



Data Management Products

National Park Service
Southwest Alaska Network
Inventory & Monitoring Program

Presented by:
Dorothy Mortenson, Data Manager

Available Products

- Website
- Data Management Plan
- X Drive \Libraries
- Product Distribution and Archive
- Bibliography
- Biological Inventories
- GIS Data and Photo Libraries

SWAN Website

- Recently revamped to comply with I&M requirements
- Adds a “front door” to all the vital signs
- Links to the Intranet, for in-house information
- Provides photos galleries, bibliographies, quick links to documents, etc.
- Drill down for more information

Southwest Alaska Network - Inventory and Monitoring Program - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address: <http://www.nature.nps.gov/im/units/swan/index.cfm>

National Park Service
Inventory & Monitoring Program

Nature & Science NPS

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Inventory & Monitoring

Parks: Nature & Science

Southwest Alaska Network:

- Long-term Monitoring
- Vital Signs Monitoring
- Plan
- Inventories
- Newsroom
- Education Outreach
- Network Staff
- Product Guidelines
- SWAN Intranet - NPS Only

Vital Signs:

- Climate
- Marine Nearshore >
- Landscape Dynamics &
- Terrestrial Vegetation >
- Lakes, Rivers & Fish >**
- Terrestrial Animals >
- Human Activities >

Related Links:

- Alaska Region I&M Program

Southwest Alaska Network

Inventory & Monitoring Program



Integrating science, education, and resource protection through monitoring.



I & M > Networks > Southwest Alaska Network > Home

Southwest Alaska Network Inventory and Monitoring Program

The Southwest Alaska Inventory & Monitoring Network (SWAN) is an office of the National Park Service dedicated to providing the scientific foundation for effective, long-term protection and management of natural resources in five units of the national park system. Collectively these units comprise approximately 8.4 million acres, 11.6 percent of the land managed by the National Park Service, or 2 percent of the Alaska landmass, and include a diversity of geologic features, ecosystems, fish, wildlife, and climatic conditions that are equaled few places in North America.



Date Last Modified:

- Resident Lake Fish

Quick Links

- What's New

Parks in this Network

Please select a park




[Southwest Alaska Network Map](#)

[National I & M Map](#)

National Park Service Inventory & Monitoring Program

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Southwest Alaska Network

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I & M » Networks » Southwest Alaska Network » Freshwater Chemistry

Freshwater Chemistry

Importance/Issues

SWAN parks contain some of the largest and most pristine freshwater resources in the national park system. These include two large lakes, Naknek Lake and Lake Clark, numerous multi-lake systems, and thousands of miles of rivers, including five designated "Wild Rivers." Lakes and streams comprise interconnected flow systems within the broader landscape. They are interactive with their adjacent environments, integrative of the biophysical processes occurring there, and thereby sensitive to local climate (changes in precipitation, glacial retreat or advance), natural disturbance events (fire, landslides, volcanic eruptions) and land-use changes in and adjacent to parks. Despite their remoteness, freshwater resources of SWAN parks are subject to several types of influence affecting their function through time. Humans affect SWAN freshwater environments by altering the climate, introducing contaminants, and through land use. Water quality, especially dissolved oxygen, pH, and temperature, is not only important for maintenance of biological life, but can control or alter biogeochemical cycling as well as the toxicity of some elements.

Monitoring Approach and Progress

Stations:

Johnson River

Exit Glacier Mile .1 Harding Trail

Exit Glacier Mile .6 Harding Trail

Quick Links

Bibliography

NPS Water Quality Inventories Information

NPS Water Resources

NPS STORET

EPA Storet

ADEC Water Division

Freshwater Chemistry Documents

Select a Report

Contacts

Alan Bennett, NPS-SWAN

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[I & M » Networks » Southwest Alaska Network » Freshwater Chemistry » Bibliography](#)

Freshwater Chemistry Monitoring

[Back to Freshwater Chemistry](#)

SWAN Publications

Baseline Water Quality

- PDF** Bennett, Laurel A. Baseline water quality inventory for the Southwest Alaska Inventory and Monitoring Network, Aniakchak National Monument and Preserve. 2004. **1.6mb**
- PDF** National Park Service Water Resources Division. Baseline water quality data inventory and analysis: Lake Clark National Park and Preserve. NPS/NRWRD/NRTR-97/102. Fort Collins, CO: U.S. National Park Service, 1997. **49 mb**
- PDF** National Park Service. Baseline water quality data inventory and analysis: Katmai National Park and Preserve and Alagnak Wild River, Volume I of II. 2001. **138 mb**
- PDF** National Park Service. Baseline water quality data inventory analysis: Katmai National Park and Preserve and Alagnak Wild River, Volume II of II. 2001. **95 mb**

References:

Southwest Alaska Network - Inventory and Monitoring Program - Microsoft Internet Explorer

Address: http://www.nature.nps.gov/m/units/swan/index.cfm?theme=d_mate_harding

National Park Service Inventory & Monitoring Program

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 Terrestrial Vegetation >
 Lakes, Rivers & Fish >
 Terrestrial Animals >
 Human Activities >

Related Links:
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 Program

Southwest Alaska Network

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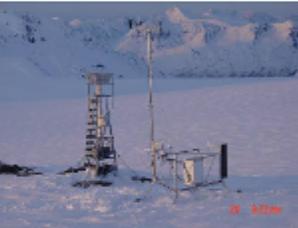

Integrating science, education, and resource protection through monitoring.

I & M > Networks > Southwest Alaska Network > Climate > Harding Icefield

Climate Change

Harding Icefield Weather Station

A prototype climate monitoring station was installed in July 2004 on the Harding Icefield, Kenai Fjords National Park, through a Cooperative Agreement developed with USGS-Water Resources Division. The automated weather station with all-weather precipitation gage) was a joint purchase by the National Weather Service-River Forecast Center and the NPS. In addition, a contract was written with Western Regional Climate Center (WRCC)/Desert Research Institute (DRI) to a) review existing climatic models, b) evaluate the ability of the existing weather station network to observe regional climatic conditions, and c) to identify potential weather station deployment locations in the the SWAN parks.



Harding Icefield April 24, 2005.

Current Monitoring

The Harding Icefield weather station was deployed in July 2004. The station is located on a nunatak in the northern Harding Icefield at an elevation of 4,200 feet above sea level.

Site selection, station acquisition, deployment and maintenance has been a multi-agency effort involving the USGS - Water Resources Division, National Weather Service - River Forecast Center and the National Park Service (KEFJ, SWAN, ARC).

The Harding Icefield Weather Station is the first of several remote automated weather stations to be deployed in support of Climate Monitoring in the SWAN.

The station has operated for just over two years. Extreme weather is the norm at this site and the weather station tower

Quick Links

[Harding Icefield Data](#)
[Harding Icefield Photo Gallery](#)
[Back >> Climate Monitoring](#)

Contacts

[Bruce Giffen](#)

Inventory and Monitoring Program - Microsoft Internet Explorer

Address: http://www.nature.nps.gov/m/units/swan/index.cfm?theme=c_h_gallery

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Climate Change

Harding Icefield Weather Station Photo Gallery

[Back to Harding Icefield](#) | Click on any photo for a larger image. Photos by NPS staff.



Setting up the Harding Icefield weather station - July 2004.



Setting up the Harding Icefield weather station - July 2004.





SWAN :: Beach Profiles - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address http://www.nature.nps.gov/units/swan/libraries/Photos/Coast_Changes/LACL_Profile/beach_profile_index.cfm?theme=Polly_Creek

Navigation & Monitoring Program

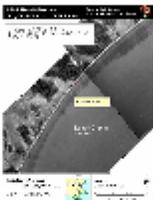


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Geomorphic Coastal Change Monitoring

Polly Creek Beach Profiles

Back to Geomorphic Coastal Change | Site Description
 Back to Other profiles | Say something about the site here...



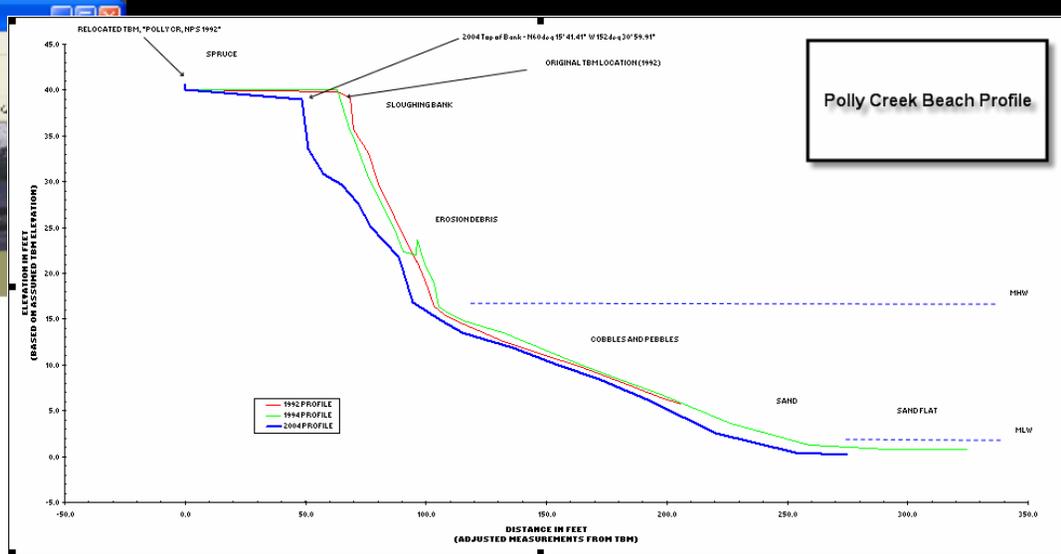
Site Map

1882

		
02_Visit_PollyCk_12.bmp Carl Cusick Profile Views LACL	02_Visit_PollyCk_13.bmp Carl Cusick Profile Views LACL	02_Visit_PollyCk_14.bmp Carl Cusick Profile Views LACL

2004

		
PollyCreekProfile.bmp Joel Cusick	Polly_Ck_Overview.JPG Joel Cusick	Polly_Ck_IMG_2255_tag.jpg Joel Cusick



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Address: http://www.nature.nps.gov/inunits/swan/index.cfm?theme=newsroom

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I & M » Networks » Southwest Alaska Network » Newsroom

Newsroom

News

March 2007	Science Symposium	Biannual Science Symposium held in Homer, AK
January 2007	Biological Inventories	Vascular Plants for SWAN park units are certified and available.
December 2006	Landscape Processes	Draft of MODIS products are complete and are being peer reviewed!

Quick Links

- Education Outreach
- Science Symposium

Executive Drifts

Search Report

SWAN e-newsletter

Search Report

Contact Us

Alan Bennett, NPS-SWAN

Date Last Modified: February 15, 2007

U.S. Department of the Interior | Southwest Alaska Network | Education Outreach

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Address: http://www.nature.nps.gov/inunits/swan/index.cfm?theme=education_outreach

Program



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I & M » Networks » Southwest Alaska Network » Education Outreach

Education Outreach

- Posters
- Brochures
- Field Guides
- Biological Inventory Reports
- Monitoring Reports
- Maps
- Research Opportunities

Posters

	Long-term Vital Signs Monitoring in the Southwest Alaska Network	JPG (Large)	PDF (Tablet)
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Brochures

	Southwest Alaska Network, Inventory and Monitoring Program Brochure	PDF
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Field Guides

PDF 3 mb	Lees, D. C. 2008. Guide to intertidal bivalves in southwest Alaska national parks: National Park Service, Southwest Alaska Network, Anchorage, AK. NPS\AKRSWAN\NRTR-2008\02
PDF 4 mb	Amphibians of Alaska
PDF 22 mb	Small Mammals Handbook Condensed

Top

Display copies available

Everyday Useful Guidelines

- File naming standards cheat sheet
- Project Organizer (spiffed up readme.txt file)
- *(handouts available)*

1.4.1. General Appearance

Figure 1 shows a typical form using the common look and feel. It has a standardized header, form title, menu buttons, color palette, font and font size.

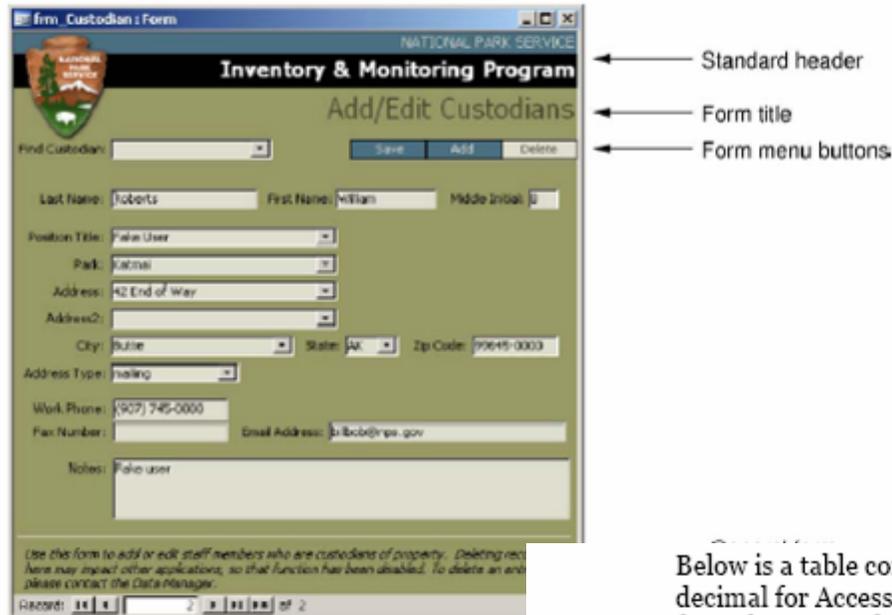


Figure 1. Sample database form

1.4.2. Color Palette and Font

Provided are the standardized font and color palette for database forms. The font size and color

Below is a table containing each of the colors in the palette, depicted in decimal for Access, RGB triplets for Word and Photoshop, and Hex values for web pages. Also provided is a list of examples of what each of these colors should be used for on database forms.

Table 1. Color Palette

Decimal	RGB Triplets	Hex	Database Form Applications
13688799	223/223/208	#dfdfd0	Text field, pull downs, and combo box backgrounds.
8563370	170/170/130	#aaaa82	Sub-form background color, disabled command buttons.
6723993	153/153/102	#999966	Main background color, disabled text fields, text field highlights.
3163975	71/71/48	#474730	Form title, help or information text.
8548427	75/112/130	#4b7082	Title bar background, menu buttons, continuous form headers.
128	128/0/0	#810000	Alerts, warnings, and other important labels.

Data Management Plan

- Completed in 2006
- Contains good data management practices from start to finish of a project.
- Outlines laws, DO's and other requirements at the start of each chapter
- Many guidelines cited are on the internet

Distribution of Products

- Libraries (reports)
 - ARLIS, TIC, Park NR Libraries, UAA Consortium Library, AK State Library, etc.
- Archives (reports and project material)
 - Hardcopy report and project materials to archives
 - Voucher specimens appropriate archives

Electronic Distribution

- Internet (Public)
- X:\Libraries (AK NPS)
 - Reports
 - Archived Projects
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 - Aerial Photos
 - Data
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 - Terrestrial Animals »
 - Human Activities »

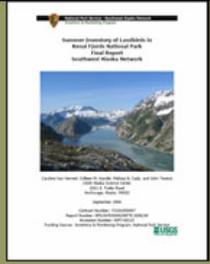
- Related Links:**
- Alaska Region I&M Program

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I & M » Networks » Southwest Alaska Network » Monitor Reports

Monitoring Technical Reports

Data Discovery

PDF Thompson, T. S. 2004. Oceanic and Nearshore Research and Monitoring in the Northern Gulf of Alaska. National Park Service, Anchorage, AK. NPS/AKRSWAN/NRTR-2004/01.

Habitat Mapping

PDF Hall, D. K., B. A. Giffen and J. Y. Chien. 2005. Changes in the Harding Icefield and the Grewingk-Yalik Glacier Complex, Kenai Fjords National Park (KEFJ).

PDF Harper, J and M Morris. 2005. The Katmai Coast - a guide to coastal biophysical features and ecological processes. National Park Service, Anchorage, AK. NPS/AKRSWAN/NRTR-2005/03.

Protocol Development

PDF Monz, Christopher, and Peter D'Luhosch. 2005. Monitoring visitor use and associated impacts in the Southwest Alaska Network Parks. National Park Service, Anchorage, AK. NPS/AKRSWAN/NRTR-2005/01.

Ecological Subsections

PDF Spencer, Page. Ecological subsections mapping of Alaska national park units. 2002. <1 mb

PDF Shephard, Michael E., and Page Spencer. Ecological subsections of Katmai National Park & Preserve, Alagnak Wild River. 2000. 4 mb

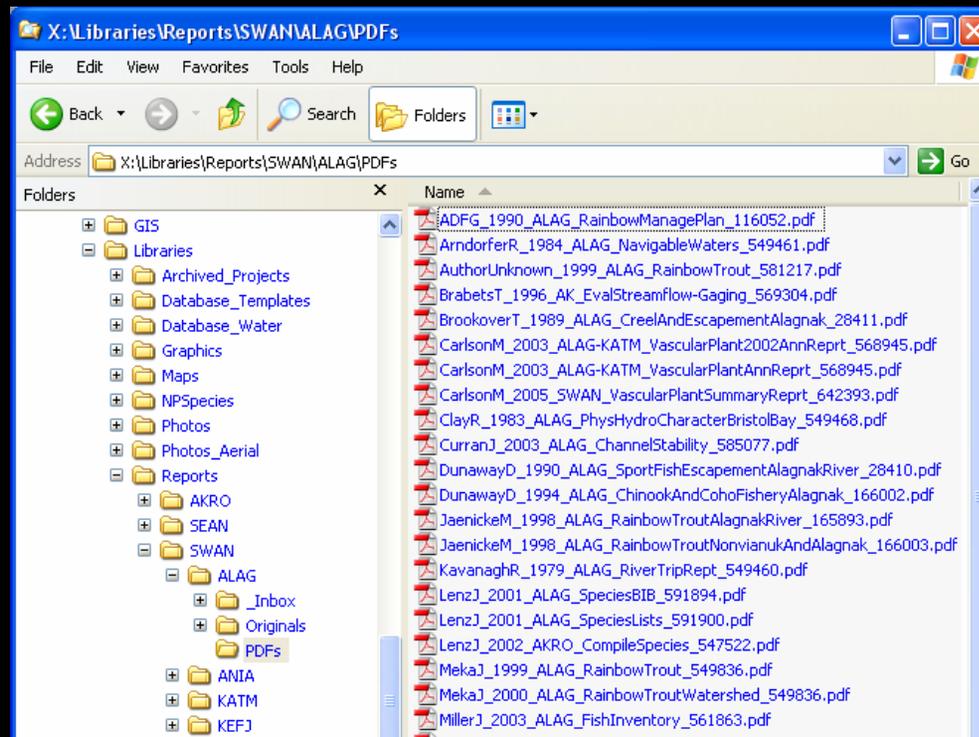
PDF Spencer, Page. Ecological subsections of Lake Clark National Park & Preserve. 2001. 17 mb

PDF Tande, Gerald F., and Julie Michaelson. Ecological Subsections of Aniakchak National Monument and Preserve. 2001. < 1 mb

PDF Tande, Gerald F., and Julie Michaelson. Ecological subsections of Kenai Fjords National Park. 2001.

Electronic Reports (in PDF) Available on X Drive

ALAG	ANIA	KATM	KEFJ	LACL
26	73	806	331	222



Bibliography (NatureBIB)

- Online bibliography service-wide for all park related documents
- Requires a login (*ask me!*)
- Continues to be updated
- Desktop version is in draft

Find bibkey ID

Enter an author, keyword or title *Select below to include park, network or office.*

Find

Starts with

in

Author last name

Pick a Park *To select multiple parks, hold down SHIFT or CTRL key while making selections.*

- Juan Bautista De Anza National Historic Trail (JUBA)
- Kalaupapa National Historical Park (KALA)
- Kaloko-Honokohau National Historical Park (KAHO)
- Katmai National Park & Preserve (KATM)

Or And

Pick a Network *To select multiple offices, hold down SHIFT or CTRL key while making selections.*

Include parks within the networks

- All Networks
- Appalachian Highlands Network(APHN)
- Arctic Network(ARCN)
- Central Alaska Network(CAKN)

Or And

Pick an NPS Office *To select multiple offices, hold down SHIFT or CTRL key while making selections.*

- All Offices
- AD, Administration Associate Director's Office(ADADMIN)
- AD, Cultural Resource Stewardship & Partnerships Associate Director's Office(ADCRSP)
- AD, Natural Resource Stewardship & Science Associate Director's Office(ADNRSS)

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Results

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6 citation(s) found.

Search criteria: Author last name starts with Hamon. Park(s): KATM.

- [Hamon, T. R. 1999. Katmai documented fish species. *in* Author unknown. No title.](#) **Bibkey 167792**
- [Hamon, T. R. 2001. The role of natural and sexual selection in local adaptation of spawning behavior and morphology in sockeye salmon, *Oncorhynchus nerka*. King Salmon, AK.](#) **Bibkey 585158**
- [Hamon, T. R., C. J. Foote, R. Hilborn and D. E. Rogers. 2000. Selection on Morphology of spawning wild sockeye salmon by a gill-net fishery. *Transactions of the American Fisheries Society*, 129:1300-1315.](#) **Bibkey 585155**
- [Hamon, T. 1999. Sockeye salmon population status and local adaptation inventoried at Aniakchak. *Natural Resource Year in Review*, 26-27.](#) **Bibkey 575260**
- [Jones, T. M., L. Bennett and T. R. Hamon. 2005. Baseline Inventory of Freshwater Fishes of the Southwest Alaska Inventory and Monitoring Network: Alagnak Wild River, Aniakchak NM and Preserve, Katmai NP and Preserve, Kenai Fjords NP, and Lake Clark NP.](#) **Bibkey 601942**
- [Wall, C. L. and T. R. Hamon. 2000. Fish Inventory of Up-a-tree Creek, Brooks Lake Drainage, Bristol Bay, Alaska.](#) **Bibkey 549826**

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Author

- Hamon(6)
- Author unknown(1)
- Bennett(1)
- Jones(1)
- Wall(1)
- Rogers(1)
- Hilborn(1)
- Foote(1)

Keyword

- sockeye salmon (3)
- Alaska (2)
- Oncorhynchus nerka* (2)
- Surprise Lake (2)
- freshwater (2)
- Aialik Bay (1)
- Albert Johnson Creek (1)
- Aniakchak National Monument and Preserve (1)
- Arctic char (1)

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Workform type Journal article

Basic Information

Journal title	Transactions of the American Fisheries Society		
Article title	Selection on Morphology of spawning wild sockeye salmon by a gill-net fishery		
Series title	None		
Volume ID	129	Issue ID	None
Page range	1300-1315	E-journal No	
Date of publication	2000		
Citation Status	new		
Citation sensitivity	Public		
Topic area	None		
Database system	NRBIB		
URL of online document	None	URL accessed on	
Linked to other applications	None		
Created by	NRBIB_NW01E1 On 15-FEB-2005 12:32 PM. Name: None.		
Last modified by	NPSPP_NW01E3 On 05-JUN-2006 04:32 PM. Name: Mortenson Dorothy.		

Author

- Journal author**
- Hamon Troy R
 - Foote Chris J
 - Hilborn Ray
 - Rogers Donald E

Keyword

- [Bristol Bay](#)
- [gill-net fishery](#)
- [Oncorhynchus nerka](#)
- [sockeye salmon](#)
- [wild sockeye salmon](#)

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Files linked to this citation

- URL: [HamonT_2000_KATM_GillNetFishery_585155.pdf](#)
- File Size: 169129 bytes
- Sensitivity: NPS Only
- Created by: NPSPP_NW01E3

Biodiversity information

- I&M biological inventory funded: No
- Evidence types: No data
- Biodiversity types: No data

Park/Network/Office

- Park/Office: Katmai National Park & Preserve (KATM)
- Sensitivity: Public
- Created by: Staff
- Park specific notes: None
- Park specific abstract: None

Holdings

- Park/Office: Alaska Region NPS Regional Office (AKRO)
- Location: Inventory and Monitoring Program
- Location ID: None
- Collection: None
- File code: None
- ANCS+: None

Abstract/Notes/Legacy

Abstract: Human activities can cause artificial selection in wild animals. To examine the effects of gill-net selectivity on locally differentiated populations of sockeye salmon *Oncorhynchus nerka* in Bristol Bay, Alaska, we completed a three-part study: (1) We showed differentiation in the body form of mature sockeye salmon spawning in beach and stream habitats that were separated by less than 300 m. (2) Because gill-net selection acts directly on the girth of immature sockeye salmon, we correlated girth at capture with the morphological characters distinguishing locally differentiated populations on the spawning grounds. By tagging individual fish and measuring them both when immature and when mature, we found morphology at maturity to be highly correlated with girth during immaturity. (3) Using selection regimes from the fishery catch and escapement data for 1994, we examined the effects of gill-net selectivity on populations of mature adults. We showed that although populations of mixed ocean age-classes may be subject to disruptive selection, single age-class populations are more likely to experience directional selection. The effect of this selection depends on cumulative selection pressures, which probably include natural and sexual selection on this trait. Even so, gill-net selection can be a strong selective force, resulting in significant additional selection on body size and shape within populations.

Notes: No general notes

Selection on Morphology of Spawning Wild Sockeye Salmon by a Gill-Net Fishery

TROY R. HAMON*¹

*University of Washington, School of Fisheries,
Box 355020, Seattle, Washington 98195, USA*

CHRIS J. FOOTE

*Department of Fisheries and Aquaculture, Malaspina University-College,
900 5th Street, Nanaimo, British Columbia V9R 5S5, Canada*

RAY HILBORN AND DONALD E. ROGERS

*University of Washington, School of Fisheries,
Box 355020, Seattle, Washington 98195, USA*

Abstract.—Human activities can cause artificial selection in wild animals. To examine the effects of gill-net selectivity on locally differentiated populations of sockeye salmon *Oncorhynchus nerka* in Bristol Bay, Alaska, we completed a three-part study: (1) We showed differentiation in the body form of mature sockeye salmon spawning in beach and stream habitats that were separated by less than 300 m. (2) Because gill-net selection acts directly on the girth of immature sockeye salmon, we correlated girth at capture with the morphological characters distinguishing locally differentiated populations on the spawning grounds. By tagging individual fish and measuring them both when immature and when mature, we found morphology at maturity to be highly correlated with girth during immaturity. (3) Using selection regimes from the fishery catch and escapement data for 1994, we examined the effects of gill-net selectivity on populations of mature adults. We showed that although populations of mixed ocean age-classes may be subject to disruptive selection, single age-class populations are more likely to experience directional selection. The effect of this selection depends on cumulative selection pressures, which probably include natural and sexual selection on this trait. Even so, gill-net selection can be a strong selective force, resulting in significant additional selection on body size and shape within populations.

Natural and sexual selection have been studied extensively and in a number of organisms (Endler 1980, 1983, 1986; Reznick and Endler 1982; Swain 1992a, 1992b; Arnold and Duvall 1994). Artificial selection has been demonstrated to affect

their natal sites precludes simple age-biased harvesting in which older fish are affected more heavily because of their longer residence in the area being fished (Ricker 1980). However, gill nets have been recognized for many years as agents of



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Monitoring Program Report

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Hamon, T. R. 1999. Katmai documented fish species. *in* Author unknown. No title.

Hamon, T. R. 2001. The role of natural and sexual selection in local adaptation of spawning behavior and morphology in sockeye salmon, *Oncorhynchus nerka*. King Salmon, AK.

Hamon, T. R., C. J. Foote, R. Hilborn and D. E. Rogers. 2000. Selection on Morphology of spawning wild sockeye salmon by a gill-net fishery. *Transactions of the American Fisheries Society*. **129**:1300-1315

Hamon, T. 1999. Sockeye salmon population status and local adaptation inventoried at Aniakchak. *Natural Resource Year in Review*. 26-27.

Jones, T. M., L. Bennett and T. R. Hamon. 2005. Baseline Inventory of Freshwater Fishes of the Southwest Alaska Inventory and Monitoring Network: Alagnak Wild River, Aniakchak NM and Preserve, Katmai NP and Preserve, Kenai Fjords NP, and Lake Clark NP.

Wall, C. L. and T. R. Hamon. 2000. Fish Inventory of Up-a-tree Creek, Brooks Lake Drainage, Bristol Bay, Alaska.

Uses for NatureBIB

- Requests from researchers outside of NPS can request a login, do their own search, and view the PDF.
- Researchers working on NPS projects can get a copy of the electronic report collection.
- Staff working with non-nps researchers can e-mail specific files being requested.
- Improves ARLIS, by sending them electronic copies and hard copies

NatureBIB (Continued)

- NatureBIB is service-wide database
- Only a few Networks have documents online
- Eventually be linked to the NPS Data Store *(formerly GIS clearinghouse)*

Biological Inventories

	ALAG	ANIA	KATM	KEFJ	LACL
Birds	O	O	X	X	X
Mammals	X	X	X	X	X
Vascular Plants	X	X	X	X	X
Fish	O	O	O	O	O
Amphibians	O	O	X	X	X
Reptiles	X	X	X	X	X
Invertebrates			S	S	S
Non-Vascular Plants				S	S
Fungi			S		

X = Done; O = Outstanding; S = Some info available

Appreciating the Biological Inventories

- Previous to the biological inventories the parks commonly would keep a word document of their species – always in “draft”.
- Taxonomic names have been validated by experts. Provides credibility to the lists.
- Synonyms addressed. Spelling corrected.
- Have more supporting evidence of species occurrence.
- Confirmed “Probably Present” to “Present”

Appreciating the Biological Inventories (continued)

- All sources compiled into one database
- Database is service-wide
- Links to references
- Lists Species of Management Concern
- Specimens properly curated

Species of Management Concern

NPSpecies - [Query1 : Select Query]

Type a question for help

Park Code	Category	Latin Name	CommonName	Park Status	Details
KEFJ	Vascular Plant	Zannichellia palustris		Probably Present	Globally secure and rare in the state (AKNHP 2006 rank G5 - S3)
KEFJ	Bird	Asio flammeus	Short-eared owl	Probably Present	Partners in Flight Watch List species.
KEFJ	Bird	Bombycilla garrulus	Bohemian Waxwing	Present in Park	Partners in Flight Continental Stewardship species.
KEFJ	Bird	Contopus cooperi	Olive-sided Flycatcher	Present in Park	Partners in Flight Watch List species.
KEFJ	Bird	Cyanocitta stelleri	Steller's Jay	Present in Park	Partners in Flight Continental Stewardship species.
KEFJ	Bird	Empidonax alnorum	Alder flycatcher	Present in Park	Partners in Flight Continental Stewardship species.
KEFJ	Bird	Euphagus carolinus	Rusty blackbird	Present in Park	Partners in Flight Watch List species.
KEFJ	Bird	Falcipectus canadensis	Spruce Grouse	Present in Park	Partners in Flight Continental Stewardship species
KEFJ	Bird	Falco peregrinus	Peregrine falcon	Present in Park	Partners in Flight Continental Stewardship species
KEFJ	Bird	Haliaeetus leucocephalus	Bald eagle	Present in Park	Partners in Flight Continental Stewardship species
KEFJ	Bird	Ixoreus naevius	Varied thrush	Present in Park	Partners in Flight Continental Stewardship species.
KEFJ	Bird	Lagopus lagopus	Willow ptarmigan	Present in Park	Partners in Flight Continental Stewardship species
KEFJ	Bird	Loxia leucoptera	White-winged crossbill	Present in Park	Partners in Flight Continental Stewardship species.
KEFJ	Bird	Melospiza lincolni	Lincoln's sparrow	Present in Park	Partners in Flight Continental Stewardship species.
KEFJ	Bird	Passerella iliaca	Fox sparrow	Present in Park	Partners in Flight Continental Stewardship species.
KEFJ	Bird	Picoides arcticus		Present in Park	Partners in Flight Continental Stewardship species.
KEFJ	Bird	Pinicola enucleator	Pine grosbeak	Present in Park	Partners in Flight Continental Stewardship species.
KEFJ	Bird	Plectrophenax nivalis	Snow bunting	Present in Park	Partners in Flight Continental Stewardship species.
KEFJ	Bird	Poecile hudsonica	Boreal Chickadee	Present in Park	Partners in Flight Continental Stewardship species.
KEFJ	Bird	Poecile rufescens	Chestnut-backed chickadee	Present in Park	Partners in Flight Continental Stewardship species.
KEFJ	Bird	Selasphorus rufus	Rufous hummingbird	Present in Park	Partners in Flight Watch List species.
KEFJ	Bird	Spizella arborea	American tree sparrow	Present in Park	Partners in Flight Continental Stewardship species.
KEFJ	Bird	Troglodytes troglodytes	Winter wren	Present in Park	Partners in Flight Continental Stewardship species.
KEFJ	Bird	Zonotrichia atricapilla	Golden-crowned sparrow	Present in Park	Partners in Flight Continental Stewardship species.
LACL	Vascular Plant	Aphragmus eschscholtzianus		Present in Park	Rare or uncommon in the state and globally (G3-S3) - Alaska Natural Heritage Program Rank: Globally and State ranked rare (G3 S3, AKNHP 2006)
LACL	Vascular Plant	Botrychium alaskense		Present in Park	Rare species G2G3 S2S3 (AKNHP 2006 tracking list)
LACL	Vascular Plant	Carex phaeocephala		Present in Park	Alaska Natural Heritage Program Rank, Globally uncommon and rare in the state (G4-S3)
LACL	Vascular Plant	Carex preslii	Sedge	Present in Park	Alaska Natural Heritage Program rank, globally secure, critically imperiled in the state (G4-S3)
LACL	Vascular Plant	Crassula aquatica		Present in Park	Alaska Natural Heritage Program Rank: Globally secure, state rare or uncommon (G5-S3)
LACL	Vascular Plant	Douglasia alaskana		Present in Park	Alaska Natural Heritage Program Rank: Globally and State Rare (G3 S3, AKNHP 2006)
LACL	Vascular Plant	Draba incerta		Present in Park	Alaska Natural Heritage Program Rank: Globally secure and state rare (G5 S2S3, AKNHP 2006)
LACL	Vascular Plant	Draba ruaxes		Present in Park	Alaska Natural Heritage Program Rank: Globally and State ranked rare (G3 S3, AKNHP 2006)
LACL	Vascular Plant	Flacochia kermadecensis		Present in Park	G4 S2S3; AKNHP 2006

Record: 77 of 94

Details regarding management priority

NUM

Species Management View NPSpecies - Microsoft Internet Explorer

Address: https://science1.nature.nps.gov/npspecies/web/main/browse_species_management?park=KATM&catid=310&unitType=organism&reportType=SpeciesManagement&pageFlag=false&resetOrgList=true

Unit | Views (Row Filter Retained) | Other Categories (Row Filter Retained) | Row Filters

Organisms
 Katmai National Park & Preserve (KATM)
 Category: Vascular Plant
 Unit: Organism
 View: Management Fields
 Row Filter: ON
 Count: 10
 Generated: 02/28/2007
 SORT ORDER: Order, Family, and Scientific Name

Column Definitions

Local Accepted TSN	Order	Family	Scientific Names	Common Names	Org. List (Y/N)	Local Accepted Name	Park Status	Weedy? (Y/N)	Pest? (Y/N)	Management Priority? (Y/N)	Exploitation Concern? (Y/N)
					Certification: 01/25/2007	Certification: 01/25/2007	Certification: 01/25/2007	Certification: 01/25/2007	Certification: 01/25/2007	Certification: 01/25/2007	Certification: 01/25/2007
23039	Capparales	Brassicaceae	Aphragmus eschscholtzianus	Aleutian cress	Y	Aphragmus eschscholtzianus	Present in Park	N	N	Y	N
527773	Capparales	Brassicaceae	Draba lonchocarpa var. vestita	lancepod draba	Y	Draba lonchocarpa var. vestita	Present in Park	N	N	Y	N
19945	Caryophyllales	Caryophyllaceae	Cerastium aleuticum	Aleutian chickweed	Y	Cerastium aleuticum	Probably Present	N	N	Y	N
40049	Cyperales	Cyperaceae	Eleocharis kamschatcica	Kamchatka spikerush	Y	Eleocharis kamschatcica	Present in Park	N	N	Y	N
41241	Cyperales	Poaceae	Catabrosa aquatica	brookgrass, water whorl grass, water whorlgrass	Y	Catabrosa aquatica	Present in Park	N	N	Y	N
181781	Isoetales	Isoetaceae	Isoetes occidentalis , Isoetes truncata	quillwort, western quillwort	Y	Isoetes occidentalis	Present in Park	N	N	Y	N
32012	Lamiales	Boraginaceae	Plagiobothrys orientalis	oriental popcornflower	Y	Plagiobothrys orientalis	Present in Park	N	N	Y	N
506948	Primulales	Primulaceae	Androsace alaskana , Douglasia alaskana	Alaskan douglasia	Y	Douglasia alaskana	Present in Park	N	N	Y	N
24016	Primulales	Primulaceae	Primula techuktschorum , Primula techuktschorum var. techuktschorum	chukchi primrose	Y	Primula techuktschorum	Present in Park	N	N	Y	N
33207	Scrophulariales	Scrophulariaceae	Limosella aquatica	awl-leaf mudwort, awl-leaf mudwort, northern mudwort, water	Y	Limosella aquatica	Present in Park	N	N	Y	N

Species Management View NPSpecies - Microsoft Internet Explorer

Address: https://science1.nature.nps.gov/npspecies/web/main/browse_species_management?park=KATM&catid=310&selection=management&pageFlag=false&management

Plagiobothrys orientalis No data

Plagiobothrys orientalis

Data Source

Status from voucher recorded in: Hulden, Eric. 1941-1950. Flora of Alaska and Yukon. Lundis University, Stockholm, Sweden. 10 vols.

No data
No data
No data
Assume for any Present in Park that does not already have a code for cultivation to be Not cultivated per A. Miller 01/23/2007

Management Fields

Field	Certification	Value	Details
Weedy?	01/25/2007	No	No data
Pest?	01/25/2007	No	No data
Management Priority	01/25/2007	Yes	Globally and regionally rare (AENHP rank: G3G4 S3). Its distribution ranges from Kamchatka east through the Aleutians to Kodiak Island.
Exploitation Concern	01/25/2007	No	No data

Record Information

Comments: No data

Date Entered: Hulden, Eric. 1941-1950. Flora of Alaska and Yukon. Lundis University, Stockholm, Sweden. 10 vols.

Created By: SLS - I&M Office; nko-alsing

Created Date: 10/30/2001

Last Modified By: SLS - I&M Office; nko-alsing

Last Modified Date: 03/23/2006

Evidence Counts

NOTE: After clicking a count-link the records displayed may be limited by the park access restrictions of your login.

TSN	Scientific Name	Org. List (Y/N)	Local Accepted Name	A-You.		A-Obs.		A-Rep.		A-Data Source	
				Local Name							
32012	Plagiobothrys orientalis	Y	Plagiobothrys orientalis	1	1	0	0	0	0	0	0

Integration

Park Link: [Park List Profile](#)

Name Link: [ITS](#)

March 19, 2007

Where to get more information

- SWAN website -> Inventories -> Biological Inventories
- http://www.nature.nps.gov/im/units/swan/index.cfm?theme=inventory_species
- Includes list of reports
- Species lists
- Links to NPSpecies (requires a login)
- Request a download for a desktop version or look on X drive.

Southwest Alaska Network - Inventory and Monitoring Program - Microsoft Internet Explorer

Address: http://www.nps.gov/swan/inventory/monitors/afn/inventory_species

National Park Service Inventory & Monitoring Program

National Park Service
U.S. Department of the Interior

Southwest Alaska Network
Inventory & Monitoring Program



Integrating science, education, and resource protection through monitoring.

I & M > Networks > Southwest Alaska Network > Inventories > Biological

Biological Inventory Program

The goal of the NPS biological inventory program is to provide park managers with comprehensive, scientifically-based information about the nature and status of selected biological resources occurring within park boundaries in a form that increases its accessibility and utility for making management decisions, for scientific research, and for educating the public. The inventories will also lay the groundwork necessary for park managers to develop effective monitoring programs and to formulate effective management strategies for resource management and protection.

To attain these basic goals, NPS biological inventories will be designed to meet three basic objectives:

- To document through existing, verifiable data and targeted field investigations the occurrence of at least 80 percent of the species of vertebrates and vascular plants currently estimated to occur in the park.
- To describe the distribution and relative abundance of species of special concern, such as Threatened and Endangered species, exotics, and other species of special management interest occurring within park boundaries.
- To provide the baseline information needed to develop a general monitoring strategy and design that can be implemented by parks once inventories have been completed, tailored to specific park threats and resource issues.

A review of existing data and new field surveys began in 2001. Inventories will continue until their expected completion in 2005.

These data are being managed centrally in a system called **NPSpecies** and will be incorporated into searchable online databases and geographic information systems that will become essential components to park natural resource management.

Biological Inventories

- NPSpecies
- Amphibians
- Birds
- Freshwater Fish
- Invertebrates
- Small Mammals
- Vascular Plants
- Biological References

Contacts

Alan Bennett, NPS-SWAN

Inventory and Monitoring Program - Microsoft Internet Explorer

Address: http://www.nps.gov/swan/inventory/monitors/afn/inventory_species

These data are being managed centrally in a system called **NPSpecies** and will be incorporated into searchable online databases and geographic information systems that will become essential components to park natural resource management.

NPSpecies

- NPS Biodiversity Service Center
- NPSpecies login required

Summary Species Lists	Top
Amphibians	The wood frog is the only amphibian known in the Southwest Parks.
Birds	KEFJ Certified Short List KEFJ Certified Long List
Fish	Draft List
Mammals	SWAN Certified Short List SWAN Certified Long List
Vascular Plants	SWAN Certified Short List

Amphibians

[View Statewide Amphibian Inventory Study](#)

PDF 6 mb	Anderson, Blain C. An Opportunistic Amphibian Inventory in Alaskas National Parks 2001-2003, 2004	
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[Top](#)

Freshwater Fish Inventories

PDF 4 mb	Jones, Tahzay M., Laurel A. Bennett, and Troy R. Hamon. Baseline Inventory of Freshwater Fishes of the Southwest Alaska Inventory and Monitoring Network: Alagnak Wild River, Aniakchak National Monument and Preserve, Katmai National Park and Preserve, Kenai Fjords National Park, and Lake Clark National Park and Preserve. 2005.
PDF 6 mb	Miller, Joe L. Freshwater Fish Inventory of the Alagnak Watershed, Alagnak Wild River, Southwest Alaska Inventory and Monitoring Network. 2003.
PDF < 1 mb	Miller, Joe, and Joel Markis. Freshwater Fish Inventory of Aniakchak National Monument and Preserve, Southwest Alaska Inventory and Monitoring Network. 2004.
PDF 30 mb	Russell, Richard. A Fisheries inventory of waters in the Lake Clark National Monument area. Juneau, AK: Alaska Department of Fish and Game, Division of Sport Fish, 1980.

[Top](#)

Birds

PDF 4 mb	Van Hemert, C., C. M. Handel, M. N. Cady and J. Terenzi. 2006. Summer Landbird Inventory of Kenai Fjords National Park. US Geological Survey, Alaska Science Center, Anchorage, Alaska. NPS/IAKRSWAN/NRTR-2006/04
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[Top](#)

The National Park Service Inventory and Monitoring NPSpecies

The National Park Service Biodiversity Database

[Discover NPSpecies](#)

Analysis

Summary Stats

Park Lists for a Name

Integration

Data Matching

Reports

Classification

Utilities

Quality Assurance

View Master Data

View Match Data

Tools

About NPSpecies

Exit

Organisms in a Park



Organisms



Native



Non-Native



Cultivated



Match to
Federal T&E

All Data



Scientific
Names



References



Vouchers



Observations



Certification

PARK-SPECIES LIST NPSpecies Report

Generated: 2/26/2007

TSN	Std. Scientific Name	Preferred Scientific Name	Std. Common Name(s)	Preferred Common Name
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LACL - Lake Clark

Plantae - Vascular Plant

Order: Apiales - Family: Apiaceae

29442	Angelica genuflexa		Including angelica	
29432	Angelica lucida	Angelica lucida	seacoast angelica	
29603	Eupatorium americanum	Eupatorium americanum	American thimbleweed	
-500080	Eupatorium frutescens			
526360	Eupatorium frutescens ssp. arcticum	Eupatorium frutescens ssp. arcticum		Throughweed
29457	Cicuta douglasii	Cicuta douglasii	Douglas water hemlock Douglas water hemlock water hemlock cascadian water hemlock	
29490	Cicuta maculata	Cicuta maculata		Madroño (Water Hemlock)
192165	Cicuta virosa	Cicuta virosa	MacKenzie's water hemlock	
29499	Cnidium canadense	Cnidium canadense	Labrador snakeroot	
-500175	Conioselinum chinense			
29457	Conioselinum chinense	Conioselinum chinense (L.) SEP	Chinese hemlockparsley	Hemlock Parsley

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Main Menu	Help	Close
Add New		Mode

Standard Classification

Standard Classification				Local Classification			
TSN	Accepted TSN	List		List	Accepted TSN	Accepted Sci. Name	
29442	29442	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	29442	Angelica genuflexa	
29432	29432	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	29432	Angelica lucida	
182155	182155	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	182155	Cicuta virosa	
29469	29469	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	29469	Conioselinum gmelinii	
29468	29468	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	29468	Conioselinum gmelinii	
29670	502953	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	502953	Heracleum maximum	
502953	502953	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	502953	Heracleum maximum	
29524	29524	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	29524	Ligusticum scoticum	
29829	29829	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	29829	Podistera macounii	
35424	35424	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	526855	Achillea millefolium var. borealis	
35423	35423	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	35423	Achillea millefolium	
526855	526855	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	526855	Achillea millefolium var. borealis	
35430	35430	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	35430	Achillea sibirica	
36733	36733	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	36733	Antennaria friesiana ssp. alaskana	
185097	36756	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	185097	Antennaria monocephala	
36754	36754	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	36754	Antennaria rosea	
185068	185068	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	185068	Antennaria rosea ssp. pulvinata	
184928	184928	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	184928	Arnica angustifolia ssp. angustifolia	
36560	36560	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	36560	Arnica chamissonis	
184937	184937	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	184937	Arnica chamissonis ssp. chamissonis	
184943	184943	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	184943	Arnica frigida	
525279	525279	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	184943	Arnica frigida	
36567	36567	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	36567	Arnica lessingii	
35432	35432	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	35432	Artemisia arctica	

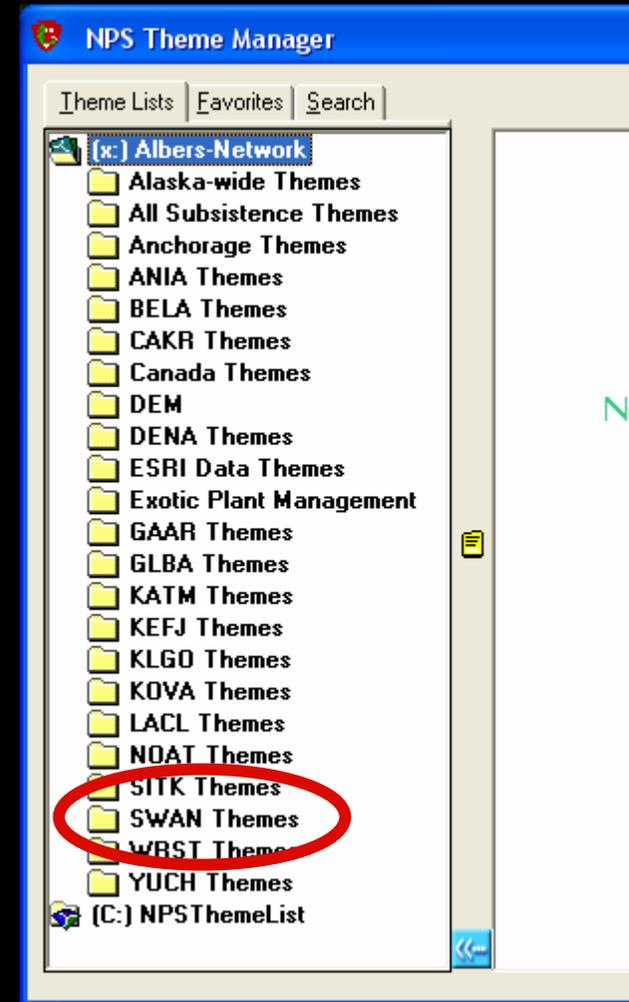
ALAG	Plantae	Vascular Plant	Apiales	Apiaceae	Conioselinum gmelinii
ALAG	Plantae	Vascular Plant	Apiales	Apiaceae	Conioselinum pacificum
ALAG	Plantae	Vascular Plant	Apiales	Apiaceae	Heracleum lanatum
ALAG	Plantae	Vascular Plant	Apiales	Apiaceae	Heracleum maximum
ALAG	Plantae	Vascular Plant	Apiales	Apiaceae	Ligusticum scoticum
ALAG	Plantae	Vascular Plant	Apiales	Apiaceae	Podistera macounii
ALAG	Plantae	Vascular Plant	Asterales	Asteraceae	Achillea borealis
ALAG	Plantae	Vascular Plant	Asterales	Asteraceae	Achillea millefolium
ALAG	Plantae	Vascular Plant	Asterales	Asteraceae	Achillea millefolium var. borealis
ALAG	Plantae	Vascular Plant	Asterales	Asteraceae	Achillea sibirica
ALAG	Plantae	Vascular Plant	Asterales	Asteraceae	Antennaria friesiana ssp. alaskana
ALAG	Plantae	Vascular Plant	Asterales	Asteraceae	Antennaria monocephala
ALAG	Plantae	Vascular Plant	Asterales	Asteraceae	Antennaria rosea
ALAG	Plantae	Vascular Plant	Asterales	Asteraceae	Antennaria rosea ssp. pulvinata
ALAG	Plantae	Vascular Plant	Asterales	Asteraceae	Arnica angustifolia ssp. angustifolia
ALAG	Plantae	Vascular Plant	Asterales	Asteraceae	Arnica chamissonis
ALAG	Plantae	Vascular Plant	Asterales	Asteraceae	Arnica chamissonis ssp. chamissonis
ALAG	Plantae	Vascular Plant	Asterales	Asteraceae	Arnica frigida
ALAG	Plantae	Vascular Plant	Asterales	Asteraceae	Arnica frigida
ALAG	Plantae	Vascular Plant	Asterales	Asteraceae	Arnica lessingii
ALAG	Plantae	Vascular Plant	Asterales	Asteraceae	Artemisia arctica

Uses for NPSpecies

- List of species verified to public distribution
- Select a list of species; Map locations of vouchers to help determine range extension
- Select Taxa or species; find references associated with these species
- Correct spelling list and names for projects.

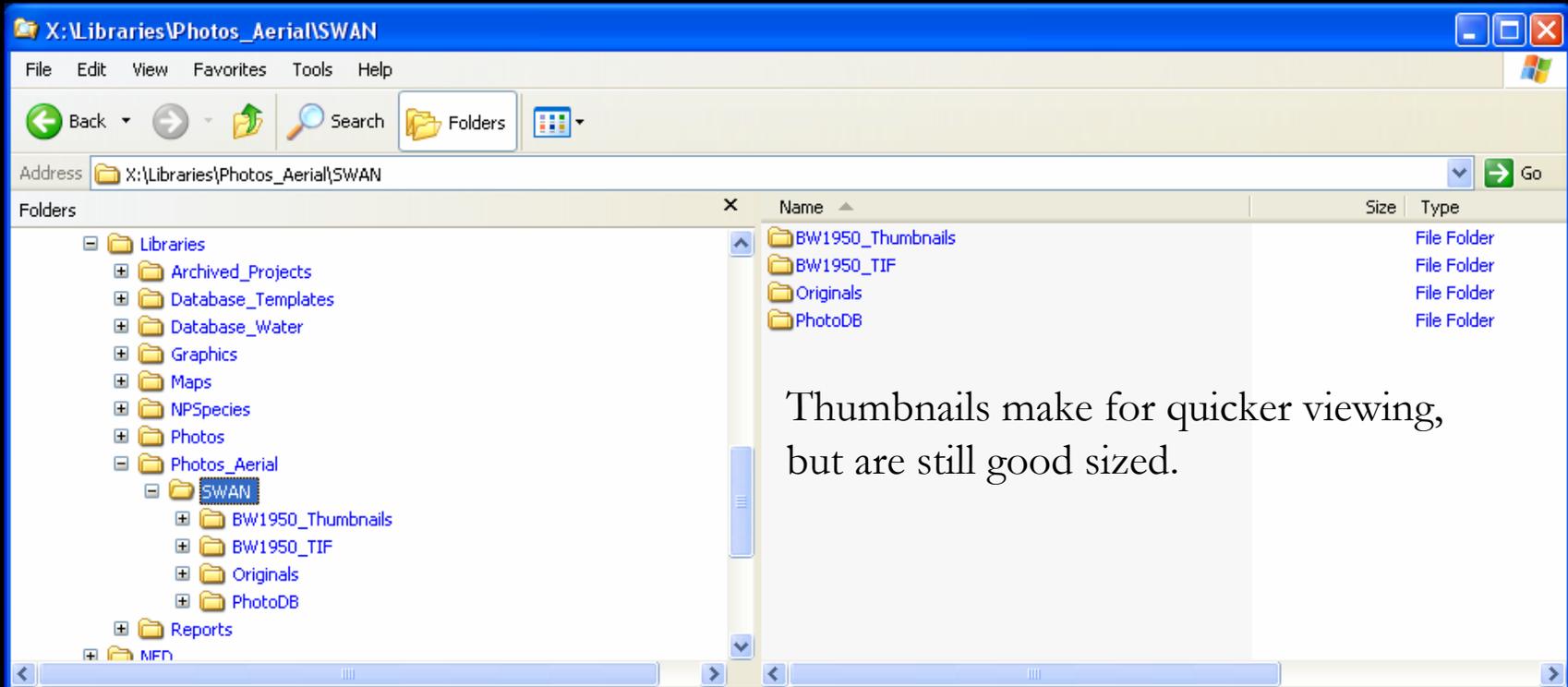
GIS Data and Photo Libraries

- SWAN Themes
 - 1950s B&W Photos – Index file
 - Lake Bathymetry (SWAN Themes)
 - SWAN lakes
- Park Themes
 - Cabins and Lodges
 - KEFJ Landbirds
 - Nunataks
 - LACL Glacier Photo Index



X:\Libraries\Photos_Aerial\SWAN

Read-only access to 1950's Aerial Photos

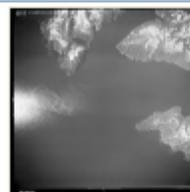




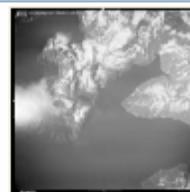
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Folders

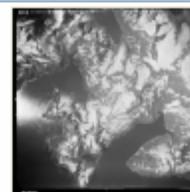
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- + DRG
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- + GIS
- Libraries
 - + Archived_Projects
 - + Database_Templates
 - + Database_Water
 - + Graphics
 - + Maps
 - + NPSpecies
 - + Photos
 - Photos_Aerial
 - SWAN
 - BW1950_Thumbnails
 - + ANIA
 - + KATM
 - + **KEFJ**
 - + LACL
 - + Other
 - + BW1950_TIF
 - + Originals
 - + PhotoDB
 - + Reports
 - + NED
 - + NGS_Topo
 - + OrthoBase
 - + Source_Data
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- + Control Panel
- + My Network Places
- + Recycle Bin
- + Unused Desktop Shortcuts



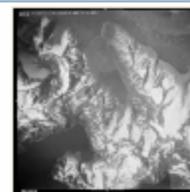
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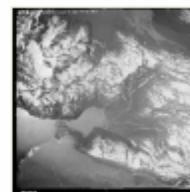
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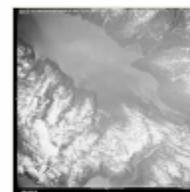
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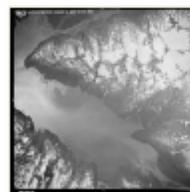
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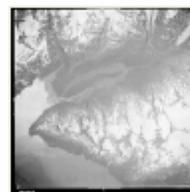
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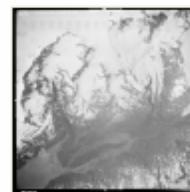
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tn_BMS14B0010069.jpg



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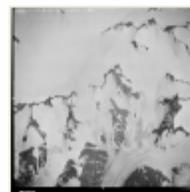


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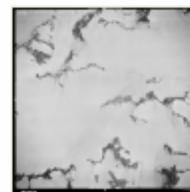
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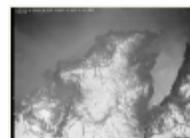
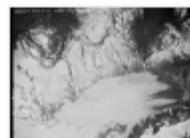
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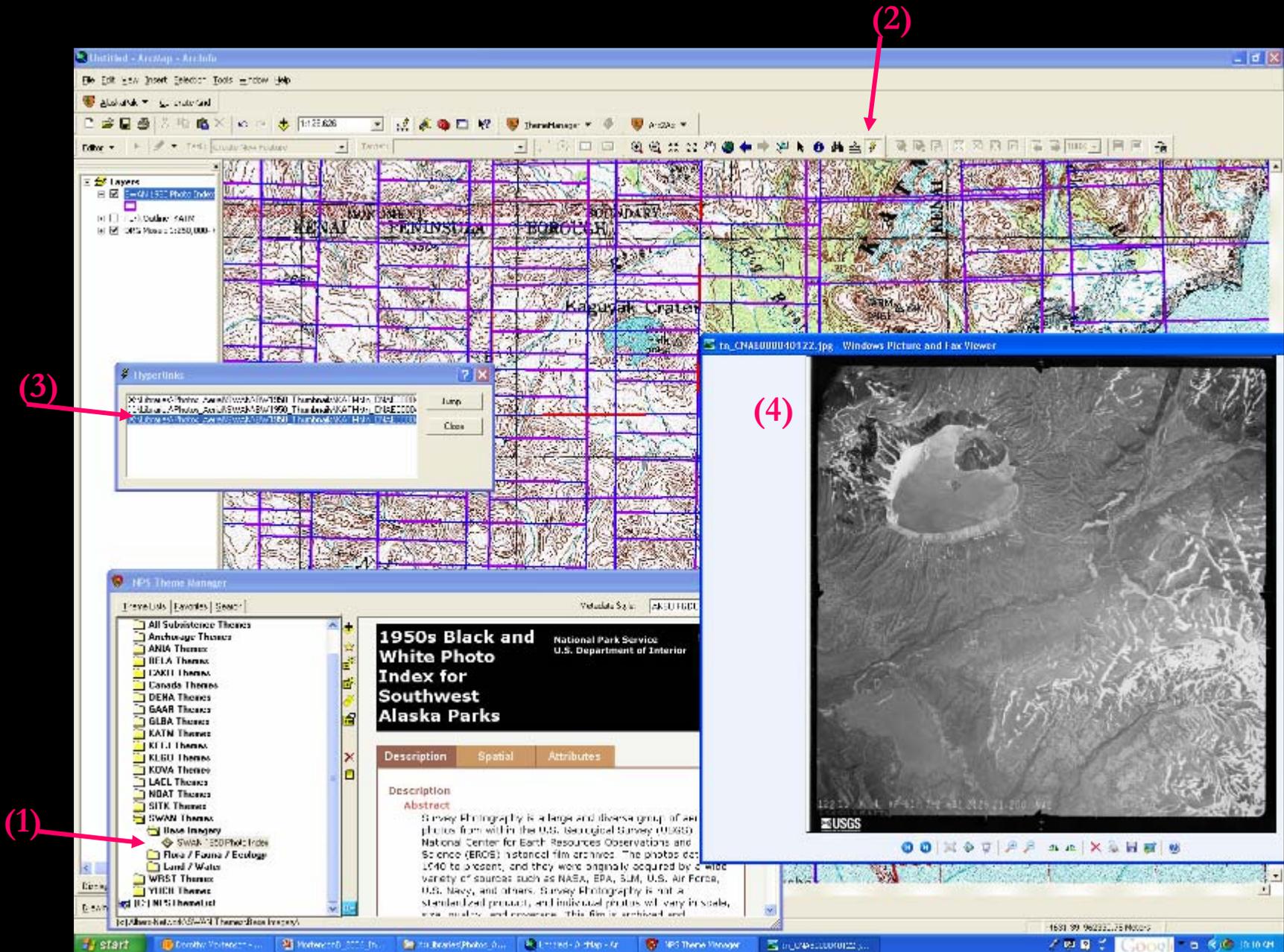


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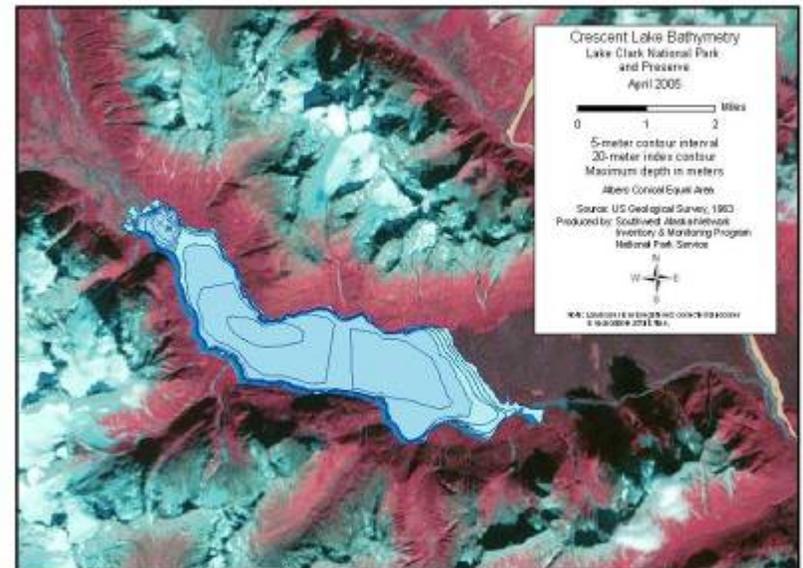
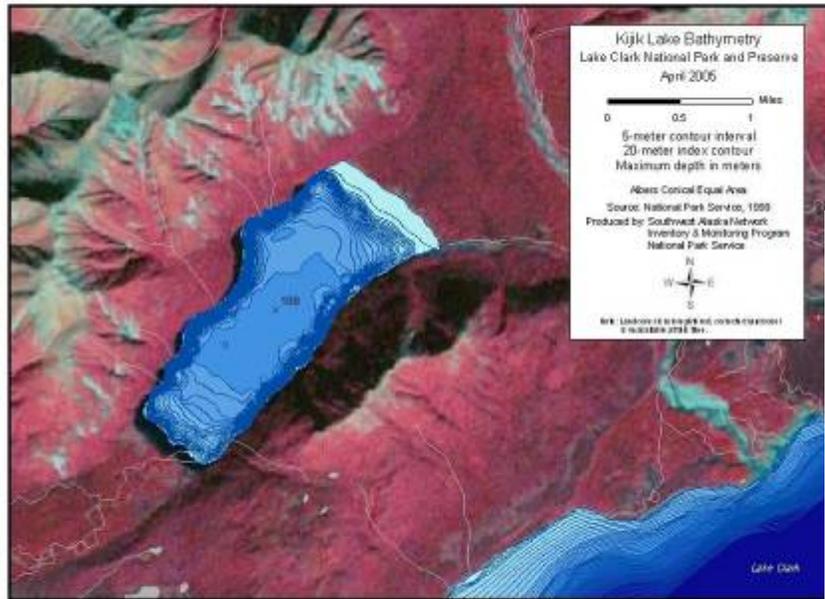




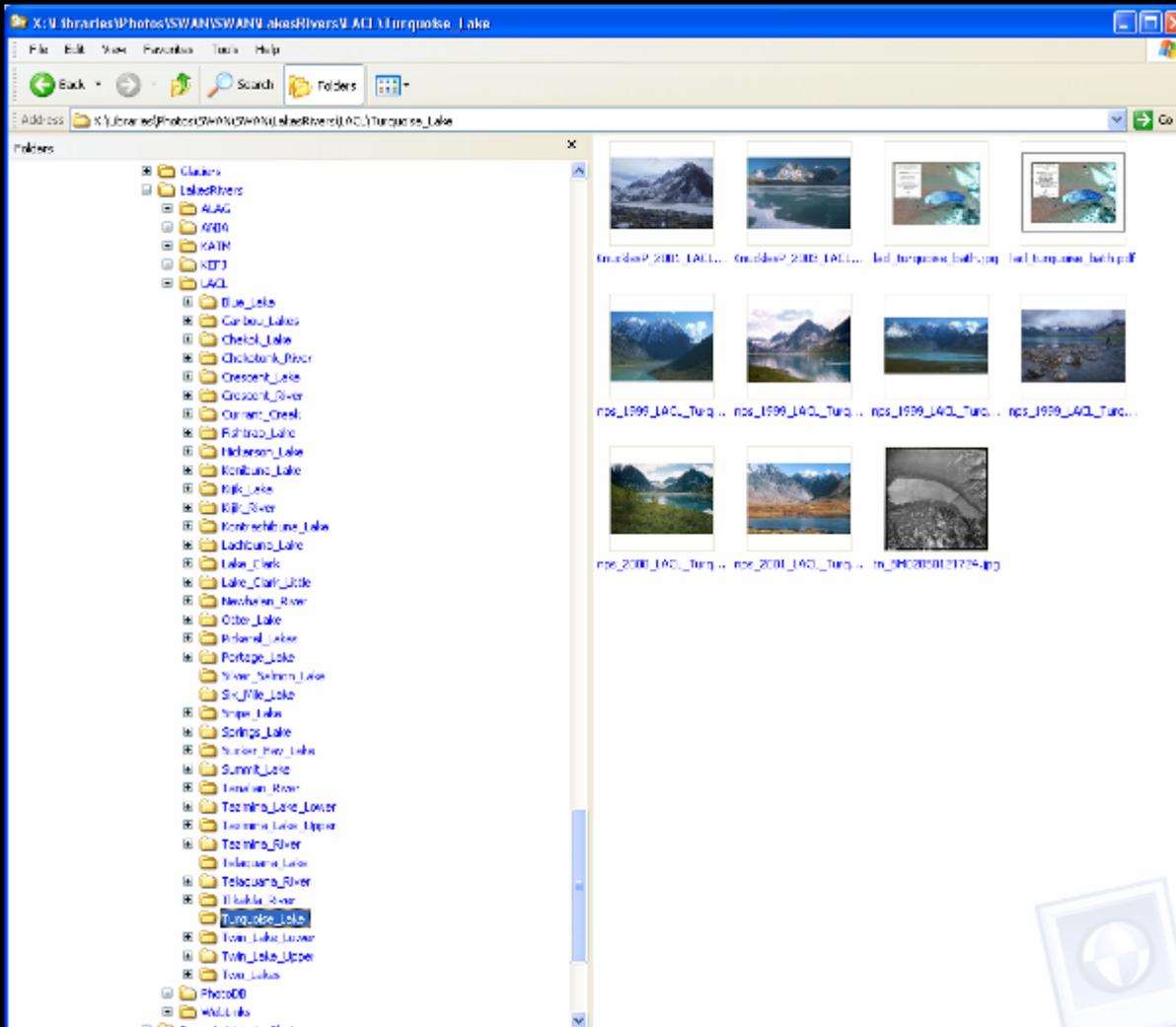
Hydrography Data

- Lake Bathymetric contours (GIS)
- Lake and River Photo Library (ThumbsPlus)
- Lake Inventory database (Access)
- Lakes of SWAN park units (GIS)

Created a "best available" lake bathymetry GIS layer



Created a Lake/River Photo Library



Contractors are from out of state. Photos and maps help to get a better understanding of what is going on in the lake.

Lake Inventory Database

- Throughout SWAN there were various small studies done related to lakes.
- Needed to get a handle on what it is we knew or needed to know.

Basic Queries

- Lake size, depth, etc.
- Determined the threshold of lake size to start collecting more detailed information (about 100 hectares)
- Then started to build a database compiling what we know about the lakes.

SWAN_Lakes_draft060324 : Database (Access 2002 - 2003 file format)

frm_List_Named_Lakes

Identifiers	Drainage	Park	Name	Hectares	Elev. ft.	Depth Ft.	Sample Tier		
2099	12736324E	-meshik basin -	ANIA Meshik Lake	204.38	116.0	4.0		Lake Details	Lake Photos
595	12549350E	Shelkof Strait Coast Basin	ANIA Surprise Lake	276.16	1,062.7	64.0	Tier 2	Lake Details	Lake Photos
2669	72886601	Lake Illianna Basin	KATM Alagnak River spur lake outlet of Kukaklek lake (r	112.29	814.6			Lake Details	Lake Photos
3531	12001577E	Lake Illianna Basin	KATM Battle Lake	1,300.47	844.2	210.0	Tier 3	Lake Details	Lake Photos
10642	12003835E	Naknek Basin	KATM Between Naknek and Brooks - donut shape (narr	228.39	200.0			Lake Details	Lake Photos
9971	85649982	Naknek Basin	KATM Between Naknek and Brooks (named by D. Mortz	196.84	160.0			Lake Details	Lake Photos

frm_ByLake_Overview

Park Code: ANIA Tier: Tier 2

Name: Surprise Lake

Drainage: Shelkof Strait Coast Basin

Water Source: Clear

Water Type: Headwater Lake

Shape: Orientation:

Hectares: 276.16 Depth ft: 64.0 Elevation ft: 1,062.7 Volume km: Shore Length m: 9,181

Identifier: Database Lake ID: 305 GIS COMID: 125493506 ADFG Anad. Stream: 272-60-10080 NHD Reach Code: 19020702012803

Tributary Stream Name: Surprise Lake Inlet - I-1 to I-9

Outlet Stream Name: Aniakchak River

Fish Species:

Fish	Source
Dolly Varden unknown	X
sockeye salmon, red	X

YSI Data Collected

ComID_text	YSI_Results_ID	site_id	observation_id	date_collect	time_collect	Temp C	specific_conductance_uS-cm	conductivity_uS-cm	total_dissolved_solids_g-L	DO %	DO Concentration	De
125493506	509	SURP-001C	SURPRISE_0	5/29/2003	6:33:00 PM	6.49	0.328		0.213	85.9	10.55	0.0
125493506	510	SURP-002C	SURPRISE_1	5/29/2003	6:43:00 PM	8.27	0.39		0.254	102.1	12	0.11
125493506	511	SURP-002C	SURPRISE_2	5/29/2003	6:46:00 PM	7.87	0.377		0.245	96.1	11.4	1.0
125493506	503	SURP-110	I10_0	5/31/2003	2:36:00 PM	8.58	0.27		0.176	97	11.32	0.0
125493506	504	SURP-110	I10_1	5/31/2003	2:38:00 PM	8.54	0.246		0.16	98.5	11.51	-0.0
125493506	505	SURP-110	I10_2	5/31/2003	2:41:00 PM	8.44	0.265		0.172	97	11.36	-0.0
125493506	498	SURP-111	I11_0	5/31/2003	1:42:00 PM	20.39	0.936		0.609	16.1	1.45	-0.0
125493506	499	SURP-111	I11_1	5/31/2003	1:47:00 PM	20.38	0.998		0.649	9.6	0.86	-0.0

Record: 1 of 57

Water Chemistry Summary:

sample_number	station	station_name	sample_date	depth_m	conductivity	pH	Color_Pt_filtered	Turbidity_NTU	TDS_mg/L	Total_alkalinity_mg/L_CaCO3
400			6/2003	0.1				6.3	229	

Record: 1 of 1 (Filtered)

**Common Commercial Operation Locations
For Visitor Use
Katmai National Park and Preserve**

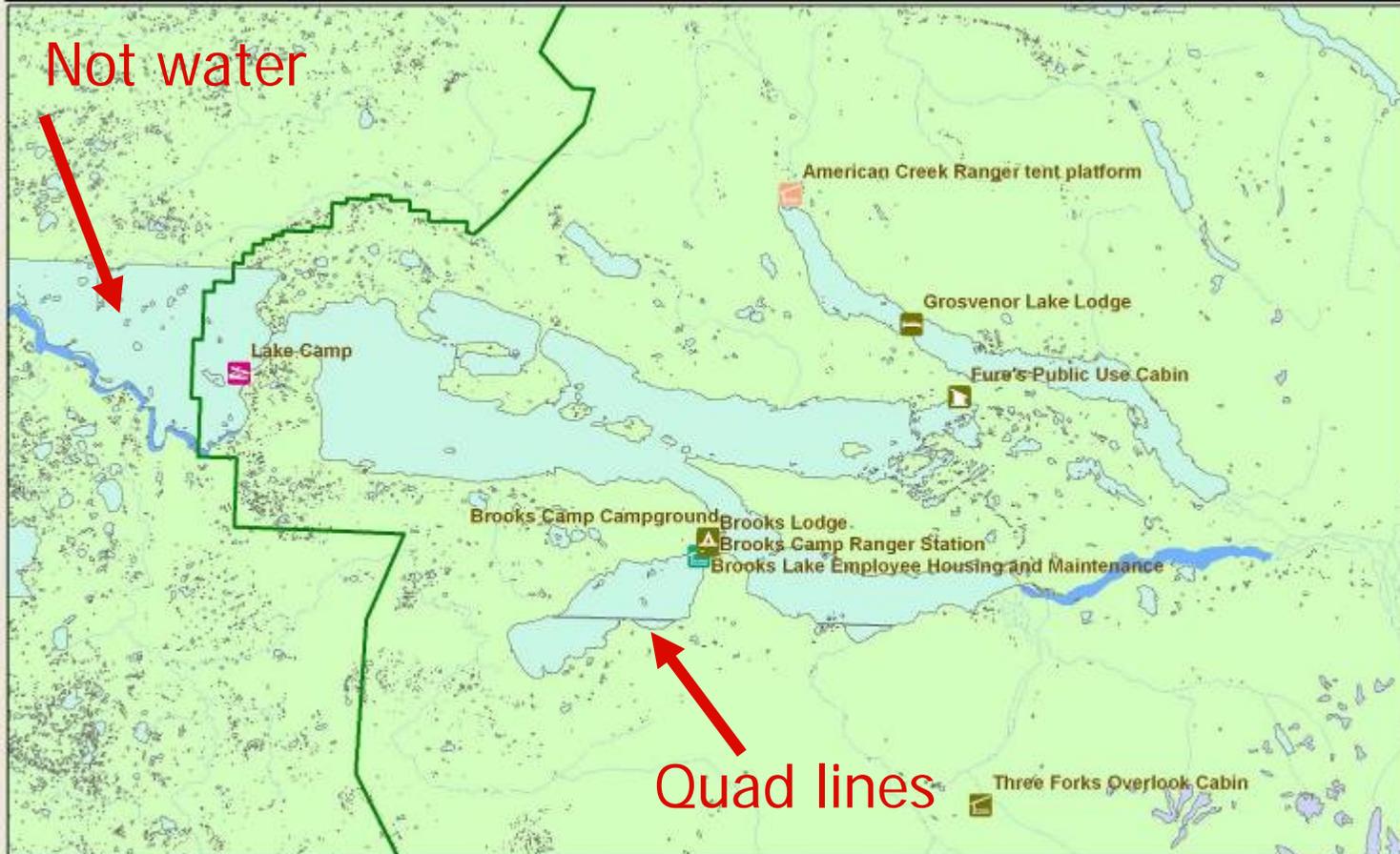
National Park Service
Inventory and Monitoring Program



Produced by: Southwest Alaska Network
Inventory & Monitoring Program
February 28, 2007

**Common Commercial Operation Locations
For Visitor Use
Katmai National Park and Preserve**

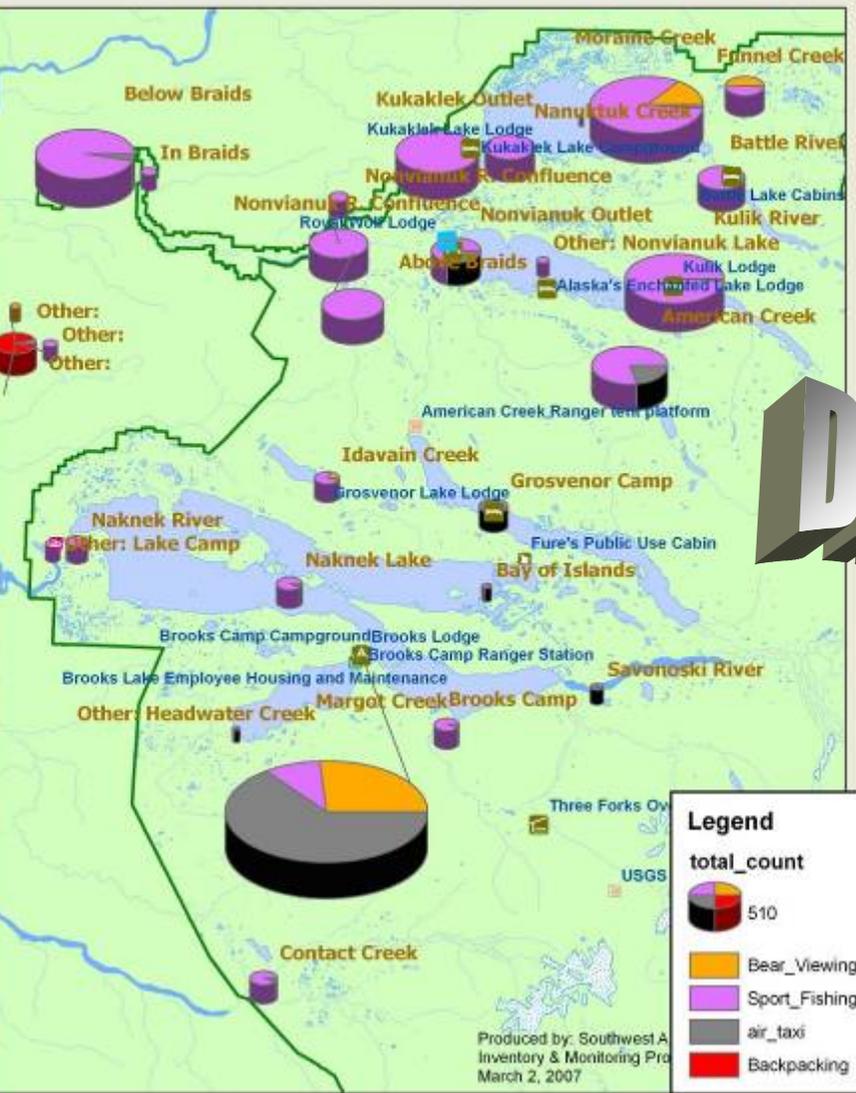
National Park Service
Inventory and Monitoring Program



Produced by: Southwest Alaska Network
Inventory & Monitoring Program
February 28, 2007

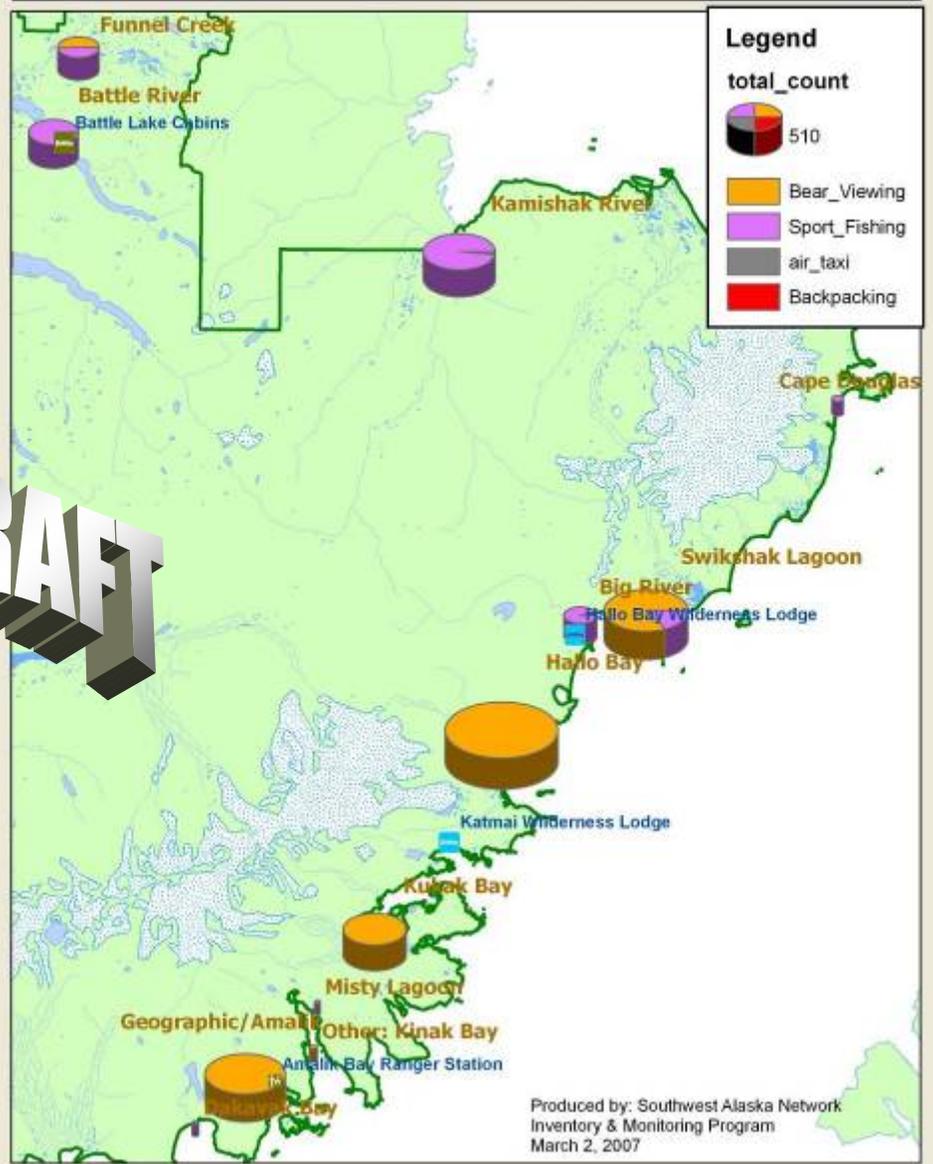
**Common Commercial Operation Locations
For Visitor Use
Katmai National Park and Preserve**

National Park Service
Inventory and Monitoring Program



**Common Commercial Operation Locations
For Visitor Use
Katmai National Park and Preserve**

National Park Service
Inventory and Monitoring Program



DRAFT

**Common Commercial Operation Locations
For Visitor Use**

National Park Service
Inventory and Monitoring Program



Legend

total_count



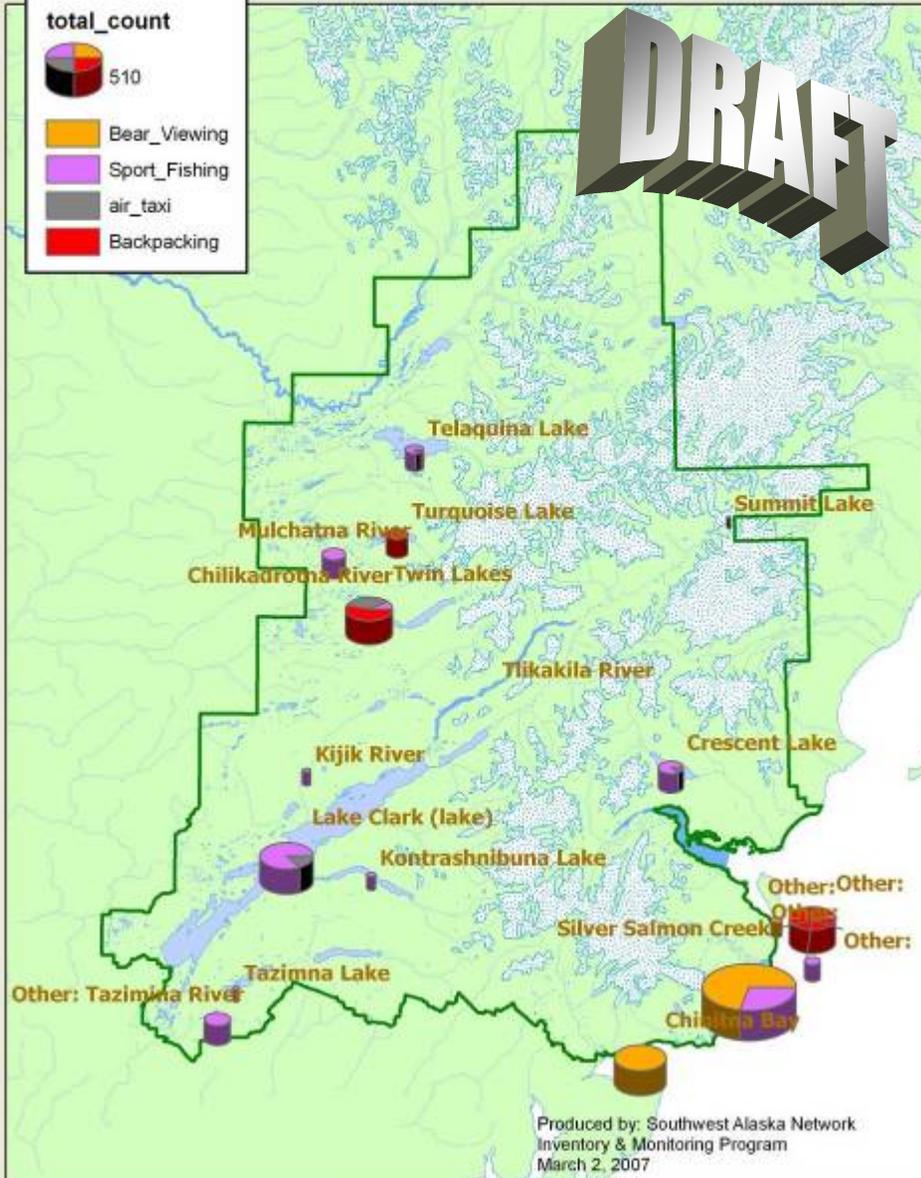
Bear_Viewing

Sport_Fishing

air_taxi

Backpacking

DRAFT



Produced by: Southwest Alaska Network
Inventory & Monitoring Program
March 2, 2007

Landbirds for KEFJ

NPS Theme Manager

Themes Lists | Favorites | Search

- Bald Eagle Nests
- Ecological Subsections KEFJ
- Ecological Subsections KEFJ Physical Group
- Exit Glacier
- FWS Bald Eagle Nests
- FWS Seabird Colonies
- Land Bird Survey 2005
 - Average Number of Individuals Detected per Transect
 - Location of all Survey Points
 - Sampling Universes
 - Survey Points where PIF Watchlist Species Detected
 - Wreck Habitat Data
- Landcover Sling Sand
- Landcover KEFJ 1999
- Landcover Kenai
- Landcover Siletwa
- Landcover Seward
- Metadata
 - Woolley Station Ridge / Tim Linn
 - Woolley Station Ridge Narvik
 - SAIF - Bio Resources
 - SAIF - Baited Fish
 - SAIF - Caribou

PIF_Watchlist_shp

Metadata:

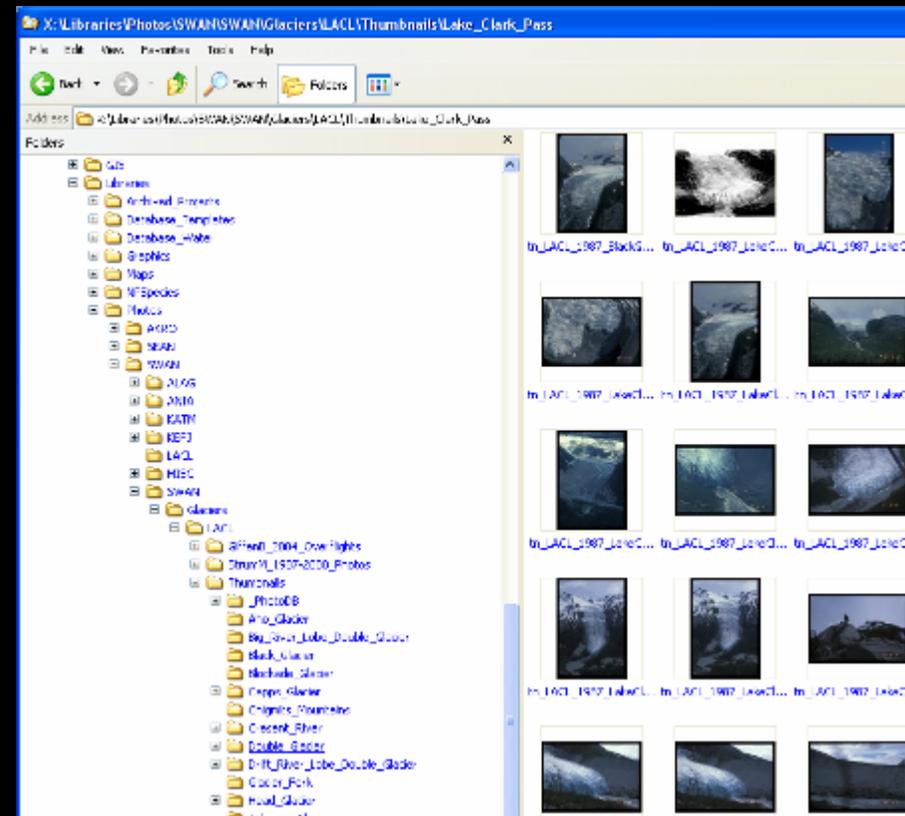
- [Identification Information](#)
- [Data Quality Information](#)
- [Spatial Data Organization Information](#)
- [Spatial Reference Information](#)
- [Entity and Attribute Information](#)
- [Distribution Information](#)
- [Metadata Reference Information](#)

Identification Information:
Citation:
Originator: USGS, Alaska Science Center
Date: 11/10/2005

Map: 270328.83 1153614.30 Meters

Glacier Photos (by B. Giffen)

- X:\Libraries\Photos\SWAN\SWAN\Glaciers
 - LACL available
- GIS
 - LACL Themes
 - Glacier Photo Index



ThumbsPlus Database

File Edit Image Transform View Help

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Size: 130 | Fast | Types: (Selected)

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Doc. Longitude (dms)?: 152-40-42

Elevation: 8000

Est. Latitude (dms)?: 90-34-50

Est. Longitude (dms)?: 152-40-42

Geographic Code: EDRIFT

Geographic Description: S of Drift Glacier

Geographic Location: Drift Glacier

Heading: 198

Path Code: LACL

Photo Filename: LACL_1987_EDRIFT875_870819

Photo Date: 88-18-1987

Photo Type: 1567

Photographer: Matthew Drum

Primary Subject Term: gl0000

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tn_LACL_1987_EDRIFT875_870819.jpg

File Edit Image Transform View Help

900 x 600 dpi

11/8/2006 11:32:32 AM

90-34-50

152-40-42

8000

90-34-50

152-40-42

EDRIFT

S of Drift Glacier

Drift Glacier

198

LACL

LACL_1987_EDRIFT875_870819

88-18-1987

1567

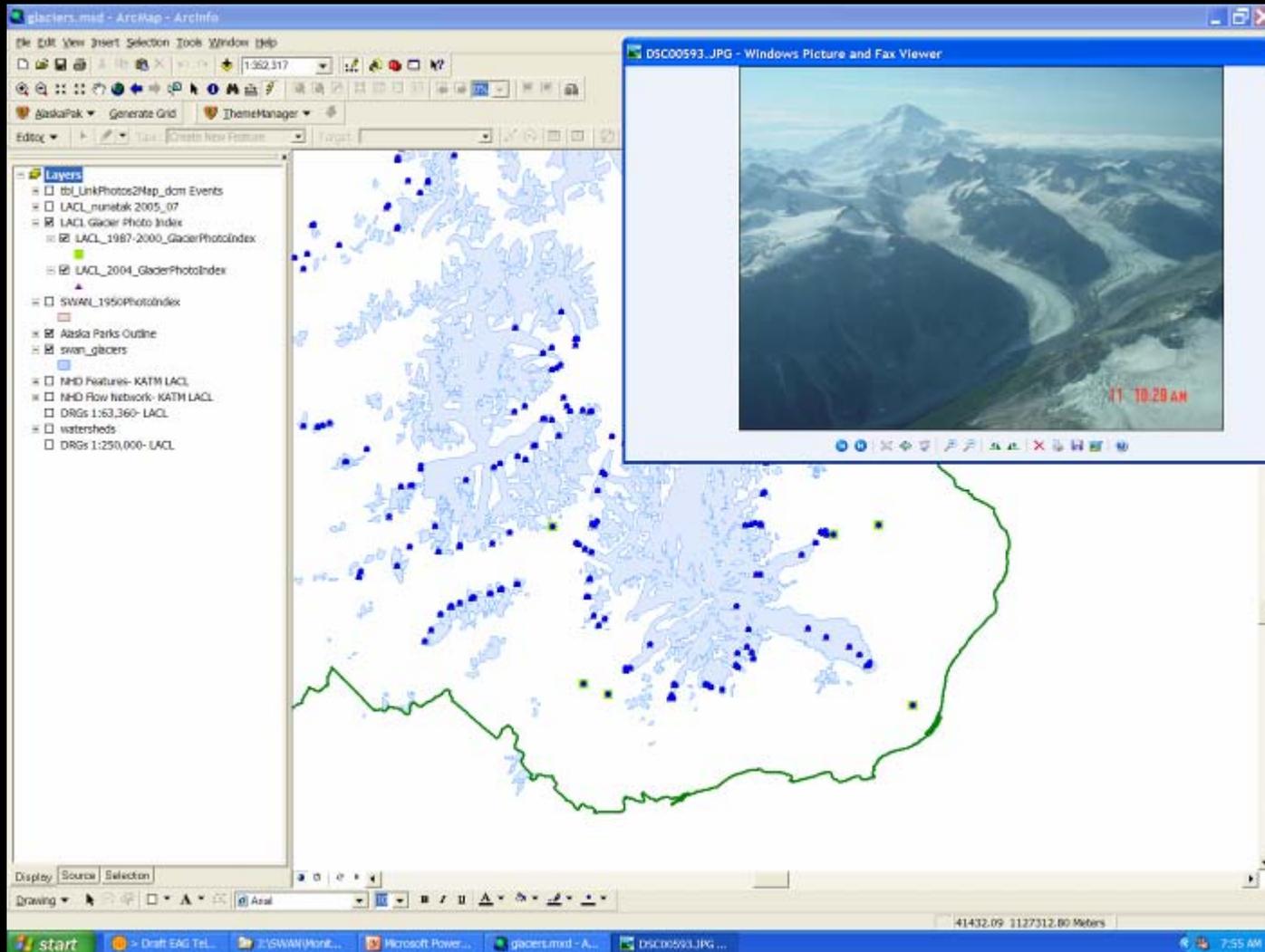
Matthew Drum

gl0000

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Files 11 of 11

Glacier Photo Points Linked to GIS



Historic Photo Monitoring

- Similar features coming soon
 - ThumbsPlus database – ready on X drive
 - Actual Photos – ready on X drive; soon on web.
 - GIS Layer – soon
 - Report – soon (X and web)

