting area
GWG 1-4 - Glaucous-winged Gull nesting area
BS - Bank Swallow colony



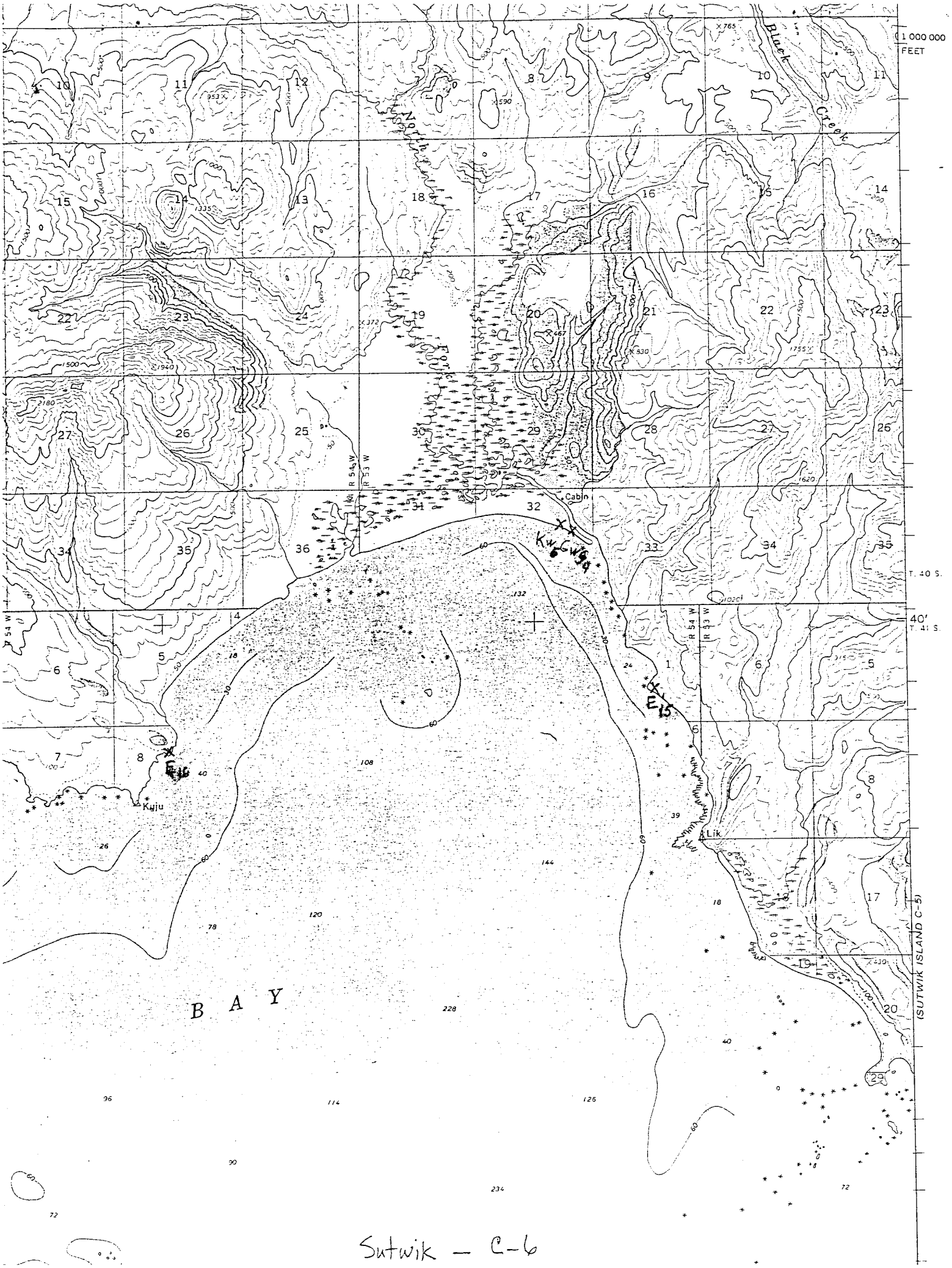
(SUTWIK ISLAND D-5)
38 S.
39 S.
50'
0 000
FEET
CREEK
Misery
Fork
Home
Creek
Mountain
Creek
Creek
The Twins
YANTARNI
AMBER
BAY
CAPE
KUNMIK
Kunmik
Gale
Extra
Beak
R 50 W
R 49 W
PACIFIC

SV-D-4


North Mountain Creek
West Creek
AMBER BAY
Aspen
Nest
Goon
Cape Ayutka
Eagle I
Garden I
Aniakchak Bay
T 39 S
T 40 S
R 52 W
R 51 W
SV-D-5
30' (SUTWIK ISLAND C-5)
25'
SCALE 1:63360
INTERIOR—GEOLOGICAL SURVEY, RESTON, VIRGINIA—1978
1000m E.


Beach
Creek
Black
ANIAKCHAK
Lagoon
Kw5
Gw3
Cabin
Village
Creek
Cabin
Lag
Elephant Head
Point
Wolverine
PRESERVE
CAPE
KUMEK
ANIAKCHAK

SV-C-5


1 000 000
FEET
Black Creek
North Fork
Cabin
Kyju
Lik
B A Y
T. 40 S.
40'
T. 41 S.
R 54 W
R 53 W
(SUTWIK ISLAND C-5)

Sutwik — C-6

ALASKA RAPTOR OBSERVATION & NEST RECORD CARD (JUNE 1987)

SPECIES (COMMON NAME): Bald Eagle	OBSERVER (NAME AND ADDRESS): Frank and Penny Starr 124 Bristlecone Drive Ridgway, CO. 81432
MAP NAME: Sutwik Island D-4	
MAP SCALE: 1:63 360	NEST SITE NUM: 1
LATITUDE: 56° 47'	OTHER NUM:
LONGITUDE: 157° 9'	NEST STATUS: (1.) ACTIVE 2. INACTIVE 3. OTHER

SPECIFIC AREA: sea stack off the head of Cape Kunmik

DATE	TIME	SURVEY METHOD	NUM. ADULTS	NUM. EGGS	NUM. NESTLG.	AGE NESTLG.	NUM. IMMAT.	ACTIVITIES

KEY:

SURVEY METHOD:
1. FOOT
2. VEHICLE
(3.) BOAT
4. PLANE
5. HELICOPTER
6. INCIDENT. OBS.

ACTIVITY (MAY BE MORE THAN ONE):
(1.) PERCHED
(2.) FLYING
3. HUNTING/ FORAGING
4. FEEDING AD.
5. TERR. DEFENSE
6. VOCALIZING
7. BODY CARE
8. COURTSHIP
9. NEST BUILDING
10. INCUBATING
11. BROODING
12. FEEDING YG.
13. OTHER: _____

NOTES, MAP OR PHOTO ATTACHED? (YES) NO

REMARKS

Active with mature pair. No young observed.

1-B

TREE NEST	GROUND NEST
SPECIES: 1. ALDER 2. BIRCH 3. CEDAR 4. COTTONWOOD 5. HEMLOCK 6. SPRUCE 7. SNAG (SP:_____) 8. NEST BOX/PLATFORM (SP:_____) 9. ARTIFICIAL 10. OTHER:_____	NEST SITUATION: 1. LEDGE ON CLIFF 2. CAVITY ON CLIFF 3. STICKNEST ON CLIFF 4. OPEN HILLSIDE 5. LEVEL GROUND 6. MARSH/TUNDRA 7. TREELESS ISLET (8.) SEA STACK 9. OTHER:_____
TREE HEIGHT: METERS	CLIFF HEIGHT: 20 METERS
TREE DIAMETER (DBH): CM	CLIFF LENGTH: KM
HEIGHT OF NEST IN TREE: METERS	HEIGHT OF NEST ON CLIFF: 20 METERS
NEST DIAMETER: CM	LEDGE/NEST WIDTH: CM
NEST DEPTH: CM	LEDGE/NEST DEPTH: CM

DOMINANT HABITAT TYPE:	NEST FRONTAGE:	NEST CONDITION:
(1.) CLIFF 2. UNVEGETATED SLOPE 3. WET SHRUB 4. DRY SHRUB 5. DECIDUOUS FOREST 6. CONIFEROUS FOREST 7. MIXED DECIDUOUS & CONIFEROUS FOREST 8. SCATTERED WOODLAND & DWARF FOREST 9. ARTIFICIAL HABITATS	1. WITHIN DOMINANT HABITAT 2. LAKE 3. RIVER OR STREAM (4.) OPEN SEA 5. INLAND SALTWATER 6. OTHER:_____	(1.) GOOD 2. POOR 3. REMNANT ONLY NEST ACCESSIBILITY: 1. EASY--NO ROPE REQUIRED 2. EASY--ROPE REQUIRED (3.) HARD--ROPE REQUIRED !! 4. ACCESS UNKNOWN

ELEVATION OF NEST ABOVE MSL:	ASPECT OF SLOPE (TRUE DIRECTION):	ASPECT OF NEST (TRUE DIRECTION):
60 FEET	E	E

DISTANCE TO HUMAN ACTIVITY:	TYPES OF HUMAN ACTIVITIES:
120 KM	1. TRAIL 2. ROAD 3. BUILDING(S) 4. AGRICULTURE 5. MINING 6. OIL/GAS 7. LOGGING 8. OTHER: Town of Chignik, A

PREY REMAINS COLLECTED? YES NO

BIOLOGICAL SAMPLES COLLECTED? YES NO

MARKERS	AGE/SEX:	AGE/SEX:	AGE/SEX:
USFWS BAND NUM:			
WING/LEG COLOR:			
WING/LEG CODE:			
MARKERS	AGE/SEX:	AGE/SEX:	AGE/SEX:
USFWS BAND NUM:			
WING/LEG COLOR:			
WING/LEG CODE:			

REMARKS

RAPTOR MANAGEMENT
U.S. FISH & WILDLIFE SERV.
1412 AIRPORT WAY
FAIRBANKS, AK 99701

ALASKA RAPTOR OBSERVATION & NEST RECORD CARD (JUNE 1987)

SPECIES (COMMON NAME): Bald Eagle	OBSERVER (NAME AND ADDRESS): Frank and Penny Starr, 124 Bristlecone Drive, Ridgway, CO. 81432
MAP NAME: Sutwik Island D-4	
MAP SCALE: 1:63 360	NEST SITE NUM: 2
LATITUDE: 56° 46'	OTHER NUM:
LONGITUDE: 157° 11'	NEST STATUS: (1) ACTIVE 2. INACTIVE 3. OTHER

SPECIFIC AREA: sharp point but still attached to Cape Kunmik

DATE	TIME	SURVEY METHOD	NUM. ADULTS	NUM. EGGS	NUM. NESTLG.	AGE NESTLG.	NUM. IMMAT.	ACTIVITIES

KEY:

SURVEY METHOD:
1. FOOT
2. VEHICLE
(3) BOAT
4. PLANE
5. HELICOPTER
6. INCIDENT. OBS.

ACTIVITY (MAY BE MORE THAN ONE):
(1) PERCHED
(2) FLYING
3. HUNTING/ FORAGING
4. FEEDING AD.
5. TERR. DEFENSE
6. VOCALIZING
7. BODY CARE
8. COURTSHIP
9. NEST BUILDING
10. INCUBATING
11. BROODING
12. FEEDING YG.
13. OTHER: _____

NOTES, MAP OR PHOTO ATTACHED? (YES) NO

REMARKS

Active with mature pair. No young observed.

2B

TREE NEST	GROUND NEST
SPECIES: 1. ALDER 2. BIRCH 3. CEDAR 4. COTTONWOOD 5. HEMLOCK 6. SPRUCE 7. SNAG (SP:_____) 8. NEST BOX/PLATFORM (SP:_____) 9. ARTIFICIAL 10. OTHER:	NEST SITUATION: (1.) LEDGE ON CLIFF 2. CAVITY ON CLIFF 3. STICKNEST ON CLIFF 4. OPEN HILLSIDE 5. LEVEL GROUND 6. MARSH/TUNDRA 7. TREELESS ISLET 8. SEA STACK 9. OTHER:
TREE HEIGHT: METERS	CLIFF HEIGHT: METERS 20
TREE DIAMETER (DBH): CM	CLIFF LENGTH: KM
HEIGHT OF NEST IN TREE: METERS	HEIGHT OF NEST ON CLIFF: METERS 18
NEST DIAMETER: CM	LEDGE/NEST WIDTH: CM
NEST DEPTH: CM	LEDGE/NEST DEPTH: CM

DOMINANT HABITAT TYPE:
(1) CLIFF
2. UNVEGETATED SLOPE
3. WET SHRUB
4. DRY SHRUB
5. DECIDUOUS FOREST
6. CONIFEROUS FOREST
7. MIXED DECIDUOUS & CONIFEROUS FOREST
8. SCATTERED WOODLAND & DWARF FOREST
9. ARTIFICIAL HABITATS

NEST FRONTAGE:
1. WITHIN DOMINANT HABITAT
2. LAKE
3. RIVER OR STREAM
(4) OPEN SEA
5. INLAND SALTWATER
6. OTHER:

NEST CONDITION:
(1) GOOD
2. POOR
3. REMNANT ONLY

NEST ACCESSIBILITY:
1. EASY--NO ROPE REQUIRED
2. EASY--ROPE REQUIRED
(3) HARD--ROPE REQUIRED
4. ACCESS UNKNOWN

ELEVATION OF NEST ABOVE MSL: FEET	ASPECT OF SLOPE (TRUE DIRECTION):	ASPECT OF NEST (TRUE DIRECTION):
60	E	E

DISTANCE TO HUMAN ACTIVITY: 120 KM

TYPES OF HUMAN ACTIVITIES:
1. TRAIL
2. ROAD
3. BUILDING(S)
4. AGRICULTURE
5. MINING
6. OIL/GAS
7. LOGGING
8. OTHER: Town of Chignik, A

PREY REMAINS COLLECTED? YES NO

BIOLOGICAL SAMPLES COLLECTED? YES NO

MARKERS	AGE/SEX:	AGE/SEX:	AGE/SEX:
USFWS BAND NUM:			
WING/LEG COLOR:			
WING/LEG CODE:			
MARKERS	AGE/SEX:	AGE/SEX:	AGE/SEX:
USFWS BAND NUM:			
WING/LEG COLOR:			
WING/LEG CODE:			

REMARKS

RAPTOR MANAGEMENT
U.S. FISH & WILDLIFE SERV.
1412 AIRPORT WAY
FAIRBANKS, AK 99701

ALASKA RAPTOR OBSERVATION & NEST RECORD CARD (JUNE 1987)

SPECIES (COMMON NAME): Bald Eagle	OBSERVER (NAME AND ADDRESS): Frank and Penny Starr 124 Bristlecone Drive Ridgway, CO. 81432
MAP NAME: Sutwik Island D-4	
MAP SCALE: 1:63 360	NEST SITE NUM: 3
LATITUDE: 56° 46'	OTHER NUM:
LONGITUDE: 157° 11'	NEST STATUS: 1. ACTIVE 2. INACTIVE 3. OTHER

SPECIFIC AREA: sea stack off the head of Cape Kunmik

DATE	TIME	SURVEY METHOD	NUM. ADULTS	NUM. EGGS	NUM. NESTLG.	AGE NESTLG.	NUM. IMMAT.	ACTIVITIES

KEY:

SURVEY METHOD:
1. FOOT
2. VEHICLE
(3) BOAT
4. PLANE
5. HELICOPTER
6. INCIDENT. OBS.

ACTIVITY (MAY BE MORE THAN ONE):
(1) PERCHED
(2) FLYING
3. HUNTING/ FORAGING
4. FEEDING AD.
5. TERR. DEFENSE
6. VOCALIZING
7. BODY CARE
8. COURTSHIP
9. NEST BUILDING
10. INCUBATING
11. BROODING
12. FEEDING YG.
13. OTHER: _____

NOTES, MAP OR PHOTO ATTACHED? (YES) NO

REMARKS

Observed active mature pair. No young in evidence.

3B

TREE NEST	GROUND NEST
SPECIES: 1. ALDER 2. BIRCH 3. CEDAR 4. COTTONWOOD 5. HEMLOCK 6. SPRUCE 7. SNAG (SP:_____) 8. NEST BOX/PLATFORM (SP:_____) 9. ARTIFICIAL 10. OTHER:	NEST SITUATION: 1. LEDGE ON CLIFF 2. CAVITY ON CLIFF 3. STICKNEST ON CLIFF 4. OPEN HILLSIDE 5. LEVEL GROUND 6. MARSH/TUNDRA 7. TREELESS ISLET (8.) SEA STACK 9. OTHER:
TREE HEIGHT: METERS	CLIFF HEIGHT: METERS 24
TREE DIAMETER (DBH): CM	CLIFF LENGTH: KM
HEIGHT OF NEST IN TREE: METERS	HEIGHT OF NEST ON CLIFF: METERS 24
NEST DIAMETER: CM	LEDGE/NEST WIDTH: CM
NEST DEPTH: CM	LEDGE/NEST DEPTH: CM

DOMINANT HABITAT TYPE:	NEST FRONTAGE:	NEST CONDITION:
(1) CLIFF 2. UNVEGETATED SLOPE 3. WET SHRUB 4. DRY SHRUB 5. DECIDUOUS FOREST 6. CONIFEROUS FOREST 7. MIXED DECIDUOUS & CONIFEROUS FOREST 8. SCATTERED WOODLAND & DWARF FOREST 9. ARTIFICIAL HABITATS	1. WITHIN DOMINANT HABITAT 2. LAKE 3. RIVER OR STREAM (4) OPEN SEA 5. INLAND SALTWATER 6. OTHER:	(1) GOOD 2. POOR 3. REMNANT ONLY NEST ACCESSIBILITY: 1. EASY--NO ROPE REQUIRED 2. EASY--ROPE REQUIRED (3.) HARD--ROPE REQUIRED 4. ACCESS UNKNOWN

ELEVATION OF NEST ABOVE MSL: FEET	ASPECT OF SLOPE (TRUE DIRECTION):	ASPECT OF NEST (TRUE DIRECTION):
75	E	E

DISTANCE TO HUMAN ACTIVITY: KM	TYPES OF HUMAN ACTIVITIES:	
120	1. TRAIL 2. ROAD 3. BUILDING(S) 4. AGRICULTURE	5. MINING 6. OIL/GAS 7. LOGGING 8. OTHER: Town of Chignik, A.

PREY REMAINS COLLECTED? YES NO

BIOLOGICAL SAMPLES COLLECTED? YES NO

MARKERS	AGE/SEX:	AGE/SEX:	AGE/SEX:
USFWS BAND NUM:			
WING/LEG COLOR:			
WING/LEG CODE:			
MARKERS	AGE/SEX:	AGE/SEX:	AGE/SEX:
USFWS BAND NUM:			
WING/LEG COLOR:			
WING/LEG CODE:			

REMARKS

RAPTOR MANAGEMENT
U.S. FISH & WILDLIFE SERV.
1412 AIRPORT WAY
FAIRBANKS, AK 99701

ALASKA RAPTOR OBSERVATION & NEST RECORD CARD (JUNE 1987)

SPECIES (COMMON NAME): Bald Eagle	OBSERVER (NAME AND ADDRESS): Frank and Penny Starr 124 Bristlecone Drive Ridgway, CO. 81432
MAP NAME: Sutwik Island D-5	
MAP SCALE: 1:63 360	NEST SITE NUM: 9
LATITUDE: 56° 50'	OTHER NUM:
LONGITUDE: 157° 28'	NEST STATUS: (1) ACTIVE 2. INACTIVE 3. OTHER

SPECIFIC AREA: Basaltic cliff, interspersed with vegetation.

DATE	TIME	SURVEY METHOD	NUM. ADULTS	NUM. EGGS	NUM. NESTLG.	AGE NESTLG.	NUM. IMMAT.	ACTIVITIES

KEY:

SURVEY METHOD:
1. FOOT
2. VEHICLE
(3) BOAT
4. PLANE
5. HELICOPTER
6. INCIDENT. OBS.

ACTIVITY (MAY BE MORE THAN ONE):
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(2) FLYING
3. HUNTING/ FORAGING
4. FEEDING AD.
5. TERR. DEFENSE
(6) VOCALIZING
(7) BODY CARE
8. COURTSHIP
9. NEST BUILDING
10. INCUBATING
11. BROODING
12. FEEDING YG.
13. OTHER: _____

NOTES, MAP OR PHOTO ATTACHED? (YES) NO

REMARKS

Observed two mature eagles successfully fledge two eaglets.

9B

TREE NEST	GROUND NEST
SPECIES: 1. ALDER 2. BIRCH 3. CEDAR 4. COTTONWOOD 5. HEMLOCK 6. SPRUCE 7. SNAG (SP:_____) 8. NEST BOX/PLATFORM (SP:_____) 9. ARTIFICIAL 10. OTHER:	NEST SITUATION: 1. LEDGE ON CLIFF 2. CAVITY ON CLIFF (3) STICKNEST ON CLIFF 4. OPEN HILLSIDE 5. LEVEL GROUND 6. MARSH/TUNDRA 7. TREELESS ISLET 8. SEA STACK 9. OTHER:
TREE HEIGHT: METERS	CLIFF HEIGHT: 32 METERS
TREE DIAMETER (DBH): CM	CLIFF LENGTH: 3 KM
HEIGHT OF NEST IN TREE: METERS	HEIGHT OF NEST ON CLIFF: 20 METERS
NEST DIAMETER: CM	LEDGE/NEST WIDTH: CM
NEST DEPTH: CM	LEDGE/NEST DEPTH: CM

DOMINANT HABITAT TYPE:
(1) CLIFF
2. UNVEGETATED SLOPE
3. WET SHRUB
4. DRY SHRUB
5. DECIDUOUS FOREST
6. CONIFEROUS FOREST
7. MIXED DECIDUOUS & CONIFEROUS FOREST
8. SCATTERED WOODLAND & DWARF FOREST
9. ARTIFICIAL HABITATS

NEST FRONTAGE:
1. WITHIN DOMINANT HABITAT
2. LAKE
3. RIVER OR STREAM
(4) OPEN SEA
5. INLAND SALTWATER
6. OTHER:

NEST CONDITION:
(1) GOOD
2. POOR
3. REMNANT ONLY

NEST ACCESSIBILITY:
1. EASY--NO ROPE REQUIRED
2. EASY--ROPE REQUIRED
(3) HARD--ROPE REQUIRED
4. ACCESS UNKNOWN

ELEVATION OF NEST ABOVE MSL: 65 FEET

ASPECT OF SLOPE (TRUE DIRECTION): E

ASPECT OF NEST (TRUE DIRECTION): E

DISTANCE TO HUMAN ACTIVITY: 120 KM

TYPES OF HUMAN ACTIVITIES:
1. TRAIL
2. ROAD
3. BUILDING(S)
4. AGRICULTURE
5. MINING
6. OIL/GAS
7. LOGGING
8. OTHER: Town of Chignik, Ak

PREY REMAINS COLLECTED? YES NO

BIOLOGICAL SAMPLES COLLECTED? YES NO

MARKERS	AGE/SEX:	AGE/SEX:	AGE/SEX:
USFWS BAND NUM:			
WING/LEG COLOR:			
WING/LEG CODE:			

MARKERS	AGE/SEX:	AGE/SEX:	AGE/SEX:
USFWS BAND NUM:			
WING/LEG COLOR:			
WING/LEG CODE:			

REMARKS

RAPTOR MANAGEMENT
U.S. FISH & WILDLIFE SERV.
1412 AIRPORT WAY
FAIRBANKS, AK 99701

ALASKA RAPTOR OBSERVATION & NEST RECORD CARD (JUNE 1987)

SPECIES (COMMON NAME): Bald Eagle	OBSERVER (NAME AND ADDRESS): Frank and Penny Starr, 124 Bristlecone Drive, Ridgway, CO. 81432
MAP NAME: Sutwik Island D-5	
MAP SCALE: 1:63 360	NEST SITE NUM: 10
LATITUDE: 56° 48'	OTHER NUM:
LONGITUDE: 157° 26'	NEST STATUS: (1) ACTIVE 2. INACTIVE 3. OTHER

SPECIFIC AREA: North facing cliff above rocky area in ocean

DATE	TIME	SURVEY METHOD	NUM. ADULTS	NUM. EGGS	NUM. NESTLG.	AGE NESTLG.	NUM. IMMAT.	ACTIVITIES

KEY:

SURVEY METHOD:
1. FOOT
2. VEHICLE
(3) BOAT
4. PLANE
5. HELICOPTER
6. INCIDENT. OBS.

ACTIVITY (MAY BE MORE THAN ONE):
(1) PERCHED
(2) FLYING
3. HUNTING/ FORAGING
4. FEEDING AD.
5. TERR. DEFENSE
6. VOCALIZING
7. BODY CARE
8. COURTSHIP
9. NEST BUILDING
10. INCUBATING
11. BROODING
12. FEEDING YG.
13. OTHER:

NOTES, MAP OR PHOTO ATTACHED? (YES) NO

REMARKS

We observed a pair of mature eagles, active, early in the season. The nest failed.

10 B

TREE NEST	GROUND NEST
SPECIES: 1. ALDER 2. BIRCH 3. CEDAR 4. COTTONWOOD 5. HEMLOCK 6. SPRUCE 7. SNAG (SP:_____) 8. NEST BOX/PLATFORM (SP:_____) 9. ARTIFICIAL 10. OTHER:_____	NEST SITUATION: 1. LEDGE ON CLIFF 2. CAVITY ON CLIFF (3) STICKNEST ON CLIFF 4. OPEN HILLSIDE 5. LEVEL GROUND 6. MARSH/TUNDRA 7. TREELESS ISLET 8. SEA STACK 9. OTHER:_____
TREE HEIGHT: METERS	CLIFF HEIGHT: 25 METERS
TREE DIAMETER (DBH): CM	CLIFF LENGTH: 2 KM
HEIGHT OF NEST IN TREE: METERS	HEIGHT OF NEST ON CLIFF: 12 METERS
NEST DIAMETER: CM	LEDGE/NEST WIDTH: CM
NEST DEPTH: CM	LEDGE/NEST DEPTH: CM

DOMINANT HABITAT TYPE:	NEST FRONTAGE:	NEST CONDITION:
(1) CLIFF 2. UNVEGETATED SLOPE 3. WET SHRUB 4. DRY SHRUB 5. DECIDUOUS FOREST 6. CONIFEROUS FOREST 7. MIXED DECIDUOUS & CONIFEROUS FOREST 8. SCATTERED WOODLAND & DWARF FOREST 9. ARTIFICIAL HABITATS	1. WITHIN DOMINANT HABITAT 2. LAKE 3. RIVER OR STREAM (4) OPEN SEA 5. INLAND SALTWATER 6. OTHER:_____	(1) GOOD 2. POOR 3. REMNANT ONLY NEST ACCESSIBILITY: 1. EASY--NO ROPE REQUIRED 2. EASY--ROPE REQUIRED (3) HARD--ROPE REQUIRED 4. ACCESS UNKNOWN

ELEVATION OF NEST ABOVE MSL:	ASPECT OF SLOPE (TRUE DIRECTION):	ASPECT OF NEST (TRUE DIRECTION):
40 FEET	N	N

DISTANCE TO HUMAN ACTIVITY:	TYPES OF HUMAN ACTIVITIES:
120 KM	1. TRAIL 2. ROAD 3. BUILDING(S) 4. AGRICULTURE 5. MINING 6. OIL/GAS 7. LOGGING 8. OTHER: Town of Chignik, A

PREY REMAINS COLLECTED? YES NO	BIOLOGICAL SAMPLES COLLECTED? YES NO		
MARKERS	AGE/SEX:	AGE/SEX:	AGE/SEX:
USFWS BAND NUM:			
WING/LEG COLOR:			
WING/LEG CODE:			
MARKERS	AGE/SEX:	AGE/SEX:	AGE/SEX:
USFWS BAND NUM:			
WING/LEG COLOR:			
WING/LEG CODE:			

REMARKS

RAPTOR MANAGEMENT
U.S. FISH & WILDLIFE SERV.
1412 AIRPORT WAY
FAIRBANKS, AK 99701

ALASKA RAPTOR OBSERVATION & NEST RECORD CARD (JUNE 1987)

SPECIES (COMMON NAME): Bald Eagle

OBSERVER (NAME AND ADDRESS): Frank + Penny Starr
124 Bristlecone Drive
Ridgway, CO. 81432

MAP NAME: Sutwik Island (D-5)

MAP SCALE: 1:63 360

NEST SITE NUM: 11

LATITUDE: 56° 46'

OTHER NUM:

LONGITUDE: 157° 27'

NEST STATUS: (1) ACTIVE 2. INACTIVE 3. OTHER

SPECIFIC AREA: cliff, N side of Aniakchak Bay

DATE	TIME	SURVEY METHOD	NUM. ADULTS	NUM. EGGS	NUM. NESTLG.	AGE NESTLG.	NUM. IMMAT.	ACTIVITIES

KEY:

SURVEY METHOD:
1. FOOT
2. VEHICLE
(3) BOAT
4. PLANE
5. HELICOPTER
6. INCIDENT. OBS.

ACTIVITY (MAY BE MORE THAN ONE):
(1) PERCHED
(2) FLYING
3. HUNTING/ FORAGING
4. FEEDING AD.
5. TERR. DEFENSE
(6) VOCALIZING
7. BODY CARE
8. COURTSHIP
9. NEST BUILDING
10. INCUBATING
11. BROODING
12. FEEDING YG.
13. OTHER: _____

NOTES, MAP OR PHOTO ATTACHED? (YES) NO

REMARKS

This nest was oberved from 28 June 88 To 1 Sept. 88.

As of 27 July nest appeared abandoned, and no reproductive success. Active for perio of one month. Eagles seemed to be an imm ature pair.

11B

TREE NEST	GROUND NEST
SPECIES: 1. ALDER 2. BIRCH 3. CEDAR 4. COTTONWOOD 5. HEMLOCK 6. SPRUCE 7. SNAG (SP:_____) 8. NEST BOX/PLATFORM (SP:_____) 9. ARTIFICIAL 10. OTHER:	NEST SITUATION: (1) LEDGE ON CLIFF 2. CAVITY ON CLIFF (3) STICKNEST ON CLIFF 4. OPEN HILLSIDE 5. LEVEL GROUND 6. MARSH/TUNDRA 7. TREELESS ISLET 8. SEA STACK 9. OTHER:
TREE HEIGHT: METERS	CLIFF HEIGHT: METERS 30
TREE DIAMETER (DBH): CM	CLIFF LENGTH: KM 1+
HEIGHT OF NEST IN TREE: METERS	HEIGHT OF NEST ON CLIFF: METERS 20
NEST DIAMETER: CM	LEDGE/NEST WIDTH: CM
NEST DEPTH: CM	LEDGE/NEST DEPTH: CM

DOMINANT HABITAT TYPE:	NEST FRONTAGE:	NEST CONDITION:
(1) CLIFF 2. UNVEGETATED SLOPE 3. WET SHRUB 4. DRY SHRUB 5. DECIDUOUS FOREST 6. CONIFEROUS FOREST 7. MIXED DECIDUOUS & CONIFEROUS FOREST 8. SCATTERED WOODLAND & DWARF FOREST 9. ARTIFICIAL HABITATS	1. WITHIN DOMINANT HABITAT 2. LAKE 3. RIVER OR STREAM (4) OPEN SEA 5. INLAND SALTWATER 6. OTHER:	(1) GOOD 2. POOR 3. REMNANT ONLY NEST ACCESSIBILITY: 1. EASY--NO ROPE REQUIRED 2. EASY--ROPE REQUIRED (3) HARD--ROPE REQUIRED 4. ACCESS UNKNOWN

ELEVATION OF NEST ABOVE MSL: FEET	ASPECT OF SLOPE (TRUE DIRECTION):	ASPECT OF NEST (TRUE DIRECTION):
77 [redacted]	S	SE

DISTANCE TO HUMAN ACTIVITY: KM	TYPES OF HUMAN ACTIVITIES:	
120	1. TRAIL 2. ROAD (3) BUILDING(S) 4. AGRICULTURE 5. MINING 6. OIL/GAS 7. LOGGING 8. OTHER: Town of Chignik AK, comm. fishing boats	

PREY REMAINS COLLECTED? YES NO | BIOLOGICAL SAMPLES COLLECTED? YES NO

MARKERS	AGE/SEX:	AGE/SEX:	AGE/SEX:
USFWS BAND NUM:			
WING/LEG COLOR:			
WING/LEG CODE:			
MARKERS	AGE/SEX:	AGE/SEX:	AGE/SEX:
USFWS BAND NUM:			
WING/LEG COLOR:			
WING/LEG CODE:			

REMARKS

RAPTOR MANAGEMENT
U.S. FISH & WILDLIFE SERV.
1412 AIRPORT WAY
FAIRBANKS, AK 99701

ALASKA RAPTOR OBSERVATION & NEST RECORD CARD (JUNE 1987)

SPECIES (COMMON NAME): Bald Eagle	OBSERVER (NAME AND ADDRESS): Frank + Penny Starr 124 Bristlecone Dr Ridgway CO 81432
MAP NAME: Sutwik Island (D-5)	
MAP SCALE: 1:63360	NEST SITE NUM: 12
LATITUDE: 56° 46'	OTHER NUM:
LONGITUDE: 157° 30'	NEST STATUS: (1) ACTIVE 2. INACTIVE 3. OTHER
SPECIFIC AREA: Cliff, N. side of mouth of Aniakchak River	

DATE	TIME	SURVEY METHOD	NUM. ADULTS	NUM. EGGS	NUM. NESTLG.	AGE NESTLG.	NUM. IMMAT.	ACTIVITIES

KEY:

SURVEY METHOD:
(1) FOOT
2. VEHICLE
3. BOAT
4. PLANE
5. HELICOPTER
6. INCIDENT. OBS.

ACTIVITY (MAY BE MORE THAN ONE):
(1) PERCHED
(2) FLYING
(3) HUNTING/ FORAGING
4. FEEDING AD.
(5) TERR. DEFENSE
(6) VOCALIZING
7. BODY CARE
8. COURTSHIP
9. NEST BUILDING
(10) INCUBATING
(11) BROODING
(12) FEEDING YG.
13. OTHER: _____

NOTES, MAP OR PHOTO ATTACHED? (YES) NO

REMARKS

This nest was observed from 17 June 88 To 1 Sept 88.

Nestlings were first observed on 8 July + 12 July respectively - 2 nestlings

4 immatures inhabit the area as well as The Two adults

The Two chick fledged on 17 Aug

12B

TREE NEST	GROUND NEST
SPECIES: 1. ALDER 2. BIRCH 3. CEDAR 4. COTTONWOOD 5. HEMLOCK 6. SPRUCE 7. SNAG (SP:_____) 8. NEST BOX/PLATFORM (SP:_____) 9. ARTIFICIAL 10. OTHER:_____	NEST SITUATION: (1) LEDGE ON CLIFF 2. CAVITY ON CLIFF (3) STICKNEST ON CLIFF 4. OPEN HILLSIDE 5. LEVEL GROUND 6. MARSH/TUNDRA 7. TREELESS ISLET 8. SEA STACK 9. OTHER:_____
TREE HEIGHT: METERS	CLIFF HEIGHT: METERS 20
TREE DIAMETER (DBH): CM	CLIFF LENGTH: KM 100 M
HEIGHT OF NEST IN TREE: METERS	HEIGHT OF NEST ON CLIFF: METERS 13
NEST DIAMETER: CM	LEDGE/NEST WIDTH: CM
NEST DEPTH: CM	LEDGE/NEST DEPTH: CM

DOMINANT HABITAT TYPE:
(1) CLIFF
2. UNVEGETATED SLOPE
3. WET SHRUB
4. DRY SHRUB
5. DECIDUOUS FOREST
6. CONIFEROUS FOREST
7. MIXED DECIDUOUS & CONIFEROUS FOREST
8. SCATTERED WOODLAND & DWARF FOREST
9. ARTIFICIAL HABITATS

NEST FRONTAGE:
1. WITHIN DOMINANT HABITAT
2. LAKE
(3) RIVER OR STREAM
4. OPEN SEA
5. INLAND SALTWATER
6. OTHER:_____

NEST CONDITION:
(1) GOOD
2. POOR
3. REMNANT ONLY

NEST ACCESSIBILITY:
1. EASY--NO ROPE REQUIRED
2. EASY--ROPE REQUIRED
(3) HARD--ROPE REQUIRED
4. ACCESS UNKNOWN

ELEVATION OF NEST ABOVE MSL: FEET 65 [redacted]

ASPECT OF SLOPE (TRUE DIRECTION): SSE

ASPECT OF NEST (TRUE DIRECTION): SSE

DISTANCE TO HUMAN ACTIVITY: KM 120

TYPES OF HUMAN ACTIVITIES:
1. TRAIL
2. ROAD
(3) BUILDING(S)
4. AGRICULTURE
5. MINING
6. OIL/GAS
7. LOGGING
8. OTHER: Town of Chignik AK. comm. fishing boats

PREY REMAINS COLLECTED? YES (NO)

BIOLOGICAL SAMPLES COLLECTED? YES (NO)

MARKERS	AGE/SEX:	AGE/SEX:	AGE/SEX:
USFWS BAND NUM:			
WING/LEG COLOR:			
WING/LEG CODE:			
MARKERS	AGE/SEX:	AGE/SEX:	AGE/SEX:
USFWS BAND NUM:			
WING/LEG COLOR:			
WING/LEG CODE:			

REMARKS

RAPTOR MANAGEMENT
U.S. FISH & WILDLIFE SERV.
1412 AIRPORT WAY
FAIRBANKS, AK 99701

ALASKA RAPTOR OBSERVATION & NEST RECORD CARD (JUNE 1987)

SPECIES (COMMON NAME): Bald Eagle	OBSERVER (NAME AND ADDRESS): Frank and Penny Starr 124 Bristlecone Drive Ridgway, CO, 81432
MAP NAME: Sutwik Island D-5	
MAP SCALE: 1:63 360	NEST SITE NUM: 13
LATITUDE: 56° 46'	OTHER NUM:
LONGITUDE: 157° 32'	NEST STATUS: (1) ACTIVE 2. INACTIVE 3. OTHER

SPECIFIC AREA: South facing cliff on Aniakchak River

DATE	TIME	SURVEY METHOD	NUM. ADULTS	NUM. EGGS	NUM. NESTLG.	AGE NESTLG.	NUM. IMMAT.	ACTIVITIES

KEY:

SURVEY METHOD:
1. FOOT
2. VEHICLE
(3) BOAT
4. PLANE
5. HELICOPTER
6. INCIDENT. OBS.

ACTIVITY (MAY BE MORE THAN ONE):
1. PERCHED
(2) FLYING
(3) HUNTING/ FORAGING
4. FEEDING AD.
5. TERR. DEFENSE
(6) VOCALIZING
7. BODY CARE
8. COURTSHIP
9. NEST BUILDING
10. INCUBATING
11. BROODING
12. FEEDING YG.
13. OTHER: _____

NOTES, MAP OR PHOTO ATTACHED? (YES) NO

REMARKS

Observed two mature birds.
one chick

13B

TREE NEST	GROUND NEST
SPECIES: 1. ALDER 2. BIRCH 3. CEDAR 4. COTTONWOOD 5. HEMLOCK 6. SPRUCE 7. SNAG (SP:_____) 8. NEST BOX/PLATFORM (SP:_____) 9. ARTIFICIAL 10. OTHER:	NEST SITUATION: (1) LEDGE ON CLIFF 2. CAVITY ON CLIFF 3. STICKNEST ON CLIFF 4. OPEN HILLSIDE 5. LEVEL GROUND 6. MARSH/TUNDRA 7. TREELESS ISLET 8. SEA STACK 9. OTHER:
TREE HEIGHT: METERS	CLIFF HEIGHT: METERS 28
TREE DIAMETER (DBH): CM	CLIFF LENGTH: KM 10
HEIGHT OF NEST IN TREE: METERS	HEIGHT OF NEST ON CLIFF: METERS 24
NEST DIAMETER: CM	LEDGE/NEST WIDTH: CM
NEST DEPTH: CM	LEDGE/NEST DEPTH: CM

DOMINANT HABITAT TYPE:	NEST FRONTAGE:	NEST CONDITION:
(1) CLIFF 2. UNVEGETATED SLOPE 3. WET SHRUB 4. DRY SHRUB 5. DECIDUOUS FOREST 6. CONIFEROUS FOREST 7. MIXED DECIDUOUS & CONIFEROUS FOREST 8. SCATTERED WOODLAND & DWARF FOREST 9. ARTIFICIAL HABITATS	1. WITHIN DOMINANT HABITAT 2. LAKE (3) RIVER OR STREAM 4. OPEN SEA 5. INLAND SALTWATER 6. OTHER:	(1) GOOD 2. POOR 3. REMNANT ONLY

NEST ACCESSIBILITY:

1. EASY--NO ROPE REQUIRED
2. EASY--ROPE REQUIRED
(3) HARD--ROPE REQUIRED
4. ACCESS UNKNOWN

ELEVATION OF NEST ABOVE MSL: FEET	ASPECT OF SLOPE (TRUE DIRECTION):	ASPECT OF NEST (TRUE DIRECTION):
80	SE	SSE

DISTANCE TO HUMAN ACTIVITY: KM	TYPES OF HUMAN ACTIVITIES:	
120	1. TRAIL 2. ROAD 3. BUILDING(S) 4. AGRICULTURE	5. MINING 6. OIL/GAS 7. LOGGING 8. OTHER: Town of Chignik, A

PREY REMAINS COLLECTED? YES NO		BIOLOGICAL SAMPLES COLLECTED? YES NO	
MARKERS	AGE/SEX:	AGE/SEX:	AGE/SEX:
USFWS BAND NUM:			
WING/LEG COLOR:			
WING/LEG CODE:			
MARKERS	AGE/SEX:	AGE/SEX:	AGE/SEX:
USFWS BAND NUM:			
WING/LEG COLOR:			
WING/LEG CODE:			

REMARKS

RAPTOR MANAGEMENT
U.S. FISH & WILDLIFE SERV.
1412 AIRPORT WAY
FAIRBANKS, AK 99701

ALASKA RAPTOR OBSERVATION & NEST RECORD CARD (JUNE 1987)

SPECIES (COMMON NAME): Bald Eagle	OBSERVER (NAME AND ADDRESS): Frank and Penny Starr 124 Bristlecone Drive Ridgway, CO. 81432
MAP NAME: Sutwik Island C-5	
MAP SCALE: 1:63 360	NEST SITE NUM: 14
LATITUDE: 56° 40'	OTHER NUM:
LONGITUDE: 157° 30'	NEST STATUS: (1) ACTIVE 2. INACTIVE 3. OTHER
SPECIFIC AREA:	

DATE	TIME	SURVEY METHOD	NUM. ADULTS	NUM. EGGS	NUM. NESTLG.	AGE NESTLG.	NUM. IMMAT.	ACTIVITIES

KEY:

SURVEY METHOD:
1. FOOT
2. VEHICLE
(3) BOAT
4. PLANE
5. HELICOPTER
6. INCIDENT. OBS.

ACTIVITY (MAY BE MORE THAN ONE):
(1) PERCHED
(2) FLYING
3. HUNTING/ FORAGING
4. FEEDING AD.
5. TERR. DEFENSE
6. VOCALIZING
(7) BODY CARE
8. COURTSHIP
9. NEST BUILDING
10. INCUBATING
11. BROODING
12. FEEDING YG.
13. OTHER: _____

NOTES, MAP OR PHOTO ATTACHED? (YES) NO

REMARKS

Nest observed from 10 June 1988 throug. 15 August 1988, A mature pair were on the nest. The nest failed. This nest is readily accessible by predators.

The cliff on which the nest is located is actually a very sharp promontory, called, Elephant Head.

14B

TREE NEST	GROUND NEST
SPECIES: 1. ALDER 2. BIRCH 3. CEDAR 4. COTTONWOOD 5. HEMLOCK 6. SPRUCE 7. SNAG (SP:_____) 8. NEST BOX/PLATFORM (SP:_____) 9. ARTIFICIAL 10. OTHER:_____	NEST SITUATION: 1. LEDGE ON CLIFF 2. CAVITY ON CLIFF (3.) STICKNEST ON CLIFF 4. OPEN HILLSIDE 5. LEVEL GROUND 6. MARSH/TUNDRA 7. TREELESS ISLET 8. SEA STACK 9. OTHER:_____
TREE HEIGHT: METERS	CLIFF HEIGHT: 23 METERS
TREE DIAMETER (DBH): CM	CLIFF LENGTH: KM
HEIGHT OF NEST IN TREE: METERS	HEIGHT OF NEST ON CLIFF: 23 METERS
NEST DIAMETER: CM	LEDGE/NEST WIDTH: CM
NEST DEPTH: CM	LEDGE/NEST DEPTH: CM

DOMINANT HABITAT TYPE:	NEST FRONTAGE:	NEST CONDITION:
(1) CLIFF 2. UNVEGETATED SLOPE 3. WET SHRUB 4. DRY SHRUB 5. DECIDUOUS FOREST 6. CONIFEROUS FOREST 7. MIXED DECIDUOUS & CONIFEROUS FOREST 8. SCATTERED WOODLAND & DWARF FOREST 9. ARTIFICIAL HABITATS	1. WITHIN DOMINANT HABITAT 2. LAKE 3. RIVER OR STREAM (4.) OPEN SEA 5. INLAND SALTWATER 6. OTHER:_____	(1) GOOD 2. POOR 3. REMNANT ONLY NEST ACCESSIBILITY: 1. EASY--NO ROPE REQUIRED (2) EASY--ROPE REQUIRED 3. HARD--ROPE REQUIRED 4. ACCESS UNKNOWN

ELEVATION OF NEST ABOVE MSL:	ASPECT OF SLOPE (TRUE DIRECTION):	ASPECT OF NEST (TRUE DIRECTION):
75 FEET	NNW	NNW

DISTANCE TO HUMAN ACTIVITY:	TYPES OF HUMAN ACTIVITIES:
120 KM	1. TRAIL, 2. ROAD, 3. BUILDING(S), 4. AGRICULTURE, 5. MINING, 6. OIL/GAS, 7. LOGGING, 8. OTHER: chignik, AK.

PREY REMAINS COLLECTED? YES NO

BIOLOGICAL SAMPLES COLLECTED? YES NO

MARKERS	AGE/SEX:	AGE/SEX:	AGE/SEX:
USFWS BAND NUM:			
WING/LEG COLOR:			
WING/LEG CODE:			
MARKERS	AGE/SEX:	AGE/SEX:	AGE/SEX:
USFWS BAND NUM:			
WING/LEG COLOR:			
WING/LEG CODE:			

REMARKS

RAPTOR MANAGEMENT
U.S. FISH & WILDLIFE SERV.
1412 AIRPORT WAY
FAIRBANKS, AK 99701

ALASKA RAPTOR OBSERVATION & NEST RECORD CARD (JUNE 1987)

SPECIES (COMMON NAME): Rough-legged Hawk	OBSERVER (NAME AND ADDRESS): Frank and Penny Starr, 124 Bristlecone Drive, Ridgway, CO. 81432
MAP NAME: Sutwik Island (D-5)	
MAP SCALE: 1:63 360	NEST SITE NUM: 1
LATITUDE: 56° 47'	OTHER NUM:
LONGITUDE: 157° 25'	NEST STATUS: (1) ACTIVE 2. INACTIVE 3. OTHER

SPECIFIC AREA: cliff, S side of Amber Bay

DATE	TIME	SURVEY METHOD	NUM. ADULTS	NUM. EGGS	NUM. NESTLG.	AGE NESTLG.	NUM. IMMAT.	ACTIVITIES

KEY:

SURVEY METHOD:
1. FOOT
2. VEHICLE
(3) BOAT
4. PLANE
5. HELICOPTER
6. INCIDENT. OBS.

ACTIVITY (MAY BE MORE THAN ONE):
1. PERCHED
2. FLYING
3. HUNTING/ FORAGING
4. FEEDING AD.
(5) TERR. DEFENSE
(6) VOCALIZING
7. BODY CARE
8. COURTSHIP
9. NEST BUILDING
10. INCUBATING
11. BROODING
12. FEEDING YG.
13. OTHER: _____

NOTES, MAP OR PHOTO ATTACHED? (YES) NO

REMARKS

Observed mature pair fledge two young.

1B

TREE NEST	GROUND NEST
SPECIES: 1. ALDER 2. BIRCH 3. CEDAR 4. COTTONWOOD 5. HEMLOCK 6. SPRUCE 7. SNAG (SP:_____) 8. NEST BOX/PLATFORM (SP:_____) 9. ARTIFICIAL 10. OTHER:_____	NEST SITUATION: (1) LEDGE ON CLIFF 2. CAVITY ON CLIFF (3) STICKNEST ON CLIFF 4. OPEN HILLSIDE 5. LEVEL GROUND 6. MARSH/TUNDRA 7. TREELESS ISLET 8. SEA STACK 9. OTHER:_____
TREE HEIGHT: METERS	CLIFF HEIGHT: METERS 70
TREE DIAMETER (DBH): CM	CLIFF LENGTH: KM 2
HEIGHT OF NEST IN TREE: METERS	HEIGHT OF NEST ON CLIFF: METERS 62
NEST DIAMETER: CM	LEDGE/NEST WIDTH: CM
NEST DEPTH: CM	LEDGE/NEST DEPTH: CM

DOMINANT HABITAT TYPE:
(1) CLIFF
2. UNVEGETATED SLOPE
3. WET SHRUB
4. DRY SHRUB
5. DECIDUOUS FOREST
6. CONIFEROUS FOREST
7. MIXED DECIDUOUS & CONIFEROUS FOREST
8. SCATTERED WOODLAND & DWARF FOREST
9. ARTIFICIAL HABITATS

NEST FRONTAGE:
1. WITHIN DOMINANT HABITAT
2. LAKE
3. RIVER OR STREAM
(4) OPEN SEA
5. INLAND SALTWATER
6. OTHER:_____

NEST CONDITION:
(1) GOOD
2. POOR
3. REMNANT ONLY

NEST ACCESSIBILITY:
1. EASY--NO ROPE REQUIRED
2. EASY--ROPE REQUIRED
(3) HARD--ROPE REQUIRED
4. ACCESS UNKNOWN

ELEVATION OF NEST ABOVE MSL: FEET	ASPECT OF SLOPE (TRUE DIRECTION):	ASPECT OF NEST (TRUE DIRECTION):
190	E	ESE

DISTANCE TO HUMAN ACTIVITY: 125 KM

TYPES OF HUMAN ACTIVITIES:
1. TRAIL
2. ROAD
(3) BUILDING(S)
4. AGRICULTURE
5. MINING
6. OIL/GAS
7. LOGGING
8. OTHER: Chignik, AK.

PREY REMAINS COLLECTED? YES NO

BIOLOGICAL SAMPLES COLLECTED? YES NO

MARKERS	AGE/SEX:	AGE/SEX:	AGE/SEX:
USFWS BAND NUM:			
WING/LEG COLOR:			
WING/LEG CODE:			
MARKERS	AGE/SEX:	AGE/SEX:	AGE/SEX:
USFWS BAND NUM:			
WING/LEG COLOR:			
WING/LEG CODE:			

REMARKS

RAPTOR MANAGEMENT
U.S. FISH & WILDLIFE SERV.
1412 AIRPORT WAY
FAIRBANKS, AK 99701

TB

ALASKA RAPTOR OBSERVATION & NEST RECORD CARD (JUNE 1987)

SPECIES (COMMON NAME): Rough-legged Hawk	OBSERVER (NAME AND ADDRESS): Frank + Penny Starr, 124 Bristlecone Drive, Ridgway, CO. 81432
MAP NAME: Sutwik Island (D-5)	
MAP SCALE: 1:63 360	NEST SITE NUM: [redacted] 2
LATITUDE: 56° 46'	OTHER NUM:
LONGITUDE: 157° 28'	NEST STATUS: (1.) ACTIVE 2. INACTIVE 3. OTHER

SPECIFIC AREA: cliff, N side of Aniakchak Bay

DATE	TIME	SURVEY METHOD	NUM. ADULTS	NUM. EGGS	NUM. NESTLG.	AGE NESTLG.	NUM. IMMAT.	ACTIVITIES

KEY:

SURVEY METHOD:
1. FOOT
2. VEHICLE
(3.) BOAT
4. PLANE
5. HELICOPTER
6. INCIDENT. OBS.

ACTIVITY (MAY BE MORE THAN ONE):
1. PERCHED
(2.) FLYING
3. HUNTING/ FORAGING
4. FEEDING AD.
(5.) TERR. DEFENSE
(6.) VOCALIZING
7. BODY CARE
8. COURTSHIP
9. NEST BUILDING
10. INCUBATING
11. BROODING
12. FEEDING YG.
13. OTHER: _____

NOTES, MAP OR PHOTO ATTACHED? (YES) NO

REMARKS

Observed mature pair fledge two young.

2B

TREE NEST	GROUND NEST
SPECIES: 1. ALDER 2. BIRCH 3. CEDAR 4. COTTONWOOD 5. HEMLOCK 6. SPRUCE 7. SNAG (SP:_____) 8. NEST BOX/PLATFORM (SP:_____) 9. ARTIFICIAL 10. OTHER:_____	NEST SITUATION: (1) LEDGE ON CLIFF 2. CAVITY ON CLIFF (3) STICKNEST ON CLIFF 4. OPEN HILLSIDE 5. LEVEL GROUND 6. MARSH/TUNDRA 7. TREELESS ISLET 8. SEA STACK 9. OTHER:_____
TREE HEIGHT: METERS	CLIFF HEIGHT: METERS 30
TREE DIAMETER (DBH): CM	CLIFF LENGTH: KM 1+
HEIGHT OF NEST IN TREE: METERS	HEIGHT OF NEST ON CLIFF: METERS 20
NEST DIAMETER: CM	LEDGE/NEST WIDTH: CM
NEST DEPTH: CM	LEDGE/NEST DEPTH: CM

DOMINANT HABITAT TYPE:	NEST FRONTAGE:	NEST CONDITION:
(1) CLIFF 2. UNVEGETATED SLOPE 3. WET SHRUB 4. DRY SHRUB 5. DECIDUOUS FOREST 6. CONIFEROUS FOREST 7. MIXED DECIDUOUS & CONIFEROUS FOREST 8. SCATTERED WOODLAND & DWARF FOREST 9. ARTIFICIAL HABITATS	1. WITHIN DOMINANT HABITAT 2. LAKE 3. RIVER OR STREAM (4) OPEN SEA 5. INLAND SALTWATER 6. OTHER:_____	(1) GOOD 2. POOR 3. REMNANT ONLY NEST ACCESSIBILITY: 1. EASY--NO ROPE REQUIRED 2. EASY--ROPE REQUIRED (3) HARD--ROPE REQUIRED 4. ACCESS UNKNOWN
ELEVATION OF NEST ABOVE MSL: 62 [redacted] FEET	ASPECT OF SLOPE (TRUE DIRECTION): S	ASPECT OF NEST (TRUE DIRECTION): E
DISTANCE TO HUMAN ACTIVITY: 120 KM	TYPES OF HUMAN ACTIVITIES: 1. TRAIL 2. ROAD (3) BUILDING(S) 4. AGRICULTURE 5. MINING 6. OIL/GAS 7. LOGGING 8. OTHER: Town of Chignik, A	

PREY REMAINS COLLECTED? YES NO

BIOLOGICAL SAMPLES COLLECTED? YES NO

MARKERS	AGE/SEX:	AGE/SEX:	AGE/SEX:
USFWS BAND NUM:			
WING/LEG COLOR:			
WING/LEG CODE:			
MARKERS	AGE/SEX:	AGE/SEX:	AGE/SEX:
USFWS BAND NUM:			
WING/LEG COLOR:			
WING/LEG CODE:			

REMARKS

RAPTOR MANAGEMENT
U.S. FISH & WILDLIFE SERV.
1412 AIRPORT WAY
FAIRBANKS, AK 99701

DAILY BIRD CHECK LIST

CAMP: ANIA

Dates: June 1988

SPECIES	17 June	18 June	19 June	20 June	21 June	22	23	24	25	26	27	28	29	30		1 July	2	3	4
Common Loon		#																	
Arctic Loon																			
* Red-throated Loon		4	4	2	2				2		5		1	1					
red-necked grebe																			
horned grebe																			
* northern fulmar																			
Flesh-footed shearwater																			
Sooty Shearwater																			
short-tailed shearwater																			
Mottled petrel																			
Leach's Storm-petrel																			
* fork-tailed storm-petrel																			
: Double-crested cormorant			sp	sp	sp	sp	sp	sp	sp	sp	sp								
: pelagic cormorant														3					
: red-faced cormorant																			
* sandhill crane		pr																	
* tundra swan								1											

DAILY BIRD CHECK LIST

Dates: June 88

CAMP: ANIA

SPECIES	17 June	18	19	20	21	22	23	24	25	26	27	28	29	30
white-fronted goose														
snow goose														
emperor's goose														
canada goose														
brant														
* mallard														
gadwall														
* green-winged teal														
American widgeon														
* northern pintail														
northern shoveler														
canvasback														
greater scaup														
common eider														
King eider														
Steller's eider														
black scoter														
* white-winged scoter														
surf scoter														

DAILY BIRD CHECKLIST

Dates: June 88

CAMP: ANIA

SPECIES	17 June	18	19	20	21	22	23	24	25	26	27	28	29	30
* harlequin duck														
oldsquaw														
barrow's goldeneye														
common goldeneye														
bufflehead														
* common merganser														
* red-breasted merganser		4	15	15				4						3
* Black oystercatcher		4											1	
Semi palmated plover		2												
black bellied plover														
lesser golden plover														
* bar-tailed godwit														
Hudsonian godwit														
whimbrel						20		14			4			
* lesser yellowlegs														
solitary sandpiper														
spotted sandpiper														
* Wandering tattler														

DAILY BIRD CHECK LIST

Dates: June 88

CAMP: ANIA

SPECIES	17 June	18	19	20	21	22	23	24	25	26	27	28	29	30
red-necked phalarope														
short-billed dowitcher														
long-billed dowitcher														
common snipe				X				X			X			
ruddy turnstone														
black turnstone														
surfbird														
rock sandpiper														
sanderling														
western sandpiper														
least sandpiper														
baird's sandpiper														
parasitic jaeger					1					1				
long-tailed jaeger														
bonaparte's gull														
mew gull	several	seen daily												→
herring gull														
glaucous gull														
glaucous winged gull	colony of 100 on tip of island													
black-legged kittiwake	100-200	seen daily												

DAILY BIRD CHECK LIST

Dates: June 88

CAMP: ANIA

SPECIES	17 June	18	19	20	21	22	23	24	25	26	27	28	29	30
sabine's gull														
* arctic tern														
aleutian tern														
* common murre			50								150			
thick billed murre														
* pigeon guillemoat	20+50	seen	regularly	feeding	c	kitti	wakes.							
* marbled murrelet														
* kittlitz's murrelet														
* ancient murrelet														
cassin's auklet														
parakeet auklet														
crested auklet														
least auklet														
rhinoceros auklet														
* horned puffin														
* tufted puffin														
golden eagle														
* bald eagle	pr + nest at mouth of River - Aimms resident													
* northern harrier														
sharp shinned hawk														

DAILY BIRD CHECK LIST

Dates: June 88

CAMP: ANIA

SPECIES	17 June	18	19	20	21	22	23	24	25	26	27	28	29	30
northern goshawk														
* rough legged hawk	2pr	res	id'd	on	island									
osprey														
merlin														
peregrine falcon														
gyr falcon														
~~golden plover~~														
rock ptarmigan														
* willow ptarmigan														
* short-eared owl														
great-horned owl														
* belted King fisher		1		1					1		X		1	
northern flicker														
downy woodpecker														
three-toed woodpecker														
say's phoebe														

DAILY BIRD CHECK LIST

Dates: June 88

CAMP: ANIA

SPECIES	17 June	18	19	20	21	22	23	24	25	26	27	28	29	30
horned lark														
tree swallow														
violet-green swallow														
* bank swallow	Colony of 30 ± in bank ¼ mi E													
cliff swallow														
gray jay														
* black-billed magpie	2 pr resident at mouth of River													
* common raven	2 pr resident in alder at east end cove													
* black-capped chickadee														
boreal chickadee														
* winter wren														
ruby-crowned kinglet														
golden-crowned kinglet														
American robin														
swainson's Thrush														
gray-cheeked Thrush											4		4	
hermit Thrush		X	X	X							X		X	
varied thrush														
* northern shrike														

DAILY BIRD CHECK LIST

Dates: June 88

CAMP: ANIA

SPECIES	17 June	18	19	20	21	22	23	24	25	26	27	28	29	30
* water pipit	1	1	1	1				1		1			1	
yellow wagtail														
American dipper														
Bohemian Waxwing														
orange-crowned warbler														
yellow-rumped warbler														
blackpoll warbler														
yellow warbler														
* wilson's warbler														
northern waterthrush														
* Savannah Sparrow	4-	6	resident		seen		every	day						
Song Sparrow							1	1	2		4		2	X
American tree sparrow														
dark eyed junco														
white crowned sparrow														
* golden-crowned sparrow	6-	8	resident		seen		every	day						
* fox sparrow													1	
lapland longspur														
Snow bunting														

DAILY BIRD CHECKLIST

Dates: June 88

CAMP: ANIA

SPECIES	17 June	18	19	20	21	22	23	24	25	26	27	28	29	30
rusty blackbird														
white-winged crossbill														
pine grosbeak														
common redpoll														
* rosy finch														

DAILY BIRD CHECKLIST

CAMP: ANIA

Dates: July 88

SPECIES	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Common Loon														1																	
Arctic Loon																															
* Red-Throated Loon		2	3	1	2	1		2		2	2		2		1	3					1							1			
red-necked grebe																															
horned grebe																															
* northern fulmar																															
Flesh-footed shearwater																															
Sooty Shearwater																															
* short-tailed shearwater																															
Mottled petrel																															
Leach's Storm-petrel																															
* fork-tailed storm-petrel																															
: Double-crested cormorant		sp	sp	sp	sp			sp	30 sp	3 sp	4 sp	sp	4 sp →		3 sp	sp	sp		6 sp	4 sp	4 sp	3	sp	5 sp	3 sp			6 sp	3 sp	5 sp	
: pelagic cormorant		2			4				4 imm				6 →			4	4		3	3		21	2							3	
: red-faced cormorant																															
* sandhill crane														2			2				X	X	X	5						
* tundra swan					3			5																							

DAILY BIRD CHECK LIST

CAMP: ANIA

Dates: July 1988

SPECIES	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
white-fronted goose																															
Snow goose																															
emperor's goose																															
canada goose																															
brant																															
* mallard																															
gadwall																															
* green-winged teal																				1											
American widgeon																															
* northern pintail																															
northern shoveler																															
canvasback																															
greater scaup																															
common eider																															
King eider																															
Steller's eider									2						2		2			3	2		2						gone		
black scoter																															
* white-winged scoter																				40											
surf scoter														10	3													140			

DAILY BIRD CHECK LIST

Dates: July 1988

CAMP: ANIA

SPECIES	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
* harlequin duck																															
oldsquaw																															
barrow's goldeneye																															
common goldeneye																															
bufflehead																															
* common merganser																															
* red-breasted merganser	2	17	3	2	5	2		5	28	6	7	2		2		4	2	22		35	6	3						4	2	6	2
* Black oystercatcher											1									1	1		1					1			
Semi palmated plover																			3						1						
black bellied plover																															
lesser golden plover																															
* bar-tailed godwit																															
Hudsonian godwit																															
whimbrel		30	2	8			6	7	4		15					6		2	2	6											
* lesser yellowlegs														5																	
solitary sandpiper																															
spotted sandpiper																															
* wandering tattler																		2	2	1	3	4									
~~semipalmated sandpiper~~																3															

DAILY BIRD CHECK LIST

Dates: July 1988

CAMP: ANIA

SPECIES	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
* red-necked phalarope																															
short-billed dowitcher																															
long-billed dowitcher																															
* common snipe								X	X	X	X																				
ruddy turnstone																															
* black turnstone																															
* surfbird																															
rock sandpiper																															
sanderling																															
* western sandpiper																															
least sandpiper														3																	
baird's sandpiper																															
? parasitic Jaeger																	1			1											
? long-tailed jaeger																															
* bonaparte's gull																1	2														
mew gull	Resident - 10 or more seen daily																														1
herring gull																															
glaucous gull																															
* glaucous winged gull	Resident - a colony of 200+ lives on the island																														
* black-legged kittiwake	Resident - 100-200 seen feeding daily																														

DAILY BIRD CHECK LIST

CAMP: ANIA

Dates: July 1988

SPECIES	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
sabine's gull																															
* arctic tern																															
aleutian tern																															
* common murre	6	6	0	10			4	6	4	12		20	4	8	6	25	30			12			300					2		7	
thick billed murre																															
* pigeon guillemoat	8	5	7	3			8		35	22			6	8	20	35	40			17	12		35	6	8			24	6	25	
* marbled murrelet			5				1													3			2						2	
* kittlitz's murrelet																							4							2	
* ancient murrelet																							12								
cassin's auklet																															
parakeet auklet																															
crested auklet																															
least auklet																															
rhinoceros auklet																															
* horned puffin																							10							140	
* tufted puffin																							2								
golden eagle																															
* bald eagle	Resident - 1pr + 4 imms seen daily																														
* northern harrier																															
sharp shinned hawk																															

DAILY BIRD CHECK LIST

Dates: July 1988

CAMP: ANIA

SPECIES	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
northern goshawk																															
* rough legged hawk	0	0						1	2	2	2	1	2	4	3	4	5	2	2	4	2	1	1	2	1	1		2	1	4	
Osprey																															
Merlin																															
* peregrine falcon								?																							
gyrfalcon																															
~~spruce~~ ptarmigan																															
rock ptarmigan																															
* willow ptarmigan														1	3																
* short-eared owl																															
great-horned owl																															
* belted Kingfisher	2 - nest near East cove																			1	1	1	1		1	1					
northern flicker																															
downy woodpecker																															
three-toed woodpecker																															
say's phoebe																															

DAILY BIRD CHECK LIST

Dates: July 1988

CAMP: ANIA

SPECIES	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
horned lark																															
tree swallow													2				1		2									2			
Violet-green swallow																															
* bank swallow	Resident - colony of ~~30-50~~ 100 live in cliff bank 1/4 mi East																												?	gone	
cliff swallow																															
gray jay																															
* black-billed magpie	Resident - 2 pair seen almost daily -																														
* common raven	Resident - 3 seen daily - live at cove East end of beach																														
* black-capped chickadee																				2											
boreal chickadee																															
* winter wren																															
ruby-crowned kinglet																															
golden-crowned kinglet																															
American robin																															
swainson's Thrush																															
gray-cheeked Thrush	2 adults + 2 young live in East cove																1														
hermit Thrush	x	x	x	x	xx		x	x	x	x	x		x	x			x	x	x	x	x		x								
varied thrush																															
* northern shrike																								1							

DAILY BIRD CHECK LIST

Dates: July 1988

CAMP: ANIA

SPECIES	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
* water pipit	Resident seen most days																?														
yellow wagtail																															
American dipper																															
Bohemian Waxwing																															
orange-crowned warbler																															
yellow-rumped warbler																															
blackpoll warbler																															
yellow warbler													2	1																	
* wilson's warbler		*			1																									2	
northern waterthrush																															
* savannah sparrow	Resident - 3pr in immediate area - common in area																			?											
song sparrow	Resident - 1pr seen or heard daily - 2 other pair East down beach																			?											
American tree sparrow																															
dark eyed junco																															
white crowned sparrow																															
* golden-crowned sparrow	Resident - 3pr in immediate area																comm in area			?											
* fox sparrow			1		1				1																						
lapland longspur																															
snow bunting																															

DAILY BIRD CHECKLIST

Dates: July 1988

CAMP: ANIA

SPECIES	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
rusty blackbird																															
white-winged crossbill																															
pine grosbeak																															
common redpoll																	2	2		4											
rosy finch																			sp	sp	sp	sp	sp							4 sp	

DAILY BIRD CHECK LIST

CAMP: 88

Dates: Aug

SPECIES	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Common Loon												1																			2
Arctic Loon																															
* Red-Throated Loon	2	1	5	1	2	3	2	2	6	4	5	2	4	2	2	1	2	2	2	2	2	3	4	2	2	4	2	2	4	2	51
red-necked grebe																							2								1
horned grebe																															
northern fulmar				sp	1																										1
flesh-footed shearwater																															
sooty shearwater																															
short-tailed shearwater																															
mottled petrel																															
Leach's storm-petrel																															
fork-tailed storm-petrel																		1													1
Double-crested cormorant	sp	sp		sp		2 sp	12 sp	6 sp	6 sp	4 sp		17 sp	2	5 sp	sp	8 sp		1 sp	5 sp	3 sp	5 sp	6 sp	54 sp	5 sp	3 sp	4 sp	8 sp	2 sp	5 sp	2 sp	5
pelagic cormorant			23		12		46	11	5	8		12	15	2		4			4	4	3	2	18								60
red-faced cormorant													3																		3
sandhill crane		4	5			4				2	3	4	27	6				41		18	53	32	61	24	38	17		6			24
* tundra swan																															3

DAILY BIRD CHECK LIST

Dates: Aug 88

CAMP: ANIA

SPECIES	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
white-fronted goose																															
Snow goose																															
emperors goose																															
canada goose																															
brant																															
* mallard												48																			1
gadwall																															
* green-winged teal																															1
American widgeon																															
* northern pintail																															
northern shoveler																															
canvasback																															
greater scaup																															
common eider																															
King eider																															
Skillers eider																															6
black scoter																															
* white-winged scoter																															1
surf scoter																															3

DAILY BIRD CHECK LIST

Dates: Aug 88

CAMP: ANIA

SPECIES	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
* harlequin duck																				3											1
oldsquaw																															
barrow's goldeneye																															
common goldeneye																															
bufflehead																															
* common merganser		2 SP	3 SP	4 SP	4 SP	2 SP	5 SP	6 SP																							18 SP
* red-breasted merganser												12 A Zim																			35
* Black oystercatcher					2																										8
semi palmated plover																															3
black bellied plover																															
lesser golden plover																															
* bar-tailed godwit																															
Hudsonian godwit																															
whimbrel									5	4										2		4									18
* lesser yellowlegs												5																			2
solitary sandpiper																															
spotted sandpiper																															
* Wandering tattler																				1											6
Eskimo Curlew																				2											1

DAILY BIRD CHECK LIST

CAMP: ANIA

Dates: Aug 88

SPECIES	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
red-necked phalarope																					2										1
short-billed dowitcher																															
long-billed dowitcher																															
common snipe																															6
ruddy turnstone																															
black turnstone																															
surfbird																															
rock sandpiper																2				1							2				3
sanderling																															
western sandpiper												8																			1
least sandpiper																															1
baird's sandpiper																															
parasitic jaeger												1																			4
long-tailed jaeger																															
bonaparte's gull					2			2																							4
mew gull			Resident seen daily																												☆
herring gull																															
glaucous gull																															
* glaucous winged gull			Resident seen daily - 100 to 200																												☆
* black-legged kittiwake			Resident seen daily - 1000-2000																												☆

DAILY BIRD CHECK LIST

Dates: Aug 88

CAMP: ANIA

SPECIES	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
sabine's gull																															
arctic tern																															?
aleutian tern																															
common murre			8		21		17	3	2			17	←	8		1															27
thick billed murre																															
pigeon guillemoat	4	8	22	5	18	3	8	4	14	6	3	24	←	17		2						5	3	7	3	1			4	2	56
marbled murrelet			3		9		6					6	←	10																	10
kittlitz's murrelet			17		11		4	2				2	←	19																	8
ancient murrelet			26		14							4	←	7									1								6
cassin's auklet																															
parakeet auklet																															
crested auklet																															
least auklet																															
rhinoceros auklet																															
horned puffin			120		247		118					65	←	44																	7
tufted puffin																															1
golden eagle																															
bald eagle	Resident seen daily																Fledged														☆
northern harrier																							2								1
sharp shinned hawk																															

DAILY BIRD CHECK LIST

Dates: Aug 88

CAMP: ANIA

SPECIES	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
northern goshawk																															
rough legged hawk	Re	si	de	nt	pr	se	en	da	ily	7	3	3								1	4		4					1			45
osprey																															
merlin																															
peregrine falcon																															
gyr falcon																															
[illegible]																															
rock ptarmigan																															
willow ptarmigan																															1
short-eared owl																				1											1
great-horned owl																															
belted Kingfisher				1	1		2		1		1	2				1		1	1	1	1	1	2	1				1			40
northern flicker																															
downy woodpecker																															
three-toed woodpecker																															
say's phoebe																															

DAILY BIRD CHECK LIST

Dates: Aug 88

CAMP: ANIA

SPECIES	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
horned lark																															
tree swallow																															4
violet-green swallow																															
* bank swallow	4	8	5				18																								61
cliff swallow																															
gray jay																															★
* black-billed magpie	Resident seen daily																														★
* common raven	Resident seen daily								14																						
* black-capped chickadee									2					2																	3
boreal chickadee																															
* winter wren																															
ruby-crowned kinglet																															
golden-crowned kinglet																															
American robin																															
swainson's Thrush																															
gray-cheeked Thrush																2	2			1											12
hermit Thrush																	2	2		2											24
varied Thrush																															
* northern shrike												1																			2

DAILY BIRD CHECK LIST

Dates: Aug 88

CAMP: ANIA

SPECIES	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
water pipit																			2	2									2		30
yellow wagtail																															
American dipper																															
Bohemian waxwing																															
orange-crowned warbler																															
yellow-rumped warbler																															
blackpoll warbler																															
yellow warbler														1		1															4.
* wilson's warbler		2	2	1		2	1				1																				8.
northern waterthrush																															
* savannah sparrow			1	1	3	4	3	1	2	1	2	2	2	2		8	7	7	3	6.	2	2	1	2	1	2	7	2	4	2	#?
song sparrow																															21
American tree sparrow																															
dark eyed junco																															
white crowned sparrow																															
* golden-crowned sparrow						1								2															1		47
* fox sparrow										1				1						1											7
lapland longspur																															
snow bunting																															

DAILY BIRD CHECKLIST

Dates: Aug 88

CAMP: ANIA

SPECIES	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
rusty blackbird																															
white-winged crossbill																															
pine grosbeak																															
common redpoll	2	2	4 sp	2 sp	6 sp	4 sp	2 sp	5 sp	3 sp	3 5 sp	4 sp	11 sp																			6
rosy finch																															sp 16

Weather - ANIA 1988 - from Bay Cabin unless noted

Present + High/low temps are read at 0900. High/low represent previous days high + previous nights low - thermometer is located in foyer + probably represents slightly high highs

Date 1988	Clouds	Pt hi/lo	wind	Baromiter	Comments
17 June	cloudy		W. 0-5		arrived 1530 pleasant
18	cloudy	cold	W - 5		light wind + rain
19	low clouds	warmer	SE - 10		light rain - cooling
20	clouds - 3000'	48 - 47/58	W - 8		rain all night
21	clear	43 - 40/62	W - 7		cool - wind increased to W 20
22	hi Thin clouds	48 - 46/70	W - 10-25		wind built + shifted to NW 20 - Waves from S breaking 4 deep
23	cloudy	45 - 44/66	NW - 8 -		cold wind - cabin temp 53 at 2200 - That was warm
24	clear	42 - 39/59	W - 12	29.87 ↑	wind calmed + moved E 6
25	hi cirrus	42 - 41/66	W - 10-20	29.93 →	improved to be nice day
26	clear	44 - 42/66	W - 5	29.86 -	Turned cold + cloudy by evening
27	cloudy	44 - 65/44	calm	29.98 ↑	Cold - at 1700 wind suddenly came up to E 15
28	cloudy	49 53/48	E 15-25	29.85 ?	wind E all day very cold in cabin - long johns + float coat
29	cloudy	50 50/45	calm	29.92	Improved - clear in PM wind E 5-10
30	cloudy Rain	50 47/58	NW 8-10	29.85	bad day rain all day wind at NW 10-20

Weather ANIA July 88

Date 88	Cloud cover	Temp 0900 Hi/Lo	Wind	Barometer	Comments
1 July	Partly sonny	46 50/44	NW 10-25	29.66↓	wind driven rain most of nigh. day windy but not bad
2	Heavy Haze	44 59/42	NW 10-20	29.54↓	clouds built wind died - last night all night wind 30-40-50+
3	Fog - Mist	48 56/48	N 5-10	29.92↑?	Mist/drizzle most of day - win. Turned to ESE 5-10
4 Happy Birth Day USA!	Fog - low clouds	47 53/47	E 3-6	29.72↓	Quickly deteriorated to solid fog + rain
5	Cloudy	46 50/46	E 0-5	29.72→	Clouds lowerd - winds Stayed E 5
6	low clouds, rain	45 56/45	W 0-5	29.74	rain all last night - rain most of today - ceiling highe
7	Cloudy rain	46 53/44	W 5-10	29.92	rain quit early afternoon some blue to ME
8	clear & high scattered clouds	42 ~~58~~/58	W 0-5	29.92	first good day in 12 - broken clouds + warmer finally
9	Broken Clouds	46 59/43	calm	29.92??	reducing clouds to clear by 1500 - wind SE 0-5
10	Cloudy	51 68/50	W 0-5	—	Not bad - winds in Bay were SSE 15-20 at Cabin SSE 0-5
11	cloudy	51 65/49	W 0-5	—	cleared winds up by 1400 down by 1900 SSE 15-20 in bay
12	broken clouds	50 61/48	W 5-10	—	wind went NW 10-20 clouds solid by 1300
13	Thin clouds	47 58/46	NW 10-20-30		High wind all last night - dropped durring the day - rain @ 1800
14	Cloudy	50 58/48	W 0-5		Rain most of night. Improved To be best day of year
15	Clear	53 70/46	W 8-10		clear, warm + windy all day
16	Partly sunny	51 74/48	E 0-5		clear, warm, wind increased to E 15
17	Broken Clouds	50 69/48	W 5-10+		Wind went E 5 @ mid afternoon ended as a nice day
18	low clouds ↓1000'	50 71/50	E 5-10		Wind increased to 10-15 cloods rose but not a nice day
19	cloudy light rain	51 57/49	E 5-10	29.42?	rain til 1430 winds varible but light
20	High clouds	52 58/49	NW 5	29.08??	clouds built Then thinned wind stayed
21	Fog	48 70/48	calm	29.21	improved forenoon Then went to cloudy + cool
22	clouds / Fog	51 67/50	calm		low clouds all day - bright teuer around 1500 - wind up to E 5
23	Low Clouds	53 60/51	E 0-5		Some sun late afternoon wind went W at 2000 10-15-20
24	Mostly Clear	51 67/48	W 10-15-20		Wind last night W 20 - Today beautiful but windy
25	clear	51 72/47	W 10-15-20		High wind last night held all da Clear beautiful
26	Cloudy	48 71/47	S 0-5		wind built To 15-20 + Moved E - not a pleasant day
27	Cloudy/rain	45 59/45	NE 20-30		Wind E - NE 20+ rain all night Continued wind + rain all day
28	cloudy	48 51/47	E 0-5		improved all day To end c broken clouds almost blusc
29	Broken clouds	51 64/48	W 0-5		improved To the most beautifu day To date in spite of sprinkle
30	High thin clouds	58 76/48	calm		beautiful morning - wind, wan + clouds built Through aftern
31	Low heavy clouds	54 71/52	NE 10-20		Serious storm wind, rain, wav. increased all day NE 35-50+

Weather ANIA Aug 88

Date 88	Cloud cover	Temp 0900 Hi/Lo	Wind	Baromiter?	Comments
1 Aug	Low clouds light rain	49 51/48	E 10-20+		windy all day scattered showers - moderate seas
2	clouds light rain	51 55/49	calm		clouds raised to broken wind to W 5
3	Broken Clouds	48 65/46	W 0-5		nice day - on water waves: Wind To S 10-15
4	Fog-rain	49 66/49	E 0-5		Fog all day - rain most o day wind E to 10
5	Broken Clouds	51 60/48	E 0-5		quickly went to cloudy then to fog
6	low clouds drizzle	49 59/49	W 5+		low clouds to fog persisted al day - higher clouds late evening
7	Broken clouds	51 59/47	NW 5-10		winds [at sea] went to N 25 here they remained NW 5-1
8	Broken clouds	50 69/47	NW 10-15		winds about like yesterday nice here very choppy out
9	High Thin	58 70/39	E 0-5		Quickly deteriorated To SE 15+ low heavy Clouds
10	cloudy c̄ holes	51 60/48	W 5		again went to low clouds/fog wind E 5-10
11	cloudy	52 56/51	W 10-20		Cleared at mid day Then clouded again wind gusts-3.
12	90% clouds	49 64/46	W 5-10		clouds rain wind SE 10
13	Broken Clouds 80%	51 64/46	W 10		Clouds up + down - wind Steady W 10
14	Clear!	48 68/44	W 0-5		Stayed clear wind went to S 10 - clouds 2000
15	Fog drizzle	52 68/52	N 5+		Rain started last night + has not quit wind SE 10
16	Fog-rain	51 56/51	SE 10-15-20		Rain all night off + on all day wind to E 15-20
17	Fog-rain	49 58/49	NE 10-20-30		Rain hard all night - lightened up some - rain off + on
18	Cloudy c̄ holes	52 60/48	NE 0-5		rain + son off + on all day hard rain last night
19	Fog-00 rain	50 61/49	NE 5		fog lifted 1400+ returned at 1800
20	Cloudy	52 58/49	NW 0-5		clouds Thinned To mostly sunny wind To SE 0-5
21	High Thin	46 61/40	W 10-15		clouds Thickened To heavy rain wind NW 5+
22	90% Clouds	44 68/41	W 5		Clouds - rain - moments of Sun
23	clear	45 63/40	W 5-10		clouds building - wind N 15. To heavy Clouds calm
24	Cloudy	46 67/45	calm		Cleared c̄ wind E 10-15 to Clou. rain
25	cloudy Rain fog	47 58/47	E 5		Rain all last night + most of today
26	cloudy - broken	44 57/44	E 5		Rain + waves during night - ra all day wind to E 20-35
27	Cloudy	40 51/40	NNE 10-15-25		wind moved NNW 10 Then To ca. Seas 6-8'
28	low clouds	40 55/40	N 10-15		0-0 most of day - rain wind E 10 Seas 2-3'
29	Broken Clouds	47 52/45	W 25-35		improved - winds stayed up until 1800 Seas 2-5
30	Cloudy Rain	42 59/41	SE 5-10		We flew out c̄ 300' ceiling
31					