22.01.02

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution ADF&G
CF

Program Trident Basin Ocean Temperatures

Program Summary

Program Manager Forrest Blau

Program Manager Address 211 Mission Road Kodiak AK 99615

Alaska Dept of Fish and Game
Division of Commercial Fisheries
211 Mission Road
Kodiak AK 99615

Program Manager Phone 907-486-1853 **Program Manager E-Mail** forrest_blau@fishgame state ak us

Gulf of Alaska Monitoring/Long Time Series Projects

Project Title **Trident Basin Water Temperature**

Project Summary

Water temperatures in Trident Basin near Near Island in the City of Kodiak from 1970 to the present

Category Oceanography-Physical/Chemical

Key Words sea surface temperature

Cooperators

Project Manager Forrest Blau

Project Manager Address

Alaska Dept of Fish and Game
211 Mission Road
Kodiak AK 99615

Project Manager Phone 907-486-1853 **Project Manager E-Mail** forrest_blau@fishgame state ak us

Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

Objectives

Sample ocean temperatures

Resources and Parameters Being Measured

Sampling Platforms

Measurements/Data Obtained

Regional Information Report 4K95-36, temps updated every ~5years in an RIR

List of Databases, Manager Name and Contact Information

Duration of Program of Project

1970 to present

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

This use to be part of red king crab research which was a budgeted item For the last 10 years the project manager has just been doing it as a no cost item He is planning on retiring in may be 2 years and it could be dropped then

Future Plans/Prognosis

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution ADF&G
H&R

Program **Anadromous Waters Catalog**

Program Summary

Alaska Statute 16 05 870(a) requires the Alaska Department of Fish and Game (ADF&G) to specify the various rivers lakes and streams or parts of them of the state that are important to the spawning rearing or migration of anadromous fishes The Catalog of Waters Important for the Spawning Rearing or Migration of Anadromous Fishes and its associated atlas are the media used to accomplish this specification and are adopted as regulation under 5 AAC 95 010 The Anadromous Waters Catalog program collects data on anadromous fish species use from biologists statewide enters that data into a GIS system produces and distributes the AWC and adopts it into regulation

Program Manager Ed Weiss

Program Manager Address
Alaska Dept of Fish and Game
Habitat and Restoration Division
333 Raspberry Road

Anchorage AK 99518-1599

Program Manager Phone 907-267-2305 **Program Manager E-Mail** ed_weiss@fishgame state ak us

Gulf of Alaska Monitoring/Long Time Series Projects

Project Title **Atlas to the Catalog of Waters Important for the Spawning, rearing or Migration of Anadromous Fishes**

Project Summary

Documents the streams which are specifed as being used by anadromous fish species for spawning, rearing or migration The mouthpoint and the known upper point of usage are digitized from USGS base maps, based on submisions from biologists statewide Stream numbers, USGS quad maps, Latitude, longitude and legal description data are generated from these digitzed points and utilized to produce the *Catalog of Waters Important for the Spawning, Rearing or Migration of Anadromous Fishes* Alaska only Stream maps documenting the presence of any of the specifed anadromous species between the mouthpoint and the known upper point of usage

Category Fish

Key Words fish, salmonids, streams, maps, andromous, salmon, steelhead, Dolly Varden

Cooperators Data submissions are received from various state & federal agencies, private organizations and individuals statewide

Project Manager Ed Weiss

Project Manager Address
Alaska Dept of Fish and Game
Habitat and Restoration Division
333 Raspberry Road

Anchorage AK 99518-1599

Project Manager Phone 907-267-2305 **Project Manager E-Mail** ed_weiss@fishgame state ak us

Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

Alaska - Statewide

Objectives

Identify, map and list the streams specified by ADF&G as being important for spawning, rearing or migration of anadromous fishes Produce, distribute and adopt into regulation this listing in the form of the *Catalog of Waters Important for the Spawning, Rearing or Migration of Anadromous Fishes* and it's atlas *An Atlas to the Catalog of Waters Important for the Spawning Rearing or Migration of Anadromous Fishes*

Resources and Parameters Being Measured

Presence of spawning, rearing or migratory habitat for the specified anadromous fish species throughout Alaska Species cataloged include anadromous forms of pacific trouts and salmon of the genus *Oncorhynchus* (rainbow and cutthroat trout and chinook, coho, sockeye, chum and pink salmon), Arctic char, Dolly Varden, sheefish, smelts, lamprey, whitefish, and sturgeon

Sampling Platforms

Measurements/Data Obtained

List of Databases, Manager Name and Contact Information

Anadromous Waters Catalog GIS	Ed Weiss	907-267-2305
Anadromous Waters Catalog Tracking Database	Ed Weiss	907-267-2305

Duration of Program of Project

Current Program Ongoing 1981 to present
Previous program 1968 to 1980

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

Program costs $130K annually Federal Wallop Breaux and State of Alaska

Future Plans/Prognosis

The atlas maps have historically been hand mapped and reproduced through blueline technology Efforts are currently under way to transfer the stream hydrography, species and lifephase data to the GIS environment

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution ADF&G
SUB

Program Marine Mammals

Program Summary

Program Manager Jim Fall

Program Manager Address

Alaska Department of Fish and Game
Subsistence Division
333 Raspberry Rd
Anchorage AK 99518-1599

Program Manager Phone 907-267-2359 **Program Manager E-Mail** jim_fall@fishgame state ak us

Gulf of Alaska Monitoring/Long Time Series Projects

Project Title **Whiskers (Seals and Sea Lions)**

Project Summary

WHISKERS[1] is an askSam text database of indigenous local knowledge about harbor seals and sea lions in Alaska It was compiled by the Alaska Department of Fish & Game from key respondent interviews with Alaska Natives in approximately 60 Alaska coastal communities between 1992 and 1999

Category Birds/Mammals

Key Words traditional knowledge, marine mammals, seals, Steller's sea lions, subsistence harvest

Cooperators NMFS[2]

Project Manager Bob Wolfe

Project Manager Address

Alaska Dept of Fish and Game
Subsistence Division
1255 W 8th Street
Juneau AK 99801

Project Manager Phone 907-465-4148 **Project Manager E-Mail** robert_wolfe@fishgame state ak us

Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

Information derives from about 60 coastal Alaska communities whose residents harvest harbor seal and/or sea lions Regions covered include Southeast Alaska, Prince William Sound, Kenai-Upper Cook Inlet, Kodiak Islands, Alaska Peninsula, Aleutian Islands, Pribilof Islands, and Bristol Bay

Objectives

WHISKERS! is designed to provide a computer-accessed database containing qualitative information on the ecology, harvest, and use of harbor seals and sea lions in Alaska, based on interview materials from Alaska Native hunters of harbor seals and sea lions

Resources and Parameters Being Measured

The primary focus is information on the ecology, harvest, and use of harbor seals and sea lions in Alaska WHISKERS! also contains information on other marine mammals such as beluga whales, sea otters, killer whales, ringed seals, spotted seals, elephant seals, walrus, and dolphins

Sampling Platforms

Measurements/Data Obtained

List of Databases, Manager Name and Contact Information

WHISKERS! is an askSam text database It is organized into non-linear random access notes within six geographic regional files For copies of WHISKERS!, contact Charles Utermohle, Alaska Department of Fish and Game, Division of Subsistence, 333 Raspberry Road, Anchorage, Alaska 99518 Or telephone Voice (907) 267-2360, Fax (907) 267-2450, charles_utermohle@fishgame state ak us

Duration of Program of Project

1992 through the present

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

Funding for WHISKERS! derives from the National Marine Fisheries Service, National Oceanic and Atmospheric Administration, Department of Commerce, total cost of about $50,000

Future Plans/Prognosis

WHISKERS! is regularly updated and is part of an active file maintained by the Alaska Department of Fish and Game

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution ADHSS
DPH
Section of Epidemiology

Program **Environmental Health Program**

Program Summary

Evaluates the possible hazards to human health associated with the presence of hazardous substances in the environment

Program Manager John Middaugh

Program Manager Address
Alaska Dept of Health and Social Services
Divison of Public Health
3601 C Street, Suite 540
PO Box 240249
Anchorage AK 99524-0249

Program Manager Phone 907-269-8000 **Program Manager E-Mail** johnm@health state ak us

Gulf of Alaska Monitoring/Long Time Series Projects

Project Title **Use of Traditional Foods in a Healthy Diet in Alaska Risks in Perspective**

Project Summary

A retrospective look at contaminants in Alaskan subsistence foods In particular the occurrence and risks associated with methylmercury, cadmium, polychlorinated biphenyls (PCBs) and other polyhalogenated diaromatic hydrocarbons are critically evaluated, and contrasted to the known health benefits of subsistence food consumption

Category Contaminants

Key Words contaminants, subsistence foods, methylmercury, cadmium, polychlorinated biphenyls, PCB, polyhalogenated diaromatic hydrocarbons

Cooperators

Project Manager Lori Verbrugge

Project Manager Address
Alaska Dept of Health and Social Services
Divison of Public Health
3601 C Street, Suite 540
PO Box 240249
Anchorage AK 99524-0249

Project Manager Phone 907-269-8045 **Project Manager E-Mail** lori_verbrugge@epi hss state ak us,

Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

All of Alaska, plus some information from Canada and Greenland

Objectives

Compile existing information about contaminant levels in Alaskan subsistence foods, and critically evaluate the potential risks and benefits of subsistence food consumption Identify research needs and data gaps

Resources and Parameters Being Measured

Compilation and critical evaluation of existing contaminants data, primarily from fish and marine mammal tissues from Alaska

Sampling Platforms

Measurements/Data Obtained

Existing data regarding contaminant levels in Alaskan subsistence foods, with emphasis on methylmercury, cadmium and PCB levels

List of Databases, Manager Name and Contact Information

Duration of Program of Project

Project has culminated in a written report, "Use of Traditional Foods in a Healthy Diet in Alaska Risks in Perspective", State of Alaska Epidemiology Bulletin Vol. 2 No. 1, January 15, 1998.

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

Existing resources of the Section of Epidemiology Done with existing staff and resources over a period of several years A rough estimate of costs for the monograph would be $100,000, which includes salaries, obtaining primary literature, printing and mailing of the report, and meetings with collaborators

Future Plans/Prognosis

Future updates to the monograph are planned as data become available

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution USDOC/NOAA
NMFS
AR/AFSC/ABL

Program **Stock Identification**

Program Summary

Provides information required in regional, national, and international agreements and treaties dealing with the management of Pacific salmon
Determines population status, identifies stocks to region or country of origin, determines population and stock utilization of ocena rearing ara, assesses, interceptions, and determines stock production

Program Manager Richard Wilmot

Program Manager Address

NMFS WASC
Route F/AKC5
11305 Glacier Hwy
Juneau AK 99801-8626

Program Manager Phone 907-789-6079 **Program Manager E-Mail** Richard Wilmot@noaa gov

Gulf of Alaska Monitoring/Long Time Series Projects

Project Title **Pacific Salmon Genetic Database Development**

Project Summary
Develop allozyme and DNA databases for Pacific salmon throughout the North Pacific region

Category Fish

Key Words salmon, genetics

Cooperators USDOS (State Department), State of Alaska, NPFMC, Pacific Salmon Commission, NPAFC

Project Manager Richard Wilmot

Project Manager Address
NOAA-NMFS
Auke Bay Laboratory
11305 Glacier Highway
Juneau, AK 99801-8626

Project Manager Phone (907) 789-6079 **Project Manager E-Mail** Richard Wilmot@noaa gov

Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

North Pacific Region

Objectives

Use genetic data to describe the stock structure of salmon, and to be able to determine origins of salmon caught in mixed stock fisheries and caught illegally on the high seas

Resources and Parameters Being Measured

Salmon genetics

Sampling Platforms

Measurements/Data Obtained

Allozyme and DNA data of Pacific salmon stocks

List of Databases, Manager Name and Contact Information

Genetic data on pink, chum, sockeye, and chinook salmon
Database is in dBase format
Contact Richard Wilmot

Duration of Program of Project

On-going

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

Variable A yearly average of $640,000 for the entire Stock Identification Program, all species and projects

Future Plans/Prognosis

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution US Dept of the Interior
USFWS
Refuges and Wildlife/Refuges

Program **Alaska Maritime National Wildlife Refuge**

Program Summary

Program Manager John Martin

Program Manager Address

Alaska Maritime Wildlife Refuge
2355 Kachemak Drive, Suite 101
Homer AK 99603

Program Manager Phone 907-235-6546 **Program Manager E-Mail** John_L_Martin@fws gov

Gulf of Alaska Monitoring/Long Time Series Projects

Project Title **Alaska Seabird Inventory and Monitoring Plan - Annual Monitoring Sites**

Project Summary

Detects trends in seabird populations, or conditions that are expected to result in population trends, and ensures that managers have up-to-date information about the health of populations and ecosystems

Category Birds/Mammals

Key Words seabirds, monitoring, health,trends

Cooperators

Project Manager Vernon Byrd

Project Manager Address

Alaska Maritime National Wildlife Refuge
2355 Kachemak Drive, Suite 101
Homer AK 99603

Project Manager Phone 907-235-6546 **Project Manager E-Mail** vernon_byrd@fws gov

Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

10 different sites annually on the Alaska Maritime NWR including St Lazaria, East Amatuli, Chowiet, and Aiktak islands in the GOA Other sites are in the Bering and Chukchi Sea

Objectives

Objectives are to provide time-series to ensure that managers have up-to-date information for identifying conservation issues and for applying adaptive management

Resources and Parameters Being Measured

Parameters include reproductive success, timing of nesting events, prey, and population trends of species of seabirds representing different foraging guilds (e g , diving piscivores, diving planktivores, surface-feeding piscivores, etc)

Sampling Platforms

Boats, land based (supported from season long field camps)

Measurements/Data Obtained

Population trends, interannual patterns in productivity and timing of nesting events, changes in prey use, chick growth rates, survival (for a few species), environmental variables (e g sea surface temperatures)

List of Databases, Manager Name and Contact Information

Electronic Format All data from the monitoring program goes into the Pacific Seabird Monitoring Database Contact is Scott Hatch, USGS/BRD, Alaska Biological Science Center, 1011 East Tudor Road, Anchorage, Alaska 99503-6199, Phone 907-786-3529 E-mail scott_hatch@usgs gov

Duration of Program of Project

Begin Date Mid-1970's for longest data sets, End date continuing long term

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

Currently base funding supports 6 sites, the others have been funded on soft money, some only intermittently) In GOA, only two sites have been base funded by the refuge, St Lazaria and Aiktak East Amatuli has been funded since the Exxon Valdez Oil Spill by the Trustee Council and the Semidis have been occasionally funded from a number of different sources (NOAA, BRD) Each site costs approximately $50K to monitor, or $500K for all 10 sites, all funding sources

Future Plans/Prognosis

Continue long term/dependent on funding

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution USGCRP
WOCE

Program **Direct Current Measurements**

Program Summary

Program Manager Worth Nowlin

Program Manager Address
US WOCE Office
Texas A&M University
Department of Oceanography
Mail Stop 3146
College Stati TX 77843-3146

Program Manager Phone 409-845-3900 **Program Manager E-Mail** wnowlin@tamu edu

Gulf of Alaska Monitoring/Long Time Series Projects

Project Title **Acoustic Doppler Current Profilers**

Project Summary

Shipboard acoustic Doppler current profilers (ADCPs), when used in conjunction with reliable heading and navigation data, can determine absolute currents in the upper ocean Many WOCE hydrography cruises include the collection and processing of underway ADCP data, and the DAC assembles, reviews, documents, archives and distributes these data The DAC is a joint effort between the Japan Oceanographic Data Centre (JODC) and the University of Hawaii

Category Oceanography-Physical/Chemical

Key Words current velocity, acoustic Doppler current profiler

Cooperators Japan Oceanographic Data Centre (JODC)

Project Manager Patrick Caldwell

Project Manager Address

National Oceanographic Data Center / E Firing ADCP Lab
Univ of Hawaii
Joint Archive for Shipboard ADCP
1000 Pope Rd MSB 307
Honolulu HI 96822

Project Manager Phone 808-956-4105 **Project Manager E-Mail** caldwell@soest hawaii edu

Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

Global

Objectives

Long-term archive

Resources and Parameters Being Measured

Upper ocean currents

Sampling Platforms

Ships

Measurements/Data Obtained

Presently 334 unique cruises

List of Databases, Manager Name and Contact Information

US NODC Shipboard ADCP Database
Mr Patrick C Caldwell
National Oceanographic Data Center / E Firing ADCP Lab
Univ of Hawaii
Joint Archive for Shipboard ADCP

Duration of Program of Project

Indefinite

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

US NODC

Future Plans/Prognosis

Continue to populate the database

22.01.02

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution ADF&G
CF (CFMD, FRED)
Coded Wire Tag Lab

Program **Coded Wire Tag Database**

Program Summary

The program maintains a database of all releases of coded wire tagged salmonids in Alaska It also has a database of all anadromous releases of salmon Associated with these release files are species, numbers, size, agency, date of release, stock of fish, release site, agency, project leader, and a number of other fields,

It also maintains a record of all recoveries of tags, the date, year, location, gear used, who sampled the fish and other fields

It has a database of sampling information, e g how many fish were sampled for the presence of coded wire tags and how many were found to have tags, when and where they were sampled

Program Manager Ron Josephson

Program Manager Address
Alaska Department of Fish and Game
Mark Tag and Age Lab
PO Box 25526 / 10017 Bentwood Place
Juneau Alaska 99802

0 0 0

Program Manager Phone 907-465-4088 **Program Manager E-Mail** ron_josephson@fishgame state ak us or cwtstaff@fishgame state ak us

Gulf of Alaska Monitoring/Long Time Series Projects

Project Title **Coded Wire Tag Releases and Recovery Database**

Project Summary

Steelhead and salmon from many hatchery and a few wild fish programs have been coded wire tagged (CWT) since the early 1970's Tags have binary codes that uniquely identify a particular stock or experimental unit of fish from a particular year These tags are inserted into fish noses as fry or smolt and recovered when the adults return For the most part, the Coded Wire Tag Lab just reads the tags and provides the data to project leaders Many different researchers and managers use the database for a diversity of purposes In many cases the Tag Lab does not know specifically what the data will be used for

Category Fish

Key Words coded wire tag, CWT, salmon, hatchery, steelhead

Cooperators State, Private Non-Profit and Federal Hatcheries, Pacific States Marine Fisheries Commision

Project Manager Each Coded Wire Tag Group has its own project manager, the agency and in some cases the managers name is available

Project Manager Address

Copy Project Manager Address here

Project Manager Phone **Project Manager E-Mail** 0

Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

Alaska

Objectives

This project maintains current information on releases of coded wire tagged salmon, recoveries of coded wire tagged salmon, and sampling efforts for same in the State of Alaska In Southeast Alaska we provide estimates of contribution numbers by coded wire tag release group by time area and gear strata

Resources and Parameters Being Measured

Salmon and steelhead Binary code on tags identifies stock, release date and location

Sampling Platforms

Fish heads containing tags recovered primarily from commercial fisheries

Measurements/Data Obtained

See above In some cases length measurements for recovered salmon is available

List of Databases, Manager Name and Contact information

Oracle format stored at the Tag Lab in Juneau Alaska Much of the information can be queried from a web page maintained by the lab at http //tagotoweb adfg state ak us/ Ron Josephson, the program manager, is the datbase contact (see above for contact information)

Duration of Program of Project

1978 to present and ongoing

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

State General Funds, Federal Funds, and some special funding The Tag Labs annual budget is over $600,000 For the most part this includes the cost of shipping us the heads Sampling is estimated to cost client/cooperators at least $400,000 Tagging costs at least $0 20 per fish for about 4,000 000 fish a year in Alaska - or $800,000 These are also client/cooperator-borne costs

Future Plans/Prognosis

ongoing

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution ADF&G
CF

Program **Groundfish, Salmon, Herring, Shellfish**

Program Summary

Commercial Fisheries Division -- The mission of the Division of Commercial Fisheries is to manage, protect, rehabilitate, enhance, and develop fisheries and aquatic plant
resources in the interest of the economy and general well-being of the state, consistent with the sustained yield principle and subject to allocations established through public regulatory processes The division is responsible for management of the state's commercial,

Program Manager Doug Mecum

Program Manager Address

Alaska Dept of Fish and Game
Division of Commercial Fisheries
1255 W 8th Street
Juneau AK 99801

Program Manager Phone 907-465-4210 **Program Manager E-Mail** dougdm@fishgame state ak us

Gulf of Alaska Monitoring/Long Time Series Projects

Project Title **Fish Tickets for Shoreside Landings**

Project Summary

Fish ticket information from commercial fisheries details catch, value, species and permit types for seafood statewide Data collected includes Salmon, Herring, Groundfish, and Shellfish Approx 250,000 tickets are collected and entered each year Data is used by multiple agencies for the management of fisheries in Alaska Data is also used to determine participants in limited license programs

Category

Key Words

Cooperators

Project Manager Carmine DiCostanzo

Project Manager Address

Alaska Dept of Fish and Game
Division of Commercial Fisheries
1255 W 8th Street
Juneau AK 99801

Project Manager Phone 907-465-6127 **Project Manager E-Mail** carmined@fishgame state ak us

Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

All Alaskan State Waters

Objectives

Maintain historic commercial seafood harvest for the purpose of fisheries management

Resources and Parameters Being Measured

N/A

Sampling Platforms

N/A

Measurements/Data Obtained

List of Databases, Manager Name and Contact Information

Groundfish Fish Tickets 1969 - Present Gail Smith 465-6157
Shellfish Fish Tickets 1969 - Present Gail Smith 465-6157
Salmon Fish Tickets 1969 - Present Carmine DiCostanzo 465-6127
Herring Fish Tickets 1969 - Present Carmine DiCostanzo 465-6127

Duration of Program of Project

1969 to Present

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

Combination of Federal Funding through AKFIN and State of Alaska General Funds It is difficult to put a budget for the project because the people involved are not solely dedicated to the project, but a good estimate is about $600K annually

Future Plans/Prognosis

The system is currently under conversion from a decentralized COBOL/ISAM based system to a client/server centralized RDMS (Oracle)
Completetion date June 2000

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution ADF&G
CF (CFMD, FRED)

Program **Shellfish**

Program Summary
Manage commercial shellfish fisheries

Program Manager Pete Probasco

Program Manager Address

Alaska Dept of Fish and Game
Divison of Commercial Fisheries
211 Mission Road
Kodiak AK 99615

Program Manager Phone 907-486-1825 **Program Manager E-Mail** pete_probasco@fishgame state ak us

Gulf of Alaska Monitoring/Long Time Series Projects

Project Title **Gulf Pot Surveys - Crabs**

Project Summary

Crab pot survey data for the Kodiak and south Alaska Peninsula areas, 1971 through 1987

Category Fish

Key Words red king crab, tanner crab

Cooperators

Project Manager project ended in 1987

Project Manager Address

Alaska Dept of Fish and Game
Divison of Commercial Fisheries
211 Mission Road
Kodiak AK 99615

Project Manager Phone 907-486-1865 **Project Manager E-Mail**

Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

Kodiak and South Alaska Peninsula areas

Objectives

Provide population index of red king crab

Resources and Parameters Being Measured

Relative abundance as measured by catch per pot of red king crab and incidental catch of Tanner crab, halibut, and cod Size, sex, and female reproductive condition of crabs Size of halibut, cod

Sampling Platforms

ship

Measurements/Data Obtained

Pot location, lift and set time and date, depth, red king and Tanner crabs enumerated, measured (carapace length for king crab, carapace width for Tanner), sexed, and reproductive condition assessed, halibut and cod enumerated and measured for length, other species/species groups enumerated

List of Databases, Manager Name and Contact Information

Data in R Base for Kodiak area only, one database for each year, Data only for red king crab, Tanner crab, halibut and cod entered Jim Blackburn, jim_blackburn@fishgame state ak us

Duration of Program of Project

1971-1987

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

None, project ended in 1987 Old funding data not available, but in 1999 dollars, this project would cost $495 to $540 thousand to be repeated for one year

Future Plans/Prognosis

None, project ended in 1987, replaced by trawl survey

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution ADF&G
H&R

Program **Anadromous Waters Catalog**

Program Summary

Alaska Statute 16 05 870(a) requires the Alaska Department of Fish and Game (ADF&G) to specify the various rivers lakes and streams or parts of them of the state that are important to the spawning rearing or migration of anadromous fishes The *Catalog of Waters Important for the Spawning Rearing or Migration of Anadromous Fishes* and its associated atlas are the media used to accomplish this specification and are adopted as regulation under 5 AAC 95 010 The Anadromous Waters Catalog program collects data on anadromous fish species use from biologists statewide enters that data into a GIS system produces and distributes the AWC and adopts it into regulation

Program Manager Ed Weiss

Program Manager Address
Alaska Dept of Fish and Game
Habitat and Restoration Division
333 Raspberry Road

Anchorage AK 99518-1599

Program Manager Phone 907-267-2305 **Program Manager E-Mail** ed_weiss@fishgame state ak us

Gulf of Alaska Monitoring/Long Time Series Projects

Project Title **Catalog of Waters Important for the Spawning, Rearing, or Migration of Anadromous Fishes**

Project Summary

Documents the streams which are specifed as being used by anadromous fish species for spawning, rearing or migration The mouthpoint and the known upper point of usage are digitized from USGS base maps, based on submisions from biologists statewide Stream numbers, USGS quad maps, Latitude, longitude and legal description data are generated from these digitzed points and utilized to produce the *Catalog of Waters Important for the Spawning Rearing or Migration of Anadromous Fishes* Alaska only

Category Fish

Key Words fish, salmonids, streams, andromous, salmon, steelhead, Dolly Varden

Cooperators Data submissions are received from various state & federal agencies, private organizations and individuals statewide

Project Manager Ed Weiss

Project Manager Address
Alaska Dept of Fish and Game
Habitat and Restoration Division
333 Raspberry Road
Anchorage AK 99518-1599

Project Manager Phone 907-267-2305 **Project Manager E-Mail** ed_weiss@fishgame state ak us

Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

Alaska - Statewide

Objectives

Identify, map and list the streams specified by ADF&G as being important for spawning, rearing or migration of anadromous fishes Produce, distribute and adopt into regulation this listing in the form of the *Catalog of Waters Important for the Spawning, Rearing or Migration of Anadromous Fishes* and it's atlas *An Atlas to the Catalog of Waters Important for the Spawning, Rearing or Migration of Anadromous Fishes*

Resources and Parameters Being Measured

Presence of spawning, rearing or migratory habitat for the specified anadromous fish species throughout Alaska Species cataloged include anadromous forms of pacific trouts and salmon of the genus *Oncorhynchus* (rainbow and cutthroat trout and chinook, coho, sockeye, chum and pink salmon) Arctic char, Dolly Varden, sheefish, smelts, lamprey, whitefish, and sturgeon

Sampling Platforms

Measurements/Data Obtained

List of Databases, Manager Name and Contact Information

Anadromous Waters Catalog GIS	Ed Weiss	907-267-2305
Anadromous Waters Catalog Tracking Database	Ed Weiss	907-267-2305

Duration of Program of Project

Current Program Ongoing 1981 to present
Previous program 1968 to 1980

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

Program costs $130K annually Federal Wallop Breaux and State of Alaska

Future Plans/Prognosis

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution ADF&G
SF

Program **Groundfish Sport Fishing**

Program Summary

Program Manager Doug McBride

Program Manager Address

Alaska Department of Fish and Game
Sport Fish Division
333 Raspberry Rd
Anchorage AK 99518-1599

Program Manager Phone 907-267-2227 **Program Manager E-Mail** doug_mcbride@fishgame state ak us

Gulf of Alaska Monitoring/Long Time Series Projects

Project Title **Groundfish Port Sampling**

Project Summary

Determines the age, weight, lenght (AWL), sex, maturity of sport caught groundfish at docks Cooperative project with CF Division

Category Fish

Key Words age, weight, length, AWL) sex, maturity, groundfish

Cooperators ADF&G/CF

Project Manager Bob Clark

Project Manager Address

Alaska Department of Fish and Game
Sport Fish Division
333 Raspberry Rd
Anchorage AK 99518-1599

Project Manager Phone 907-267-2222 **Project Manager E-Mail** bob_clark@fishgame state ak us

Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

North Gulf Coast, including fish landed at Valdez, Cordova, Whittier, Seward, Homer, Deep Creek, and Kodiak

Objectives

Estimate geographic distribution of recreational effort, harvest, and catch of rockfish, lingcod, and halibut Estimate age, size, sex, and maturity of recreationally harvested rockfish (by species and management assemblage), lingcod, and halibut

Resources and Parameters Being Measured

Resources - rockfish species, lingcod, and halibut along the North Gulf Coast Parameters - recreational effort, catch, and harvest, age, size, sex, and maturity of rockfish, lingcod, and halibut

Sampling Platforms

Catch sampling and angler interviews at Valdez, Cordova, Whittier, Seward, Homer, Deep Creek, and Kodiak

Measurements/Data Obtained

Angler trips, number caught, number harvested by species Total length, age, sex, and maturity by species Data are obtained annually from May through September

List of Databases, Manager Name and Contact Information

SAS data bases - contact Scott Meyer (scott_meyer@fishgame state ak us) at the Homer ADF&G office

Duration of Program of Project

It is anticipated that this program will continue into the forseeable future

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

All projects are funded through the Federal Aid in Sport Fish Restoration contract with the USFWS About $200K annually, $1,800K cumulative since 1991

Future Plans/Prognosis

Alternative ports will be added/removed as management questions and budgets dictate This project will likely continue into the forseeable future

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution ADF&G
SF

Program **Salmonids**

Program Summary

Program Manager Doug McBride

Program Manager Address

Alaska Department of Fish and Game
Sport Fish Division
333 Raspberry Rd
Anchorage AK 99518-1599

Program Manager Phone 907-267-2227 **Program Manager E-Mail** doug_mcbride@fishgame state ak us

Gulf of Alaska Monitoring/Long Time Series Projects

Project Title **Coded Wire Tagging (CWT) of Hatchery and Selected Wild Salmonid Stocks**

Project Summary

Coded wire tagging (CWT) inserts a binary tag into the snouts of salmonids before release This project places and recovers these tags from hatchery chinook and coho salmon and selected wild stocks to determine size of returning population and straying rates

Category Fish

Key Words coded wire tagging, CWT, coho, chinook, fish, salmon

Cooperators ADF&G/CF

Project Manager Bob Clark

Project Manager Address

Alaska Department of Fish and Game
Sport Fish Division
333 Raspberry Rd
Anchorage AK 99518-1599

Project Manager Phone 907-267-2222 **Project Manager E-Mail** bob_clark@fishgame state ak us

Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

This project occurs in Prince William Sound (Valdez, Wittier, Cordova), Cook Inlet (various sites), and Kodiak (Buskin River)

Objectives

Estimate contributions of all hatchery and select wild stocks of chinook and coho salmon to select commercial and marine sport fisheries Estimates smolt abundance in select wild stocks of coho and chinook salmon Estimate rates of straying of all hatchery stocks to select drainages

Resources and Parameters Being Measured

Resources - all hatchery releases of chinook and coho salmon Wild chinook salmon in the Kenai River, Willow Creek, Deep Creek Wild coho salmon in the Kenai River and Cottonwood Creek Parameters are proportion marked, proportion sampled, harvest by tag code, harvest by fishery, exploitation rate, straying rate

Sampling Platforms

All hatchery fish are marked at Elmendorf and Fort Richardson hatcheries Wild salmon are captured by smolt weir, screw trap, and inclined plane trap Returning adults are sampled at buying stations, tenders and processing plants

Measurements/Data Obtained

Estimates of contribution, smolt abundance, and straying rate are obtained annually

List of Databases, Manager Name and Contact Information

All CWT data are housed in the PSMFC databases (http //www psmfc org) and the ADF&G tag lab (http //tagotoweb adfg state ak us)

Duration of Program of Project

It is anticipated that these programs will continue into the forseeable future

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

All projects are funded through the Federal Aid in Sport Fish Restoration contract with the USFWS Annual costs are about $170K for tagging Hatchery fish, $300K for tagging wild fish, $300K for tag recovery Cumulative costs since 1991 are estimated to be $1,500K, $1,500K and $2,500K respectively,

Future Plans/Prognosis

Alternative stocks and hatchery plants will be added/removed as management questions and budgets dictate This project will likely continue into the forseeable future

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution ADF&G
SF

Program **Salmonids**

Program Summary

Program Manager Doug McBride

Program Manager Address

Alaska Department of Fish and Game
Sport Fish Division
333 Raspberry Rd
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Program Manager Phone 907-267-2227 **Program Manager E-Mail** doug_mcbride@fishgame state ak us

Gulf of Alaska Monitoring/Long Time Series Projects

Project Title **Sport Fish Weirs and Sonars**

Project Summary

Weir and sonar (Kenai River only) counts of returning anadromous salmonid sportfish (salmon, steelhead, dolly varden, cutthroat trout) to streams Determines population size Weir-caught fish may also provide age, weight, length (AWL), and stage of maturity data

Category Fish

Key Words weir, sonar, salmonid, sportfish, salmon, steelhead, dolly varden, cutthroat trout, population size, age, weight, length, AWL, maturity

Cooperators ADF&G/CF

Project Manager Bob Clark

Project Manager Address

Alaska Department of Fish and Game
Sport Fish Division
333 Raspberry Rd
Anchorage AK 99518-1599

Project Manager Phone 907-267-2221 **Project Manager E-Mail** bob_clark@fishgame state ak us

Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

This project occurs in Cook Inlet (Kenai River, Russian River, Cooper Creek, Deep Creek, Ninilchik River, Deshka River, Wasilla Creek, Cottonwood Creek, Little Susitna River, Fish Creek) and Kodiak (Karluk, Ayakulik, Chignik)

Objectives

Census passage of salmonids Estimate age, sex, size compositions

Resources and Parameters Being Measured

Resources are coho and chinook salmon, steelhead, and Dolly Varden Parameters are numbers, ages, sizes, sexes

Sampling Platforms

Picket weirs, floating weirs, split-beam sonar

Measurements/Data Obtained

Counts of salmonids by species by date, length from mid-eye to fork in tail, sex (male/female), age (freshwater and ocean ages in years) These data are collected by day through each run on an annual basis

List of Databases, Manager Name and Contact Information

Northern Cook Inlet - Spreadsheets, contact Gene Sandone (gene_sandone@fishgame state ak us) at the Palmer ADF&G office
Kenai River chinook - Access databases, contact Dan Bosch (dan_bosch@fishgame state ak us) at the Anchorage ADF&G office
Remaining Kenai Peninsula - Spreadsheets, contact Mike Bethe (mike_bethe@fishgame state ak us) at the Soldotna ADF&G office

Duration of Program of Project

It is anticipated that these programs will continue into the forseeable future

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

All projects are funded through the Federal Aid in Sport Fish Restoration contract with the USFWS Annual costs are about $650k, cumulative costs are estimated to be $5,000K

Future Plans/Prognosis

Alternative stocks will be added/removed as management questions and budgets dictate This project will likely continue into the forseeable future

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution ADF&G
SUB

Program **Oil Impacts**

Program Summary

Program Manager Jim Fall

Program Manager Address

Alaska Department of Fish and Game
Subsistence Division
333 Raspberry Rd
Anchorage AK 99518-1599

Program Manager Phone 907-267-2359 **Program Manager E-Mail** jim_fall@fishgame state ak us

Gulf of Alaska Monitoring/Long Time Series Projects

Project Title **Oil Spill Health Task Force**

Project Summary

Tested shellfish, finfish, marine mammals, land mammals (deer)
, and sea birds and other subsistence foods in the Exxon Valdez Oil Spill area for contaminants and published results in a newsletter Funded from 1989 to 1991 by Exxon, 1993-1994 by the Exxon Valdez Oil Spill Trustee Council No data in 1992

Category Fish, Birds/Mammals, Contaminants

Key Words subsistence, fish, shellfish, birds, mammals, contaminants, oil

Cooperators Indian Health Service, State of Alaska Governor's Office, Alaska Dept of Health and Social Services, Alaska Dept of Environmental Conservations, NOAA, Chugachmiut, Kodiak Area Native Association, and Exxon Corporation

Project Manager Jim Fall

Project Manager Address

Alaska Dept of Fish and Game
Subsistence Division
333 Raspberry Road
Anchorage AK 99518-1599

Project Manager Phone 907-267-2359 **Project Manager E-Mail** jim_fall@fishgame state ak us

Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

Exxon Valdez oil spill area

Objectives

To provide subsistence users with information regarding the safety of eating subsistence foods gathered from the oil spill area

Resources and Parameters Being Measured

See project description re resources Presence of PAH's or their metabolites in flesh and bile assays

Sampling Platforms

Boats, beach, land

Measurements/Data Obtained

Goal was 3 times per year as possible, but not always met (Spring, Summer, Fall)

List of Databases, Manager Name and Contact Information,

Word file, Jim Fall

Duration of Program of Project

1989-91, 1993-94

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

EVOS funding $300K No information prior to that

Future Plans/Prognosis

None

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution Fisheries & Oceans Canada

Program **High Seas Salmon Program**

Program Summary
Copy Program Summary Here

Program Manager David Welch

Program Manager Address
Program Head, High Seas Salmon Research &
PICES-GLOBEC Co-Chair,
Climate Change & Carrying Capacity Implementation Plan
Fisheries & Oceans Canada
Ocean Sciences & Productivity Division
Pacific Biological Station

Nanaimo British Columbia CANADA V9R 5K6

Program Manager Phone (250) 756-7218 **Program Manager E-Mail** welchd@pac dfo-mpo gc ca

Project Title **High Seas Salmon Program**

Project Summary

The High Seas Salmon Program began a program of repeated ocean sampling transects along the west coast beginning in 1998 Their purpose is to begin monitoring ocean conditions and effects on juvenile salmon and zooplankton along the coast of British Columbia and extending at least as far north as Baranof Island, SE Alaska

Gulf of Alaska Monitoring/Long Time Series Projects

Category Fish, Oceanography- Biological, Oceanography - Physical/chemical

Key Words Plankton, climate change, salmon, ocean

Cooperators NMFS

Project Manager David Welch

Project Manager Address
Program Head, High Seas Salmon Research &
PICES-GLOBEC Co-Chair,
Climate Change & Carrying Capacity Implementation Plan
Fisheries & Oceans Canada
Ocean Sciences & Productivity Division
Pacific Biological Station
Nanaimo British Columbia CANADA V9R 5K6

Project Manager Phone (250) 756-7218 **Project Manager E-Mail** welchd@pac dfo-mpo gc ca

Geographic Scope

Southern BC to SE Alaska We are anticipating widening the survey to include the region from Northern California to SE Alaska if funding can be secured for the ship time

Objectives

Determine the reasons for large scale declines in salmon survival in the ocean

Resources and Parameters Being Measured

Chlorophyll, zooplankton biomass (4 size groups), salmon growth and projected survival, nitrate, SiO4, CTD profiles, continuous surface temperature & salinity records while underway Funding from Fisheries & Oceans Canada and outside agencies (Bonneville Power Administration)

Sampling Platforms

CCGS W E Ricker

Measurements/Data Obtained

List of Databases, Manager Name and Contact Information

David W Welch, Ph D
Program Head, High Seas Salmon Research &
PICES-GLOBEC Co-Chair,
Climate Change & Carrying Capacity Implementation Plan
Fisheries & Oceans Canada

Duration of Program of Project

Ongoing

Funding

Ship Time Approximately $340,000 US per year
Labour Approximately $250,000 US per year
Supplies/Lab costs Approxmately $100,000 US per year

Future Plans/Prognosis

Early results are very promising

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution Fisheries & Oceans Canada & Sir Alister Hardy Foundation for Ocean Sciences (Collaborative Project)

Program **North Pacific Marine Research Program (Dinkum Sands)**

Program Summary

The goal of this program is to increase understanding of the Bering Sea and adjacent waters, with the ultimate aim of developing predictive ability for ecological responses to natural and human-induced impacts The program seeks and encourages high quality proposals which promise long-term results as well as those with more immediate applicability

Program Manager David Welch

Program Manager Address

Program Head, High Seas Salmon Research &
PICES-GLOBEC Co-Chair,
Climate Change & Carrying Capacity Implementation Plan
Fisheries & Oceans Canada
Ocean Sciences & Productivity Division
Pacific Biological Station

Nanaimo British Columbi CANADA V9R 5K6

Program Manager Phone (250) 756-7218 **Program Manager E-Mail** welchd@pac dfo-mpo gc ca

Project Title **A continuous plankton recorder monitoring program for the eastern North Pacific & southern Bering Sea**

Project Summary

(See http //www2 sfos uaf edu 8080/projects/projects html for a version including graphics)

Our objective is to put in place a monitoring program for the eastern North Pacific and southern Bering Sea region Large scale changes in Pacific salmon populations in all regions of North America have been related to climate change in this century The likely initial cause is changes in the structure of the ocean and atmosphere These changes are known to affect the abundance, productivity, and community structure of continental shelf and open ocean plankton communities The changes in

Category Oceanography - Biological, Fish

Gulf of Alaska Monitoring/Long Time Series Projects

Key Words Plankton, climate change, salmon, ocean, monitoring

Cooperators Sir Alister Hardy Foundation for Ocean Science (Plymouth, UK)

Project Manager Sonia Batten

Project Manager Address 0
Dr Sonia D Batten
Sir Alister Hardy Foundation for Ocean Science
1, Walker Terrace, The Hoe,
Plymouth United Kingdom PL1 3BN

Project Manager Phone +44 1752 221-112 **Project Manager E-Mail** soba@wpo nerc ac uk

Geographic Scope

Plankton monitoring transects extending from Prince William Sound to Long Beach California, and from Vancouver west to the southern Bering Sea

Objectives

Begin establishing baseline data needed to define a long term plankton monitoring program for the eastern North Pacific

Resources and Parameters Being Measured

Relative colour (a qualitative measure of chlorophyll concentration) and zooplankton community composition and abundance. 6 surveys per year for two years will be carried out using the Hardy Continuous Plankton Recorder, which has been in continuous use in the Atlantic Ocean since 1931

Sampling Platforms

Exxon oil tanker (N-S route) and Asian Container ship (E-W route)

Measurements/Data Obtained

Gulf of Alaska Monitoring/Long Time Series Projects

Relative index of chlorophyll concentration
Abundance by taxa of zooplankton

List of Databases, Manager Name and Contact Information

S Batten

Duration of Program of Project

19991-2001

Funding

Dinkum Sands (North Pacific Marine Research Initiative)-- $250,000 to support two years of sampling

Future Plans/Prognosis

We intend to put a proposal in to EVOS (which will have the support of PICES) to initiate a multi-decadal plankton monitoring program for the Eastern North Pacific

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution NASA
ESE(MTPE)/Oceanography

Program **EOS - Earth Observing System, Ocean Biology**

Program Summary

The EOS is a program of multiple spacecraft and inter diciplinary science investigations to provide a 15-year data set of key parameters and advances in scientific knowledge needed to understand global climate change The oceanography component measures surface temperature, phytoplankton and dissolved organic matter, surface wind fields and ocean surface topography Color instruments measure primary productivity and other aspects of phytopankton

Program Manager Eric Lindstrom

Program Manager Address
NASA Headquarters

Washington DC 20546-0001

Program Manager Phone 202-358-4540 **Program Manager E-Mail** elindstr@mail hq nasa gov or eric lindstrom@hq nasa gov

Gulf of Alaska Monitoring/Long Time Series Projects

Project Title SeaWiFS - Sea-viewing Wide Field-of-view Sensor

Project Summary

An instrument on the SeaStar spacecraft that measures accurate ocean color to clarify magnitude and variability of chlorophyll and primary production by marine phytoplankton, and to determine the distribution and timeing of spring blooms Launched August 1, 1997, it is a follow-up to the CZCS

Category Oceanography-Biological

Key Words phytoplankton, oceanography, biological, chlorophyll, productivity

Cooperators

Project Manager Charles McClain

Project Manager Address

NASA
Goddard Space Flight Center
Mailstop 970 2
Greenbelt MD 20771

Project Manager Phone 301-286-5377 **Project Manager E-Mail** mcclain@calval gsfc nasa gov or chuck@ardbeg gsfc nasa go

Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

Global

Objectives

The purpose of the SeaWiFS Project is to obtain accurate ocean color data from the world's oceans for 5-year period, to process these data in conjunction with ancillary data into meaningful biological parameters, and to make these data readily available to researchers

Resources and Parameters Being Measured

Normalized water-leaving radiance at 412, 443, 490, 510 and 565 nm, aerosol radiance at 670 and 865 nm, chlorophyll concentration, aerosol optical thickness at 865 nm, diffuse attenuation coefficient at 490 nm

Sampling Platforms

OrbView-2 spacecraft (built, launched, owned and operated by Orbital Sciences Corporation), flying the SeaWiFS instrument, orbit is 705-km, Sun synchronous, local noon equator crossing (descending)

Measurements/Data Obtained

Top-of-the-atmosphere radiances at 412, 443, 490, 510, 555, 670, 765 and 865 nm, instrument and spacecraft telemetry from the OrbView-2 data stream, total column ozone from the TOMS project, meteorological fields (wind, humidity, pressure) from NCEP operational data products

List of Databases, Manager Name and Contact Information

All SeaWiFS data products are archived and distributed by the Goddard Version 0 Distributed Active Archive Center (DAAC)

Manager Stephen Wharton
Mailstop 902 0
NASA Goddard Space Flight Center

Duration of Program of Project

5 years

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

Estimates of funding levels are not available, but in the many millions of dollars

Future Plans/Prognosis

Possible extension of spacecraft operations / data collection beyond 5-year nominal lifetime

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution NASA
ESE(MTPE)/Oceanography

Program **EOS - Earth Observing System, Ocean Biology**

Program Summary

The EOS is a program of multiple spacecraft and inter dicipinary science investigations to provide a 15-year data set of key parameters and advances in scientific knowledge needed to understand global climate change The oceanography component measures surface temperature, phytoplankton and dissolved organic matter, surface wind fields and ocean surface topography Color instruments measure primary productivity and other aspects of phytopankton

Program Manager Eric Lindstrom

Program Manager Address
NASA Headquarters

Washington DC 20546-0001

Program Manager Phone 202-358-4540 **Program Manager E-Mail** elindstr@mail hq nasa gov or eric lindstrom@hq nasa gov

Gulf of Alaska Monitoring/Long Time Series Projects

Project Title **SIMBIOS - Sensory Intercomparison and Merger for Biological and Interdisciplinary Oceanic Studies**

Project Summary

Combines data products from the seven ocean color missions between 1996 and 2001 (SeaWIFS, OCTS, POLDER, MODIS (AM and PM), MISR, MERIS, and GLI) plus experimental missions (ROSCAT, UVISI, and the two MOS sensors) to ensure the best possible global coverage and best exploits the complimentary missions of the sensors It quantifies the relative accuracies, improves the level of confidence and compatibility among the products, and generates merged, improved level-3 products

Category Oceanography-Biological

Key Words color, primary productivity

Cooperators

Project Manager Charles McClain

Project Manager Address

NASA
Goddard Space Flight Center
Mailstop 970 2
Greenbelt MD 20771

Project Manager Phone 301-286-5377 **Project Manager E-Mail** chuck@ardbeg gsfc nasa gov or mcclain@calval gsfc nasa go

Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

Instrument-specific

Objectives

Evaluation and calibration of sensors, validation of data products, and development of data merger methodologies for the production of consistent ocean color data sets from multiple satellite-mounted sensors

Resources and Parameters Being Measured

Normalized water-leaving radiances in bands similar to SeaWiFS (412, 443, 490, 510 and 555 nm), chlorophyll concentration

Sampling Platforms

OrbView-2 for SeaWiFS, ADEOS (Japan) for OCTS and POLDER, EOS-AM1 for MODIS and MISR, EOS-PM1 for MODIS, IRS-P3 for MOS, ROCSAT for OCI

Measurements/Data Obtained

Top-of-atmophere radiances in all bands, instrument and navigation-related telemetry, ancillary data, *in situ* measurements

List of Databases, Manager Name and Contact Information

Contact SIMBIOS Project Manager (above)

Duration of Program of Project

N/A

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

Estimates of funding levels are not available, but in the many millions of dollars

Future Plans/Prognosis

Dependent upon launch schedules and availability of data sets

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution NSF
GEO
OCE

Program **Physical Oceanography**

Program Summary

Supports research on ocean climate, circulation, basin and eddy scale down to turbulent processes in ocean and lakes

Program Manager Eric Itsweire

Program Manager Address
Division of Ocean Sciencees
Directorate for Geosciences
The National Science Foundation
4201 Wilson Boulevard
Arlington VA 22230

Program Manager Phone 703-306-1583 **Program Manager E-Mail** eitsweire@nsf gov

Gulf of Alaska Monitoring/Long Time Series Projects

Project Title **Gulf of Alaska Recirculation Study (GARS)**

Project Summary

This study analyzes and models an extensive set of Current Meter, Hydrographic, Acoustic Doppler Current Profiler, Drifter, and Meteorological data from the Gulf of Alaska, collected from eight cruises over a period of three years Objectives are to describe and understand seasonal and interannual variability of the Northeast Pacific Ocean circulation

Category Oceanography-Physical/Chemical

Key Words current meter, hydrographic, acoustic Doppler current profiler, drifter, meteorological

Cooperators UAF

Project Manager Thomas Royer

Project Manager Address

Center for Coastal Physical Oceanography
Old Dominion University
Norfolk VA 23529

Project Manager Phone 757-683-5547 **Project Manager E-Mail** royer@ccpo odu edu

Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

Gulf of Alaska from Alaska coast to Ocean Station P 50N, 145 W

Objectives

To measure the seasonal variability of the circulation in the Gulf of Alaska

Resources and Parameters Being Measured

Temperature, salinity and currents

Sampling Platforms

R/V Alpha Helix

Measurements/Data Obtained

Temperature, salinity and currents

List of Databases, Manager Name and Contact Information

Submitted all data to NODC

Duration of Program of Project

Approx 1990-1995

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

About $800,000

Future Plans/Prognosis

Process oriented program to address seasonal deep ocean forcing in the Gulf of Alaska

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution NSF/NASA
GEO
US GLOBEC

Program **US GLOBEC/NEP/Retrospective Projects**

Program Summary

To understand the effects of climate variability and climate change on the distribution, abundance and production of marine animals (including commercially important living marine resources) in the eastern North Pacific To embody this understanding in diagnostic and prognostic ecosystem models, capable of capturing the ecosystem response to major climatic fluctuations

Program Manager Elizabeth Turner

Program Manager Address
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1315 East-West Highway
9708 SSMC3
Silver Spring MD 20910-3282

Program Manager Phone 301-713-3338, ext 135 **Program Manager E-Mail** Elizabeth Turner@noaa gov

Gulf of Alaska Monitoring/Long Time Series Projects

Project Title **Remote Sensing of the NE Pacific Retrospective and Concurrent Time Series Analysis Using Multiple Sensors on Multiple Scales**

Project Summary

Types of data or derived indices being analyzed

Satellite SST - 1 km absolute temperature, cloud masked Approximately 19N--56N, from the coast out to 132W-138W 1-4 images per day
Satellite SST - Pathfinder 9 km absolute temperature, cloud masked
Satellite Altimeter Heights - TOPEX/POSEIDON, ERS-1, ERS-2 covering the NE Pacific from the equator to 61N, out to 170W

Category Oceanography-Biological, Oceanography-Physical/Chemical

Key Words circulation, sea surface temperature, surface pigments, interannual variability, altimetry, satellite ocean color

Cooperators University of Maine, Ocean Imaging, Inc

Project Manager Ted Strub

Project Manager Address

College of Oceanic and Atmospheric Sciences
Oregon State University
104 Ocean Administration Building

Corvallis OR 97331-5503

Project Manager Phone (541) 737-3015 **Project Manager E-Mail** tstrub@oce orst edu

Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

The large-scale Northeast Pacific, with primary focus on the covariability of the Alaska Gyre, the California Current and the North Pacific Current Some studies related to El Niño variability will extend to the equator A supplemental grant from NSF has added a component comparing the NE Pacific to the SE Pacific (the Peru-Chile Current System)

Objectives

To determine the primary modes of variability in ocean circulation, SST and surface pigment concentrations on three scales
Basin-scale (500-5000km), Mesoscale (50-500km) and small-scale (50m-50km)
To process and make available satellite SST and satellite color data, To make altimeter products available to others with specific requests

Resources and Parameters Being Measured

Sea Surface Temperature (SST), Sea Surface Height (SSH), Surface Pigment Concentrations, SAR brightness temperature

Sampling Platforms

Polar orbitting satellites (AVHRR) for SST, TOPEX/POSEIDON and ERS satellites for SSH, SeaWiFS satellite for ocean color, RadarSat and ERS satellites for SAR

Measurements/Data Obtained

SST - 1985-1999
SSH - 1993-1999
Pigment - Oct 1997 - 1999
SAR scenes several each year

List of Databases, Manager Name and Contact Information

SST Archive, Ted Strub, tstrub@oce orst edu, http //coho oce orst edu
Pigments, Andrew Thomas, thomas@maine maine edu
SAR, Jan Svejkovsky, jan@oceani com

Duration of Program of Project

August 1997 - July 2000 Possibly extended during the second phase of the GLOBEC NE Pacific program

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

NSF/NASA (50% each) (***NSF contribution is $397,341, thus total project costs are around $800,000-JRS)

Future Plans/Prognosis

A proposal has been submitted to the next phase of the GLOBEC NE Pacific program to continue this work for the next 5 years (October 1994)

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution USDOC/NOAA
NMFS
AR/AFSC/ABL

Program **Groundfish**

Program Summary

Research and assessment of sablefish and rockfish in Alaska Also conduct research on effects of fishing and essential fish habitat

Program Manager Phil Rigby

Program Manager Address
NMFS Route AKC4
11305 Glacier Hwy

Juneau AK 99801

Program Manager Phone 907-789-6653 **Program Manager E-Mail** Phil Rigby@noaa gov

Gulf of Alaska Monitoring/Long Time Series Projects

Project Title **NMFS Longline Survey of the Aleutian Region, Bering Sea, and Gulf of Alaska**

Project Summary

On-going annual longline resource assessment surveys, chartered U S vessels, data catch by species, size compositions for principle species, catch and some size comp Available by pre-assigned depth strata Data collected at more or less fixed index sites, 100 - 1,000 m Aleutian Islands, Bering sea and Gulf of Alaska Purpose is to assess sablefish, rougheye and shortraker rockfish, and shortspine thornyhead populations and monitor changes in abundance and size compositions Replaces Japan-U S cooperative longline survey, 1979-1994

Category Fish

Key Words sablefish, rougheye and shortraker rockfish, and shortspine thornyhead

Cooperators Resource Assessment and Conservation Engineering Division

Project Manager Michael Sigler

Project Manager Address
NMFS Route AKC4
11305 Glacier Hwy

Juneau AK 99801

Project Manager Phone 907-789-6037 **Project Manager E-Mail** Mike Sigler@noaa gov

Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

Aleutian Islands, Bering Sea (continental slope), Gulf of Alaska, 100-1,000 m, fixed index sites
This on-going project has been conducted annually since 1987 and replaces the Japan-U S cooperative longline survey, 1979 - 1994

Objectives

Assess abundance and biological condition of sablefish, rougheye and shortraker rockfish, and shortspine thornyhead

Resources and Parameters Being Measured

Area-weighted CPUE, age and size compositions Growth, maturity, and diet Migration rates Habitat use

Sampling Platforms

Chartered US longliners

Measurements/Data Obtained

Area-weighted CPUE, size composition, age-length-weight-maturity data Tagging sablefish, Greenland turbot, and shortspine thornyhead with t-bar tags Tagging sablefish with electronic data storage tags Gillnet catch rate, age, length, diet of young-of-the-year sablefish Sperm whale, short-tailed albatross sightings and behavior

List of Databases, Manager Name and Contact Information

Single revised database combines all longline data collected by the Japan-US longline survey and the NMFS longline survey, Access database
Manager is Harold Zenger, RACE Division, 206-526-4158, Harold Zenger@noaa gov

Duration of Program of Project

Japan-US survey 1979 - 1994
Annual NMFS longline survey, 1987 - present

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

NMFS program funds and charter fees paid by vessels Total costs are estimated to be $500K per year

Future Plans/Prognosis

NMFS survey will be ongoing indefinitely, earliest years of Japan-US longline survey are being edited as Japanese data forms are made available from their archives

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution USDOC/NOAA
NMFS
AR/AFSC/ABL

Program **Stock Identification**

Program Summary

Provides information required in regional, national, and international agreements and treaties dealing with the management of Pacific salmon
Determines population status, identifies stocks to region or country of origin, determines population and stock utilization of ocena rearing ara, assesses, interceptions, and determines stock production

Program Manager Richard Wilmot

Program Manager Address

NMFS WASC
Route F/AKC5
11305 Glacier Hwy
Juneau AK 99801-8626

Program Manager Phone 907-789-6079 **Program Manager E-Mail** Richard Wilmot@noaa gov

Gulf of Alaska Monitoring/Long Time Series Projects

Project Title **Rockfish Genetic Database Development**

Project Summary
Develop allozyme and DNA databases for rougheye and shortraker rockfish throughout the North Pacific region

Category Fish

Key Words rockfish, genetics

Cooperators USDOS (State Department), State of Alaska, NPFMC, Pacific Salmon Commission, NPAFC

Project Manager Richard Wilmot

Project Manager Address
NOAA-NMFS
Auke Bay Laboratory
11305 Glacier Highway
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Project Manager Phone (907) 789-6079 **Project Manager E-Mail** Richard Wilmot@noaa gov

Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

North Pacific Region

Objectives

Use genetic data to describe the stock structure of rougheye and shortraker rockfish in the Gulf of Alaska and the Aleutian Islands area

Resources and Parameters Being Measured

Rockfish genetics

Sampling Platforms

Measurements/Data Obtained

Allozyme and DNA data of rougheye and shortraker rockfish stocks

List of Databases, Manager Name and Contact Information

Genetic data on rougheye and shortraker rockfish
Database is in dBase format
Contact Richard Wilmot

Duration of Program of Project

On-going

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

Variable A yearly average of $640,000 for the entire Stock Identification Program, all species

Future Plans/Prognosis

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution USDOC/NOAA
NMFS
AR/AFSC/RACE

Program **Groundfish Assessment**

Program Summary

The Resource Assessment and Conservation Engineering (RACE) Division of the Alaska Fisheries Science Center conducts fishery surveys to measure the distribution and abundance of approximately 40 commercially important fish and crab stocks in the eastern Bering Sea, gulf of Alaska, and the marine waters off California, Oregon, and Washington The RACE Groundfish Assessment Program conducts and reports the results of surveys designed to establish time series estimates of the distribution and abundance of groundfish resources in waters off the coast of California northward to the Bering Sea Program staff investigate biological processes and interactions with the environment to estimate growth, mortality, and recruitment to improve the precision and accuracy of forecasting stock dynamics of groundfish

Program Manager Gary Stauffer

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Seattle WA 98115-0070

Program Manager Phone 206-526-4170 **Program Manager E-Mail** Gary Stauffer@noaa gov

Gulf of Alaska Monitoring/Long Time Series Projects

Project Title **Gulf of Alaska Biennial Survey (formerly Gulf of Alaska Triennial Survey)**

Project Summary

Using standardized RACE Division bottom trawls and a random-stratified survey design, the bottom trawl survey collects data to estimate the catch-per-unit-effort, biomass and size and age distribution of commercial and non-commercial fish and invertebrates The primary survey objectives are to (1) Delineate the distributions of the major groundfish and commercially important invertebrate species inhabiting the continental shelf and upper continental slope of the Gulf of Alaska and to (2) collect data to estimate the abundance and biological condition of the major groundfish species

Category Fish

Key Words Fish, groundfish, invertebrates, shellfish, pollock

Cooperators 0

Project Manager Michael Martin

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Seattle WA 98115-0070

Project Manager Phone 206-526-4175 **Project Manager E-Mail** Michael Martin@noaa gov

Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

Islands of Four Mountains (170W) to Dixon Entrance (U S -Canada border) nearshore of the 1,000 m isobath

Objectives

In addition to the above objectives, other data collected or biological collections completed include length-weights, stomach contents, sexual maturity observations and special projects

Resources and Parameters Being Measured

Catch and fishing effort, species identification and enumeration, lengths and weights by sex, collection of stomachs and age structures, surface and bottom temperatures

Sampling Platforms

Chartered fishing vessels, fisheries research ships

Measurements/Data Obtained

Summer months of 1984, 1987, 1990, 1993, 1996 and 1999 from depths ranging from approximately 20-1,000 m over the continental shelf and upper slope waters Approximately 800 trawl stations completed/survey Beginning in 2001, the survey is scheduled to be conducted every two years

List of Databases, Manager Name and Contact Information

Data stored in tables (Haul, Catch, Length, Age along with ancillary tables) in ORACLE relational database (RACEBASE), Alaska Fisheries Science Center, Seattle , Gary Mundell, (206)526-4137 or Michael Martin, (206)526-4175

Duration of Program of Project

Biennially Three vessels @75 days each

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

Funding comes from base budget The cost estimate to complete the Gulf of Alaska Biennial Trawl Survey is approximately $1,000,000

Future Plans/Prognosis

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution USDOC/NOAA
NMFS
AR/AFSC/RACE

Program **Groundfish Assessment**

Program Summary

Conducts and reports results of surveys designed to establish time series estimates of the distribution and abundance of groundfish resources in waters off the coast of California northward to the Bering Sea Estimate growth, mortality, and recruitment to improve the precision and accuracy of forecasting stock dynamics of groundfish

Program Manager Gary Stauffer

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Gulf of Alaska Monitoring/Long Time Series Projects

Project Title **Japan-US Cooperative Longline Survey of the Aleutian Region, Bering Sea, and Gulf of Alaska**
(also includes the data from the ongoing NMFS longline survey conducted in same general area)

Project Summary

Annual longline resource assessment surveys, chartered Japanese vessels, data catch by species, size compositions for principle species, catch and some size comp Available by pre-assigned depth strata Data collected at more or less fisxed index sites, 100 - 1,000 m Aleutian Islands, Bering sea and Gulf of Alaska Purpose is to assess sablefish and Pacific Cod populations and monitor changes in abundance and size compositions

Category Fish

Key Words sablefish, Pacific cod

Cooperators Japan

Project Manager Harold Zenger

Project Manager Address

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7600 Sand Point Way NE

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Project Manager Phone 206-526-4158 **Project Manager E-Mail** harold zenger@noaa gov

Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

Aleutian Islands, Bering Sea (continental slope), Gulf of Alaska, 100-1,000 m, fixed index sites
Limited to years 1979 - 1994, project is now inactive, and has been replaced by ongoing NMFS longline survey

Objectives

Assess abundance and biological condition of sablefish and Pacific cod

Resources and Parameters Being Measured

Area-weighted CPUE and size composition

Sampling Platforms

Chartered Japanese longliners and chartered US longliners

Measurements/Data Obtained

Area-weighted CPUE, size composition, some age data

List of Databases, Manager Name and Contact Information

Single revised database combines all longline data collected by the Japan-US longline survey and the NMFS longline survey, Access database
Manager listed above

Duration of Program of Project

Japan-US survey 1979 - 1994
Annual NMFS longline survey, 1988 - present

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

NMFS program funds and charter fees paid by vessels Costs were estimated to have been about $500K/year

Future Plans/Prognosis

NMFS survey will be ongoing indefinitely, earliest years of Japan-US longline survey are being edited as Japanese data forms are made available from their archives

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution USDOC/NOAA
NMFS
AR/PRD

Program **Alaska Marine Mammal Observer Program**

Program Summary

Under requirements of the MMPA, determines the impact of U S commercial fisheries on marine mammal stocks In 6-8 years will observe at least 8 nearshore salmon net fisheries within Alaska classified as having occasional incidental mortality and serious injury of marine mammals

Program Manager Brian Fadely

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National Marine Fisheries Service
PO Box 21668

Juneau AK 99802-1668

Program Manager Phone 907-586-7642 **Program Manager E-Mail** brian fadely@noaa gov

Gulf of Alaska Monitoring/Long Time Series Projects

Project Title **Cook Inlet Set and Drift Gillnet Marine Mammal Observer Project**

Project Summary

Assesses the extent of marine mammal and seabird interactions with the Cook Inlet salmon set and drift gillnet fisheries

Category Birds/Mammals, Fish

Key Words beluga whale, marine mammal, salmon, seabirds

Cooperators University of Alaska Observer Training Center, Alaska Department of Fish and Game, National Marine Mammal Laboratory (NMFS-Alas

Project Manager Brian Fadely

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Project Manager Phone 907-586-7642 **Project Manager E-Mail** Brian Fadely@noaa gov

Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

Cook Inlet, Alaska Most of the set fishery, and all of the drift fishery effort (and hence observer effort) is focused in the Upper Cook Inlet, north of Anchor Point

Objectives

1 Obtain estimates of incidental mortality and serious injury to marine mammals by the observed fisheries
2 Obtain estimates of incidental bycatch of seabirds by the observed fisheries
3 Obtain estimates of damage to fishery gear and catch by marine mammals
4 Document use and effectiveness of marine mammal deterrents
5 Study the nature of interactions between the fisheries and marine mammals/birds

Resources and Parameters Being Measured

Observers collect data on any marine mammal or seabird observed near to or interacting with fishing nets Descriptive fishery and environmental data are also recorded to test for associations between fisheries activities and mammal/bird interactions, and to estimate the proportion of observed relative to total fishing effort fishing effort Target observer coverage levels were based on models that would give a 95% confidence that actual fisheries incidental ~~mortality levels of harbor porpoise did not exceed a level that would be detrimental to the population, even if no mortalities were observed In practice,~~

Sampling Platforms

Drift gillnet vessels, set gillnet skiffs, small skiffs, shore

Measurements/Data Obtained

Fishery characteristic data includes set duration, timing, location, gear type, net orientation, percent of net fishing, proximity to shore and other nets, and species and size of catch Environmental data describing sea and weather conditions includes sea state, estimates of wind speed, swell height and direction, tide stage and habitat type (river mouth, embayment, point, etc) Numbers, species, and behavior of seabirds and marine mammals observed near nets are recorded, and if used the effectiveness of deterents If there is an interaction or entanglement with the net, then additional data to describe in detail the behavior of the animal, response/behavior of the fisherman, and outcome are recorded If a bird or mammal drowns in the net, then individual specimen data (size, sex, age, condition) and tissue samples (for genetics and ageing analysis) are collected

List of Databases, Manager Name and Contact Information

Cook Inlet Observer Program (CIOP) database (Access), Brian Fadely, Protected Resources Division, National Marine Fisheries Service, PO Box 21668, Juneau, AK 99802, 907-586-7642

Duration of Program of Project

Gulf of Alaska Monitoring/Long Time Series Projects

Cook Inlet fisheries 1999 and 2000, additional fisheries through at least 2005

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

Department of Commerce multi-year funds for MMPA programs Funding for 1999 program was $900K Current funding commitment extends to 2001

Future Plans/Prognosis

The current plans (subject to change) are to observe Kodiak Island and Yakutat salmon set gillnet fisheries in 01/02, and Southeast Alaska salmon purse seine and drift gillnet fisheries in 03/04 If incidental mortality and serious injury levels are found to be high, additional periods of observation within a fishery may result

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution USDOC/NOAA
NOS
NCCOS/COP

Program **US GLOBEC/NEP/Monitoring**

Program Summary

The overall goals of the GLOBEC Northeast Pacific program are (1) to determine how biological processes and characteristics of zooplankton populations are affected by mesoscale features and dynamics in the Northeast Pacific

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Program Manager Phone 301-713-3338, ext 135 **Program Manager E-Mail** Elizabeth Turner@noaa gov

Gulf of Alaska Monitoring/Long Time Series Projects

Project Title **Physical-Chemical Structures, Primary Production and Distribution of Zooplankton and Planktivorous Fish on the Gulf of Alaska Shelf A GLOBEC Monitoring Proposal**

Project Summary

Alaska (GOA) shelf sustains a number of commercially significant fisheries Despite dramatic changes in many of these fisheries in the late 1970s, little is known about the factors and processes linking fish populations to the physical and climatic environment Nevertheless the existing oceanographic and fisheries data indicate variability on the same time scales as climatic changes This program constitutes a pilot monitoring program, which in conjunction with GLOBEC process studies will aid in elucidating the links between the various physical, biological and climatic factors

The basic water properties and circulation pattern of the GOA are coupled closely to the Aleutian Low pressure system, the atmospheric wind stress and precipitation

Category Multiple

Key Words ocean climate variability, ocean processes, primary production, zooplankton, phytoplankton, fish

Cooperators Old Dominion University

Project Manager Tom Weingartner

Project Manager Address

Institute of Marine Sciences
University of Alaska, Fairbanks
Fairbanks AK 99775

Project Manager Phone (907) 474-7993 **Project Manager E-Mail** weingart@ims uaf edu

Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

North Central Gulf of Alaska shelf, 58-61N, 150 - 147W including the shelf and shelfbreak Standard sampling includes occupation of the Seward Line which was occupied in the 1970s and the Cape Fairfield Line which was occupied in the 1980s Time permitting additional sampling is conducted within Prince William Sound and offshore of the sound Maps of the sampling domain can be found at http //www ims uaf edu 8000/globec/

Objectives

The initial goals of the monitoring program are to understand the seasonal and interannual variability in the thermohaline, nutrient, and phyoplankton, zooplankton, and fish community structure on the Gulf of Alaska shelf

Resources and Parameters Being Measured

Vertical profiles of temperature, salinity, nutrients, chlorophyll Underway and continuous measurements of upper ocean (<200m) currents, surface temperature, salinity, fluorescence, hydroacoustic assessments of the distribution and biomass of moderate and large-sized zooplankton and juvenile fish (emphasizing pink salmon) Vertical tows and MOCNESS measurements of zooplankton speciation and distribution Additional information on this project and examples of the data collected

Sampling Platforms

The University of Alaska's R/V Alpha Helix

Measurements/Data Obtained

Conductivity-temperature-fluorescence-depth, Acoustic Doppler Current Profiler, 4-frequency, split beam hydroacoustics, water sampling for the analysis of nutrients and chlorophyll Net tows for zooplankton and fish Additional information on this project and examples of the data collected can be found at http //www ims uaf edu 8000/globec/

List of Databases, Manager Name and Contact Information

All data is available by contacting Tom Weingartner at the address and phone given above

Duration of Program of Project

October 1997 - December 2000

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

Through National Oceanic and Atmospheric Administration (NOAA)
Shiptime costs ~$525,000/year
Salaries, equipment, supplies, travel, etc ~$500,000/year

Future Plans/Prognosis

GLOBEC will issue a new call for proposals in fall 1999 This call will request proposals to continue monitoring through 2003 and request proposals to commence single field year process studies in the Gulf of Alaska shelf

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution USDOC/NOAA
NOS
NCCOS/COP

Program **US GLOBEC/NEP/Retrospective Projects**

Program Summary

The overall goals of the GLOBEC Northeast Pacific program are (1) To determine how biological processes and characteristics of zooplanktonic populations are affected by mesoscale features and dynamics in the Northeast Pacific, and

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Gulf of Alaska Monitoring/Long Time Series Projects

Project Title **Retrospective Analysis of Growth Rate and Recruitment for Sablefish, Anoploma fimbria, from the Gulf of Alaska and the Califo**

Project Summary

The PI's will use the otoliths of the long-lived sablefish, which may live up to 70 years, to examine variability in growth from year to year Sablefish are one of the most valuable groundfish species in the region They have a widespread distribution in the Northeast Pacific, occurring in two discrete stocks in the two major oceanographic regimes (Gulf of Alaska and the California Current) During their first 6-9 months they reside in pelagic waters over the shelf and slope, broadly overlapping the temporal and spatial distribution of juvenile salmon This proposal hypothesizes that growth of sablefish during their first year is modified by variability in the pelagic environment, that early juvenile growth influences subsequent recruitment success, and that a common juvenile environment results in correlative relationships between

Category Fish

Key Words sablefish, otolith

Cooperators

Project Manager Steven Berkeley

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Copy Project Manager Address here
Oregon State University, Hatfield Marine Science Center, 2030 Marine Science Dr
Newport, OR 97376

Newport OR 97365

Project Manager Phone (541) 867-0135 **Project Manager E-Mail** berkeles@ccmail orst edu

Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

Gulf of Alaska, Washington, Oregon, California

Objectives

Determine the correspondence between first year growth of sablefish (as inferred from otolith deposition), recruitment of sablefish, growth of coho salmon, and a suite of climatic variables We will examine examine patterns of covariation of the above time series, from both Gulf of Alaska, and the West Coast (WA, OR, CA)

Resources and Parameters Being Measured

First Year Growth of Sablefish, as inferred from otolith deposition

Sampling Platforms

Using archived otoliths from the Alaka Department of Fish and Game, National Marine Fisheries Service, Canadian Pacific Biological Station, and Oregon Department of Fish and Wildlife

Measurements/Data Obtained

Recruitment Indices of Sablefish from Gulf of Alaska(GOA), British Columbia, and the West Coast (WA, OR, CA)
First year growth of sablefish from GOA, and West Coast

List of Databases, Manager Name and Contact Information

first year growth of sablefish, ACCESS97 format, on in-house computer (PCC)
William Pinnix
bill pinnix@hmsc orst edu
(541)867-0296

Duration of Program of Project

July 1998-July 2000

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

US NEP GLOBEC
ANNUAL BUDGET $80,000

Future Plans/Prognosis

Sablefish growth in first year appears to be negatively correlated with recruitment indices Future plans include an Oxygen stable isotope analysis to compare growth with temperature patterns These plans will shed light on pelagic juvenile stage duration, and climatic events during the pelagic juvenile stage

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution USDOC/NOAA
OAR
ERL/CIFAR

Program **Fisheries Oceanography and Bering Sea Ecosystem Studies**

Program Summary
Copy Program Summary Here

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Program Manager Phone 907-474-5698 **Program Manager E-Mail** gunter@gi alaska edu

Gulf of Alaska Monitoring/Long Time Series Projects

Project Title **Intra- and Interspecific Genetic Variation of mtDNA in Rockfish (Sebastes)**

Project Summary

Uses polemerase chain reaction based mitochondrial DNA analysis to resolve population genetic structure for rougheye rockfish (Sebastes aleutianus) and to determine if mtDNA variation resolves population structure in shortraker rockfish (Sebastes borealis)

Category Fish

Key Words

polemerase chain reaction, mitochondrial DNA analysis, rougheye rockfish, Sebastes aleutianus, shortraker rockfish, Sebastes borealis

Cooperators NMFS/ABL

Project Manager Anthony Gharrett

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P O Box 210082
Auke Bay AK 99821

Project Manager Phone 907-465-5445 **Project Manager E-Mail** ffajg@uaf edu

Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

GOA

Objectives

Determine if mtDNA variation was promising for studying stock structure

Resources and Parameters Being Measured

mtDNA restriction site variation

Sampling Platforms

NOAA samples

Measurements/Data Obtained

mtDNA RFLP frequency data

List of Databases, Manager Name and Contact Information

NA

Duration of Program of Project

18 mo

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

ABL through CIFAR Budget to date about $30,000

Future Plans/Prognosis

S-K funding to follow-up encouraging results

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution USDOC/NOAA
OAR
ERL/CIFAR

Program **Fisheries Oceanography and Bering Sea Ecosystem Studies**

Program Summary

The overall goals of the GLOBEC Northeast Pacific program are (1) To determine how biological processes and characteristics of zooplanktonic populations are affected by mesoscale features and dynamics in the Northeast Pacific, and

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Gulf of Alaska Monitoring/Long Time Series Projects

Project Title **Physical-Chemical Structures, Primary Productivity and Distribution of Zooplankton and Planktivorous Fish on the Gulf of Alaska Shelf A GLOBEC Monitoring Proposal Project Energetics Project**

Project Summary

Examines the size-weight-energy content of pink salmon and krill in the Gulf of Alaska study area seasonally and annually for 3 years This money comes from the NSF US GLOBEC program through CIFAR

Category pink salmon

Key Words fish, krill, energetics

Cooperators NSF, US GLOBEC

Project Manager A J Paul

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Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

Northern Gulf of Alaska Shelf, Station map at www ims uaf edu 8000/globec/results/GLOBEC_STNS HTM

Objectives

Measure the interannual values for whole body energy content of krill and pink salmon fry and relate findings to measures of physical conditions and productivity

Resources and Parameters Being Measured

Whole body energy content of krill and pink salmon fry

Sampling Platforms

RV Alpha Helix

Measurements/Data Obtained

Species specific whole body energy content, length, weights

List of Databases, Manager Name and Contact Information

contact PI

Duration of Program of Project

3 years starting October 1997

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

Through NOAA This energetics project is a sub-component of the larger US GLOBEC NEP project "Physical-Chemical Structures, Primary Productivity and Distribution of Zooplankton and Planktivorous Fish on the Gulf of Alaska Shelf" headed by Tom Weingartner (under USDOC/NOAA/NOS/NCCOS/COP) See that project for total project budget

Future Plans/Prognosis

Unknown

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution USDOC/NOAA
OAR
ERL/CIFAR

Program **Fisheries Oceanography and Bering Sea Ecosystem Studies**

Program Summary
Copy Program Summary Here

Program Manager Gunter Weller

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Gulf of Alaska Monitoring/Long Time Series Projects

Project Title **Revised Analysis of Allozyme Variation in Asian and Alaskan Pink Salmon**

Project Summary

Assembles and analyzes pink salmon allozyme data taken by the genetics lab of the NMFS Auke Bay Fisheries Laboratory between 1986 and 1996 Data includes samples from Asia

Category Fish

Key Words pink salmon, allozyme

Cooperators NMFS/ABL

Project Manager Anthony Gharrett

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Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

Asia

Objectives

Examine odd-broodyear pink salmon population structure

Resources and Parameters Being Measured

Allozyme frequencies

Sampling Platforms

In-stream capture

Measurements/Data Obtained

Allozyme data

List of Databases, Manager Name and Contact Information

NA

Duration of Program of Project

3 yrs Samples taken between 1986 and 1996

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

ABL through CIFAR Budget about $60,000

Future Plans/Prognosis

?

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution USDOI
USFWS
Realty

Program **Water Resources**

Program Summary

Collects hydrologic data on water bodies within National Wildlife Refuges in Alaska Types of data include stream discharge, lake elevation surveys and selected physical water quality parameters (temperature, pH and conductivity)

Program Manager Keith Bayha

Program Manager Address

US Fish and Wildlife Service
1011 East Tudor Road
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Program Manager Phone 907-786-3537 **Program Manager E-Mail** keith_bayha@fws gov

Gulf of Alaska Monitoring/Long Time Series Projects

Project Title **Hydrologic Data Collection and Investigations**

Project Summary

Installs and maintains a stream discharge gaging network to collect water yield data on selected refuges within the Alaska Region Data is collected continously over a five-year period There are 14 stream discharge gaging stations in operation on the Kenai National Wildlife Refuge, 1 gaging stations on the Becharof National Wildlife Refuge, 9 gaging stations on the Innoko National Wildlife Refuge, and 20 gaging stations on the Togiak National Wildlife Refuge

Category Oceanography-Physical/Chemical

Key Words water, discharge, streams

Cooperators

Project Manager Steve Lyons

Project Manager Address
U S Fish and Wildlife Service
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Project Manager Phone 907-786-35 **Project Manager E-Mail** steve_lyons@fws gov

Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

Statewide

Objectives

To study the occurrence, quantity, distribution and movement of surface waters in and around the National Wildlife Refuges in Alaska

Resources and Parameters Being Measured

Stream discharge and naturalk surface water elevations of important lakes

Sampling Platforms

Stream discharge is measured at 15 minute intervals using computerized datalogger and submersible pressure transducers Surface water elevations of lakes are surveyed by contract land surveyors using GPS technology

Measurements/Data Obtained

Stream discharge average daily discharge (cubic feet per second), maximum and minimum discharge
Surface water elevations height relative to mean sea level (feet)

List of Databases, Manager Name and Contact Information

Water Resource Investigations
Steve Lyons (steve_lyons@fws gov)
1011 E Tudor Rd
Anchorage, Alaska 99503
907-786-3515

Duration of Program of Project

Ongoing Five continuous years on each refuge

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

Future Plans/Prognosis

When funding becomes available, a 5-year Water Resource Study is planned for Kodiak National Wildlife Refuge followed by a study on Koyukuk/Nowitna National Wildlife Refuge, then Selawik National Wildlife Refuge

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution USDOI
USFWS
Refuges and Wildlife/Refuges

Program **Alaska Maritime National Wildlife Refuge**

Program Summary

Program Manager John Martin

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Homer AK 99603

Program Manager Phone 907-235-6546 **Program Manager E-Mail** John_L_Martin@fws gov

Gulf of Alaska Monitoring/Long Time Series Projects

Project Title **Alaska Seabird Inventory and Monitoring Plan - Periodic Monitoring Sites**

Project Summary

Detects trends in seabird populations, or conditions that are expected to result in population trends, and ensures that managers have up-to-date information about the health of populations and ecosystems

Category Birds/Mammals

Key Words seabirds, monitoring, health,trends

Cooperators

Project Manager Vernon Byrd

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Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

In the GOA the periodic sites are Forrester/Lowrie (surveyed opportunistically 2 of last 5 years), Chiswells (surveyed with EVOS funding 2 of last 5 years), Pye Islands (surveyed opportunistically with NPS boat once in last 5 years), Chisik/Duck (surveyed annually the last 5 years with MMS and EVOS funding), Shumagins (several different islands surveyed once in last 5 years with EVOS funding)

Objectives

Objectives are to provide time-series to ensure that managers have up-to-date information for identifying conservation issues and for applying adaptive management

Resources and Parameters Being Measured

Parameters include reproductive success, timing of nesting events, prey, and population trends of species of seabirds representing different foraging guilds (e g , diving piscivores, diving planktivores, surface-feeding piscivores, etc) but this project includes only short visits to sites so, not all parameters are obtained for all species

Sampling Platforms

boats, land based

Measurements/Data Obtained

population trends, indices to productivity and timing of nesting events, prey

List of Databases, Manager Name and Contact Information

Electronic Format All data from the monitoring program goes into the Pacific Seabird Monitoring Database Contact is Scott Hatch, USGS/BRD, Alaska Biological Science Center, 1011 East Tudor Road, Anchorage, Alaska 99503-6199, Phone 907-786-3529 E-mail scott_hatch@usgs gov

Duration of Program of Project

Begin Date mid-1970's, End date continuing long term

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

Soft money, for instance in the GOA, surveys have been done in the Chiswell Islands and at Chisik island due to EVOS funding If the refuge does the work opportunistically costs are just for ship time and travel for observers (10-15K) and they usually stay only 1-2 days at a location If the refuge can find soft money, they would go for full season monitoring, like at Chisik/Duck and the cost would be more like 35k+

Future Plans/Prognosis

long term/depending on funding

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution USDOI
USGS
BRD / ABSC

Program **Biological Information Management and Delivery**

Program Summary

Advance access to and dissemination of biological data, information, and technology resulting from worldwide research This is facilitated by establishing partnerships with other government and nongovernment science organizations, developing standards and methodologies for biological data collection and documentation, developing information products targeted to specific user populations, and introducing technical applications for analyzing and integrating biological data and information

Program Manager William Seitz

Program Manager Address

USGS/BRD
Alaska Biological Science Center
1011 East Tudor Road
Anchorage AK 99503-6199

Program Manager Phone 907-786-3385 **Program Manager E-Mail** william_seitz@usgs gov

Gulf of Alaska Monitoring/Long Time Series Projects

Project Title **Design and Implementation of a Seabird Monitoring Database for the North Pacific**

Project Summary

This project will collate and make accessible, through electronic media such as compact discs and/or the Internet, the results of past, present, and future efforts to monitor seabirds throughout the North Pacific basin The project is led by the U S Geological Survey in cooperation with the Pacific Seabird Group Contributors include State, Federal, Provincial, University, and private organizations and individuals in the United States, Canada, Mexico, Russia, Korea, and Japan Time series data (i e , annual means and, where available, standard errors) are recorded in the database with related records on study design, principal contacts, source documents, agency sponsors, and other ancillary information The project complements seabird colony catalog and pelagic atlasing projects and their associated databases, differing from those other approaches in dealing expressly with observations on seabird population parameters that are replicated over time

Category Birds/Mammals

Key Words database, monitoring, seabirds

Cooperators Pacific Seabird Group, USFWS, MMS, NPS, others

Project Manager Scott Hatch

Project Manager Address

USGS/BRD
Alaska Biological Science Center
1011 East Tudor Road
Anchorage AK 99503-6199

Project Manager Phone 907-786-3529 **Project Manager E-Mail** scott_hatch@usgs gov

Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

North Pacific Ocean and adjacent seas north of 20 degrees N latitude

Objectives

The project will (1) provide a management system for seabird monitoring data that is flexible, efficient, and comrehensive, (2) apply the system retrospectively by identifying and incorporating sources of existing seabird monitoring data from throughout the subarctic, temperate, and subtropical North Pacific region, (3) incorporate new data in a timely manner and distribute updated versions of the database to potential users, and (4) encourage wide participation in the system to achieve a coordinated monitoring program for Pacific seabirds, greater standardization of field methods, and effective use of seabirds as indicators of large-scale change in the Pacific marine environment

Resources and Parameters Being Measured

Resources targeted in this project include 86 species of seabirds breeding in the Pacific Ocean and adjacent seas north of 20 degrees N Parameters measured vary widely by location, species, and investigator, but potentially include populations, productivity, survival, breeding chronology, food habits, and a variety of other indices of seabird breeding performance such as feeding rates, chick growth rates, parental attendance at nests, etc

Sampling Platforms

The Pacific Seabird Monitoring Database is a repository for seabird monitoring information gathered by many independent investigators using a variety of techniques Most studies entail visits to selected seabird colonies for periods of days, weeks, or months on an annual or less-than-annual basis

Measurements/Data Obtained

Currently (1999) the database contains approximately 12,000 observations in 2,000 time series Each observation represents--for a given species, location, and year--an annual measure of one of the several population parameters mentioned above Greater or lesser information is available on 56 species breeding in the North Pacific region Northern seabirds such as kittiwakes and murres are the most intensively studied species Sixty-five percent of the observations are from Alaska Population size (40 percent of observations) is the most studied parameter, followed by components of productivity (25 percent) and breeding chronology (20 percent)

List of Databases, Manager Name and Contact Information

Gulf of Alaska Monitoring/Long Time Series Projects

Pacific Seabird Monitoring Database
Charla Sterne and/or Scott Hatch
U S Geological Survey
Alaska Biological Science Center
1011 E Tudor Road
Anchorage, AK 99503
Charla_Sterne@usgs gov (907-786-3580)
Scott_Hatch@usgs gov (907-786-3529)

Duration of Program of Project

Ongoing, currently planned for continuation by USGS through FY 2003

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

Approximately 130K/yr FY 1995-1998, 69K/yr in FY 1999

Future Plans/Prognosis

Development of a server and website is in progress to distribute data over the Internet

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution USDOI
USGS
BRD / ABSC

Program **Wildlife**

Program Summary
Seabirds and Forage Fish Marine Ecosystems in Alaska

Program Manager William Seitz

Program Manager Address

USGS/BRD
Alaska Biological Science Center
1011 East Tudor Road
Anchorage AK 99503-6199

Program Manager Phone 907-786-3385 **Program Manager E-Mail** william_seitz@usgs gov

Gulf of Alaska Monitoring/Long Time Series Projects

Project Title **Pelagic Seabird Atlas of the North Pacific**

Project Summary

The purpose of this project is to compile and archive existing historical data on the distribution and abundance of seabirds at sea in Alaska and elsewhere in the North Pacific Its goal is a comprehensive, easy-to-use, PC-based data management and graphic (GIS) presentation system for all types of existing and future at-sea surveys of marine birds and mammals of the North Pacific

Category Birds/Mammals

Key Words pelagic, seabirds, marine mammals, GIS, data management

Cooperators USFWS, Alaska Maritime National Wildlife Refuge, Migratory Bird Management, MMS, University of California

Project Manager John Piatt

Project Manager Address

USGS/BRD
Alaska Biological Science Center
1011 East Tudor Road
Anchorage AK 99503-6199

Project Manager Phone 907-786-3549 **Project Manager E-Mail** john_piatt@usgs gov

Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

Gulf of Alaska, Bering Sea, Aleutians, Chukchi Sea, North Pacific

Objectives

The purpose of this project is to compile and archive existing historical data on the distribution and abundance of seabirds at sea in Alaska and elsewhere in the North Pacific Its goal is a comprehensive, easy-to-use, PC-based data management and graphic (GIS) presentation system for all types of existing and future at-sea surveys of marine birds and mammals of the North Pacific

Resources and Parameters Being Measured

Seabird abundance at sea on transects (species, number, behavior), ancillary data on marine mammal abundance, sea surface temperature, sea surface salinity

Sampling Platforms

Ships (at sea) and small boats (coastal)

Measurements/Data Obtained

Per transect start latitude and longitude, heading, duration of transect, wind and sea conditions, observers, sea surface temperature and salinity, number of birds or mammals observed per time period of transect (species, number, behavior)

List of Databases, Manager Name and Contact Information

OCSEAP Pelagic Seabird Database (1976-1981), USGS and USFWS databases (1982-1998)
John Piatt
USGS 1011 E Tudor Rd
Anchorage AK 99503

Duration of Program or Project

indefinite without funding, ongoing data collection

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

No funding at present When funding is available, maintaining the database costs approximately $30,000/year Data collection came from many different sources and those costs were many millions of dollars

Future Plans/Prognosis

Funding contingent Limited compilation of historical data New data collected annually by USGS and USFWS

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution USDOI
USGS
BRD / ABSC

Program **Wildlife**

Program Summary

Investigate factors regulating the distribution, abundance, and condition of wildlife populations and communities, including their physiology, behavior, genetics, and habitat requirements Investigate the effects of disease on wildlife populations and communities and the prevention and management of disease in free-ranging biota Examples of Wildlife projects focus on waterfowl, migratory birds other than waterfowl, nongame migratory birds, international migratory bird conservation, upland game, terrestrial mammals, marine mammals, amphibians, reptiles, terrestrial invertebrates, wildlife management on public lands, nuisance wildlife, wildlife disease, population studies, and wildlife habitat management

Program Manager William Seitz

Program Manager Address

USGS/BRD
Alaska Biological Science Center
1011 East Tudor Road

Anchorage AK 99503-6199

Program Manager Phone 907-786-3385 **Program Manager E-Mail** william_seitz@usgs gov

Gulf of Alaska Monitoring/Long Time Series Projects

Project Title **Population ecology of seabirds on Middleton Island, Alaska**

Project Summary

Current research and monitoring of seabirds on Middleton Island is a continuation of work initiated at this location in 1956 by Robert Rausch and resumed in the mid 1970s by the U S Fish and Wildlife Service Work of varying intensity has been conducted in 22 years since 1974 and annually since 1981 Current emphasis is on the population dynamics and feeding ecology of black-legged kittiwakes and pelagic cormorants nesting on an abandoned radar tower, which has been modified to facilitate close observation and experimental manipulation of those species Capabilities include supplemental feeding of breeding adults and evaluation of food availability as a factor affecting breeding performance, colony structure, and survival Annual censuses of several species (kittiwakes, cormorants, murres) are conducted Long-term population trend data are also available for glaucous-winged gulls, rhinoceros auklets, and black oystercatchers Productivity of gulls, auklets, and tufted puffins is monitored using standard protocols Sampling of chick diets in several species, especially puffins and auklets, is used to montitor the species composition of forage fish available to seabirds on Middleton

Category Birds/Mammals

Key Words Middleton Island, seabirds, monitoring

Cooperators University of Alaska, Anchorage

Project Manager Scott Hatch

Project Manager Address

USGS/BRD
Alaska Biological Science Center
1011 East Tudor Road
Anchorage AK 99503-6199

Project Manager Phone 907-786-3529 **Project Manager E-Mail** scott_hatch@usgs gov

Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

Middleton Island, north-central Gulf of Alaska

Objectives

Specific objectives of the project are (1) develop research infrastructure on Middleton Island consisting of artificial and easily accessible breeding habitats for five colonial-nesting seabird species including black-legged kittiwakes, pelagic cormorants, common murres, tufted puffins, and rhinoceros auklets, (2) establish or continue integrated population monitoring (numbers, productivity, and survival) for five species (as above) plus glaucous-winged gulls using natural habitats on Middleton, (3) evaluate food supply and predation as limiting factors on kittiwake reproduction

Resources and Parameters Being Measured

Principal study species are black-legged kittiwakes, pelagic cormorants, glaucous-winged gulls, tufted puffins, rhinoceros auklets, and common murres Measured parameters vary by species but include populations, productivity, survival, breeding chronology, food habits, and other indices of breeding performance Black-legged kittiwakes are the most intensively studied species, recent work includes blood chemistry and behavioral observations in conjunction with suppletmental feeding experiments at the tower colony

Sampling Platforms

Work is conducted out of a field station on Middleton Island, staffed by personnel from the USGS Alaska Biological Science Center for approximately 3 months per year from early May through mid August

Measurements/Data Obtained

Middleton Island seabird monitoring comprises about 880 observations in the Pacific Seabird Monitoring Database These are annual measures of population parameters (numbers, productivity, and/or other variables from the above list) in one or more of the focal species during most years since 1974 Middleton studies include the earliest (1988) and longest running observations on adult survival of black-legged kittiwakes in the North Pacific Auklet and puffin diet composition has been quantified in 10 years since 1978 Supplemental feeding experiments with black-legged kittiwakes have now been conducted in 4 years (annually since 1996)

List of Databases, Manager Name and Contact Information

Gulf of Alaska Monitoring/Long Time Series Projects

Middleton Island seabird monitoring results are submitted annually to the Pacific Seabird Monitoring Database Contact
Charla Sterne and/or Scott Hatch
U S Geological Survey
Alaska Biological Science Center
1011 E Tudor Road
Anchorage, AK 99503
Charla_Sterne@usgs gov (907-786-3580)
Scott_Hatch@usgs gov (907-786-3529)

Duration of Program of Project

Ongoing, currently planned for continuation by USGS through FY 2003

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

Variable, averaging 3-5K annually for field operations from 1976-1986, 20-50K/yr since 1987

Future Plans/Prognosis

In 1998, USGS personnel wrote a prospectus for a permanent marine biological station on Middleton Island Partnerships are sought in support of continued research and monitoring of the island's seabirds and other wildlife, land acquisition and protection, and public education in this uniquely accessible and biologically dynamic area

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution USDOI
USGS
WRD

Program **NAWQA - National Water Quality Assessment Program**

Program Summary

Describes the status and trends in the quality of a large, representative part of the Nation's surface- and ground-water resources, and to provide a sound, scientific understanding of the primary factors affecting the quality of these resources

Program Manager Timothy Miller

Program Manager Address
Office of the National Water Quality Assessment Program
USGS / Water Resources Division
John W Powell Federal Building
12201 Sunrise Valley Dr
Reston VA 20192

Program Manager Phone 703-648-5012 **Program Manager E-Mail** tlmiller@usgs gov

Gulf of Alaska Monitoring/Long Time Series Projects

Project Title **Cook Inlet Basin Study Unit**

Project Summary

Surface and ground-water are collected intensively for 3 years A low-intensity phase follows for 6 years, during which water quality is monitored at a selected number of sites and areas that were assessed during the high-intensity phase This combinatino of high- and low-intensity monitoring phases allows the NAWQA Program to examine trends in water quality over time Measurements are made to determine water chemistry in streams and aquifers, the quantity of suspended sediment and the quality of bottom sediments in streams, the variety and number of fish, benthic invertebrates and algae in streams, and the presence of contaminants in fish tissues

Category Multiple

Key Words surface-water, ground-water, water quality, water chemistry, streams, aquifers, sediment, fish, benthic invertebrates, algae,contaminants, tissues

Cooperators

Project Manager Steven Frenzel

Project Manager Address

US Geological Survey
4230 University Dr , Suite 201
Anchorage AK 99508-4664

Project Manager Phone 907-786-7100 **Project Manager E-Mail** sfrenzel@usgs gov

Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

Fresh waters of the Cook Inlet Basin

Objectives

To assess the current status and trends in water quality of streams and aquifers of the Cook Inlet Basin

Resources and Parameters Being Measured

The chemistry of stream water, streambed sediments and groundwater and ecological parameters oif streams are measured at selected locations

Sampling Platforms

Streamflow is monitored continuously, chemical samples are collected at fixed frequencies and during high flows

Measurements/Data Obtained

Surface water is sampled for concentrations of major ions, nutrients, organic carbon, suspended sediment and basic field parameters Ground water is sampled for concentrations of major ions, nutrients, organic carbon, trace elements, pesticides and VOC Ecological attributes measured at stream sites include instream and riparian habitat conditions, benthic algae, macroinvertebrate, and fish community composition

List of Databases, Manager Name and Contact Information

Water chemistry data goes to STORET Other databases will reside with the USGS Alaska District Roy Glass, Database Manager, 907-786-7100, rlglass@usgs gov

Duration of Program of Project

10-01-1997 to 09-30-2002

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

Variable

Future Plans/Prognosis

Monitoring firm through 09-30-2001 Final report due by 09-30-2002

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution UAF
IMS
Data Management

Program **IMS Data Archive**

Program Summary

Data archive of physical, biological, chemical, and geological oceanography data of the Gulf of Alaska, Prince Williams Sound, Bering Sea, Chukchi Sea, and the north Pacific ocean

Program Manager Chirk C Chu

Program Manager Address
Institute of Marine Science
University of Alaska

Fairbanks, Alaska 99775-7220

Program Manager Phone 907-474-7092 **Program Manager E-Mail** chu@ims uaf edu

Gulf of Alaska Monitoring/Long Time Series Projects

Project Title 0

Project Summary
The data archive contains data for numerous research projects from 1970 to the present

Category Oceanography-Physical/Chemical,Oceanography-Biological

Key Words temperature, salinity, nutrients, primary production, secondary production, sediment

Cooperators 0

Project Manager 0 0

Project Manager Address 0
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Project Manager Phone 0 **Project Manager E-Mail** 0

Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

Latitude between 125 W and 175 E and longitude between 30 N and 80 N

Objectives

Generally the data is used to study ocean currents, biological productivity, and ecological impacts

Resources and Parameters Being Measured

Temperature, salinity, nutrients, primary production, secondary production, sediment

Sampling Platforms

Mostly shipboard

Measurements/Data Obtained

CTD, current meters, tide gauges, benthic organisms, nutrient chemistry, primary productivity indicators, zooplanktons, fishery surveys

List of Databases, Manager Name and Contact Information

http //iliamna ims uaf edu 8000/DataBase

Duration of Program of Project

Ongoing

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

Highly Variable Depends on funding from State of Alaska, National Science Foundation, NOAA, ONR, and private industry Annual budget is around $10 million

Future Plans/Prognosis

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution UAF
SFOS
IMS
NOAA

Program **NOAA Coastal** Ocean Program and Climate Change Program

Program Summary

Continuation of long hydrographic time series

Program Manager Thomas Royer

Program Manager Address
(original address, see project manager address for current)
Institute of Marine Science
University of Alaska Fairbanks
PO Box 757220
Fairbanks AK 99775-7220

Program Manager Phone 907-474-7835 **Program Manager E-Mail** royer@ims alaska edu

Gulf of Alaska Monitoring/Long Time Series Projects

Project Title **High Latitude Coastal Ocean Time Series**

Project Summary

Hydrographic sampling of temperature and salinity versus depth began in December 1970 at Seward, Alaska (59o50 7'N, 149o28 0'W), to water depth 263 m , sampled irregularly to 1990, approximately monthly since May 1990 This site is at the mouth of Resurrection Bay and is at the core of the Alaska Coastal Current that is a major circulation feature

Category Oceanography-Physical/Chemical

Key Words salinity, temperature

Cooperators

Project Manager Thomas Royer

Project Manager Address Center for Coastal Physical Oceanography Old Dominion University

Center for Coastal Physical Oceanography
Old Dominion University
Norfolk VA 23529

Project Manager Phone 757-683-5547 **Project Manager E-Mail** royer@ccpo odu edu

Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

Hydrographic Sampling at approximately 60 N, 149 W

Objectives

Continue time series of hydrographic paratmeters (temperature and salinity versus depth) that began in Dec, 1970

Resources and Parameters Being Measured

Temperature and salinity versus depth on a monthly basis

Sampling Platforms

R/V Little Dipper, R/V Alpha Helix and other ships of opportunity

Measurements/Data Obtained

Temperature and salinity versus depth to 250 m

List of Databases, Manager Name and Contact Information

Hydrography (www ims uaf edu 8000)
Chirk Chu, SFOS, IMS, Univer Alaska Fairbanks chu@ims alaska edu

Duration of Program of Project

September 1970 - September 1977

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

About $350,000 total

Future Plans/Prognosis

Continued sampling is being picked up by NOAA/NSF GLOBEC Program for th present time but the long term prognosis is uncertain
This data set are the only long term subsurface coastal data in the northern North Pacific They are the only continuing salinity measurements

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Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution ADF&G/Kodiak Regional Aquaculture Association
CF

Program **Aquaculture**

Program Summary
Copy Program Summary Here

Program Manager ADF&G - Doug Mecum, Director CF
KRAA - Larry Malloy, Director

Program Manager Address

Program Manager Phone KRAA - 486-6555 **Program Manager E-Mail** 0

Gulf of Alaska Monitoring/Long Time Series Projects

Project Title **Kitoi Bay Monitoring**

Project Summary

ADF&G personnel, funded by KRAA, monitor several sites in Kitoi Bay for plankton, salinity, and temperature data The project is part of the Kitoi Bay Hatchery Evaluation program which monitors enhanced salmon production from the facility The oceanography data has been collected annually since 1990

Category Fish, Oceanography - Biological, Oceanography - Physical/chemical

Key Words Plankton, salinity, temperature

Cooperators 0

Project Manager Steven G Honnold

Project Manager Address 0

Copy Project Manager Address here 211 Mission Road, Kodiak Ak 99615

0 0 0

Project Manager Phone 486-1873 **Project Manager E-Mail** **Steve Honnold@fishgame state ak us**

Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

Kitoi Bay, located on Afognak Island (58°11'N, 152°21'W)

Objectives

1 Monitor salinity, temperature, and plankton bloom data in Kitoi Bay during the juvenile pink, chum, and coho salmon saltwater rearing periods

Resources and Parameters Being Measured

Plankton tows collected weekly from May through July by replicate vertical tows - 24 hour settlement volume in graduated cylinders
Salinity and temperature data are collected weekly from May through July at three stations within Kitoi Bay from the surface to the bottom

Sampling Platforms

skiff

Measurements/Data Obtained

see parameter being measured

List of Databases, Manager Name and Contact Information

Annual data summary sheets and raw data sheets are in binders and in electronic format
Summary reports and Regional Information Reports
Steven G Honnold, Kodiak ADF&G
NOTE DATA EXISTS PRE-1990 IN 'DEAD FILES' AND ARCHIVES IN THE KODIAK OFFICE AND AT KITOI BAY HATCHERY

Duration of Program of Project

1990-present

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

KRAA

Future Plans/Prognosis

Continue annual monitoring

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution ADF&G
SUB

Program **Marine Mammals**

Program Summary

Program Manager Jim Fall

Program Manager Address

Alaska Department of Fish and Game
Subsistence Division
333 Raspberry Rd

Anchorage AK 99518-156 99518-1599

Program Manager Phone 907-267-2359 **Program Manager E-Mail** jim_fall@fishgame state ak us

Gulf of Alaska Monitoring/Long Time Series Projects

Project Title **Community Profile Database**

Project Summary

A record of subsistence harvest of birds, mammals, fish and shellfish and other subsistence foods across Alaska based on interviews with representative members of subsistence communities

Category Birds/Mammals

Key Words subsistence, birds, seabirds, mammals, marine mammals, fish, shellfish, communities

Cooperators

Project Manager Charles Utermohle

Project Manager Address

Alaska Dept of Fish and Game
Subsistence Division
333 Raspberry Road
Anchorage AK 99518-1565

Project Manager Phone 907-267-2360 **Project Manager E-Mail** charles_utermohle@fishgame state ak us

Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

Statewide with an emphasis on rural communities

Objectives

To provide a single, comprehensive resource on communities' subsistence use of wild renewable resources

Resources and Parameters Being Measured

Subsistence use, harvest, and sharing are compiled for species of fish, marine invertebrates, land mammals, marine mammals, birds and plants

Sampling Platforms

Typically, face-to-face interviews are conducted with all households in a community on their subsistence uses for a 12-month period For larger communities a partial random or stratified sampling design will be used The collected information is aggregated by community of residence

Measurements/Data Obtained

Percentage of households using, harvesting, giving, and receiving by resource Estimated subsistence resource quantities in number harvested and pounds edible weight provided at community, household, and per capita levels Background information on demographics, employment, income, and issues are often recorded

List of Databases, Manager Name and Contact Information

Community Profile Database
Charles J Utermohle, Ph D
Alaska Subsistence Data Program
Division of Subsistence
Alaska Department of Fish and Game

Duration of Program of Project

On-going

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

Updates are dependent upon funding of new community subsistence surveys Past contributors include Alaska Department of Fish and Game, Exxon Valdez Oil Spill Trustee Council, Fish and Wildlife Service, Minerals Management Service, National Park Service, and USDA Forest Service,

Future Plans/Prognosis

The Community Profile Database is currently available as a downloadable, self-executing file requiring MS Access 97 on the World Wide Web A version which can be searched on the Internet is planned

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution ADF&G
WC

Program **Marine Mammals**

Program Summary

Program Manager Lloyd Lowry

Program Manager Address

Alaska Dept of Fish and Game
Wildlife Conservations Division
1300 College Road
Fairbanks AK 99701-1599

Program Manager Phone 907-459-7248 **Program Manager E-Mail** lloyd_lowry@fishgame state ak us

Gulf of Alaska Monitoring/Long Time Series Projects

Project Title **Harbor Seal Survey**

Project Summary

(1) Ground counts of harbor seals at the southwest beach haulout on Tugidak Island, south of Kodiak Island, (2) Aerial population trend surveys (ADF&G) of selected haulouts in Prince William Sound (1984, 1988-present), near Ketchikan (1983-84, 88, 93-present), Sitka (1983-84, 93-present), and Kodiak (1992-present), and (3) Aerial population abudance surveys (NMFS), statewide coverage completed on a 5-year rotation

Category Birds/Mammals

Key Words harbor seals, land based and aerial counts

Cooperators NMML

Project Manager Bob Small

Project Manager Address

Alaska Dept of Fish and Game
Wildlife Conservations Division
333 Raspberry Rd
Anchorage AK 99518-1599

Project Manager Phone 907-267-2188 **Project Manager E-Mail** bob_small@fishgame state ak us

Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

Latititudes and Longitudes of every haulout site in the state are available

Objectives

ADF&G trend route surveys determine the population trend within the general trend route area ADF&G land based counts on Tugidak are designed to examine pupping and molting phenology, and population trend on Tugidak Island NMFS abundance surveys are designed to estimate the population abundace for each stock within Alaska waters

Resources and Parameters Being Measured

The number of harbor seals present at haulout sites (aerial surveys), and the number of specific age and sex classes present on Tugidak during the pupping and molting periods

Sampling Platforms

Aerial surveys are conducted in either a single or twin engine aircraft, land-based counts are collected with the use of binoculars and spotting scopes

Measurements/Data Obtained

Aerial surveys 4-7 replicate counts are obtained during each survey, with both visual estimates and counts from photographic slides Land-based surveys age and sex of all seals present on the haulouts

List of Databases Manager Name and Contact Information

ADF&G databases Bob Small (contact information above)
NMFS databases Dave Withrow (National Marine Mammal Laboratory, 7600 Sand Point Way NE, Seattle, WA 98115-0070, 206-526-4019)

Duration of Program of Project

All programs will likely continue for the foreseeable future

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

ADF&G program funds allocated annually by the U S Congress, administered by NMFS costs roughly $60K/year
NMFS program funds allocated on a 2-3 year funding program within NMFS (check with Dave Withrow)

Future Plans/Prognosis

Both programs are likely to continue See EVOS project 00509 (FY 2000) for review/revision of both projects

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution USDOC/NOAA
AOML
PHOD/GOOS Center

Program **AMVER/SEAS**

Program Summary

Utilizing Voluntary Obvserving Ships (VOS) to collect and transmit in real-time meteorological and oceanographic observations

Program Manager Yves Tourre

Program Manager Address

Lamont-Doherty Earth Observatory of Columbia University
Department of Oceanography
Palisades NY 10964

Program Manager Phone

Program Manager E-Mail tourre@iri ldeo columbia edu

Gulf of Alaska Monitoring/Long Time Series Projects

Project Title AMVER/SEAS

Project Summary

To collect and transmit real-time sea surface meteorological and sub-surface oceanographic data in support of marine weather forecasting and El Nino Southern Oscillation studies including seasonal, interannual to decadel climatic changes

Category Oceanography-Physical/Chemical

Key Words sea surface temperature, SST

Cooperators NOS

Project Manager Steven Cook

Project Manager Address
NOAA/AOML
GOOS Center Operations
4301 Rickenbacker Causeway

Miami FL 33149

Project Manager Phone 305-361-4366 **Project Manager E-Mail** skcook@ucsd edu or cook@aoml noaa gov

Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

Global

Objectives

to improve short term to long term climate forecasts

Resources and Parameters Being Measured

Sea surface temperature and upper ocean thermal characteristics

Sampling Platforms

VOS (container ships) and NOAA Research Vessels

Measurements/Data Obtained

Subsurface temperature data down to 760 meters data stored at 2 meter resolution

List of Databases Manager Name and Contact Information

all data are archived at the NODC

Duration of Program of Project

Started about 30 years ago and is considered a national NOAA asset Therefore expected to survive

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

Varies, but approximately 1 2 KK/year

Future Plans/Prognosis

Continue to improve sensor, transmission and software to improve data throughput and accuracy

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution USDOC/NOAA
NESDIS
Laboratory for Satellite Altimetry

Program

Program Summary
Copy Program Summary Here

Program Manager Robert Cheney

Program Manager Address

NOAA E/OC2, SSMC3 Room 3620

Silver Spring MD 20910-3282

Program Manager Phone 301-713-2857 x118 **Program Manager E-Mail** rcheney@nodc noaa gov

Gulf of Alaska Monitoring/Long Time Series Projects

Project Title **Sea Level Data, Wind Speed, and Significant Wave Height from Satellite Altimetry**

Project Summary

Radar altimeters measure sea level with an accuracy of 3 cm over a footprint of about 2 km They also measure significant wave height and wind speed (but not direction) The NOAA web site is http //ibis grdl noaa gov/SAT

Category Oceanography-Physical/Chemical

Key Words sea level, wave height, wind speed

Cooperators US Navy, NASA

Project Manager Robert Cheney

Project Manager Address
NOAA E/OC2, SSMC3 Room 3620
1315 East West Hwy

Silver Spring MD 20910-3282

Project Manager Phone 301-713-2857 x118 **Project Manager E-Mail** rcheney@nodc noaa gov

Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

Global

Objectives

Altimetric measurements of sea level provide information about the Earth's gravity field over the ocean, tides, ocean currents, changes in upper layer heat content, and the location of features such as the Gulf Stream and ocean eddies Wind speed and wave height are also obtained over the ocean

Resources and Parameters Being Measured

Various satellites Parameters are sea level, wind speed, wave height

Sampling Platforms

As of 1999, 3 satellites are operating Topex/Poseidon, ERS-2, and Geosat Follow-On

Measurements/Data Obtained

List of Databases, Manager Name and Contact Information

A good starting point is NOAA web site http //ibis grdl noaa gov/SAT

Duration of Program of Project

Indefinite It is expected that satellite altimeters will fly continuously The series began in 1991

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

NASA and the US Navy have funded past satellites NOAA will take this program over in 2011

Future Plans/Prognosis

Global altimeter data are available from 1985-89 and 1991-present

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution USDOC/NOAA
NESDIS
NCDC

Program

Program Summary

Program Manager

Program Manager Address
Copy Program Manager Address Here

Program Manager Phone

Program Manager E-Mail

Gulf of Alaska Monitoring/Long Time Series Projects

Project Title **Sea Surface Temperature 14 Km Analysis (Local-Scale) from NOAA Series AVHRR Data**

Project Summary

AVHRR records of 14-km scale sea surface temperatures from 1986 to the present For real-time data, see the NESDIS CoastWatch Program For archived data contact the National Climatic Data Center listed below

Category Oceanography-Physical/Chemical

Key Words Sea surface temperature

Cooperators Coast Watch, NASA

Project Manager John Sapper
NOAA/NESDIS/Office of Satellite Data Processing and Distribution
Suitland Federal Center
FB#4, E/SP13, Room 20439
Suitland, MD 20746

Project Manager Phone 301 457-5195 **Project Manager E-Mail** john sapper@noaa gov

Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

Objectives

Resources and Parameters Being Measured

Sampling Platforms

Measurements/Data Obtained

List of Databases, Manager Name and Contact Information

Database TD-9613 SST Local Scale Analysis 14-km

Address NOAA/National Climatic Data Center
151 Patton Ave, Room 120
Asheville, NC 28801-5001

Duration of Program of Project

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

Future Plans/Prognosis

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution USDOC/NOAA
NESDIS
NODC

Program **COP/OCSEAP - Coastal Ocean Program/OuterContinental Shelf Environment Assessment Project**

Program Summary

Program Manager

Program Manager Address
Copy Program Manager Address Here

Program Manager Phone

Program Manager E-Mail

Gulf of Alaska Monitoring/Long Time Series Projects

Project Title **Intertidal Organisms and Habitats (F030) Data (1974-1980)**

Project Summary

Data from field sampling of marine organisms in intertidal or subtidal habitats The data were collected to provide information about species abundance and distribution Data from each observation may include cruise and station informatoiin such as vessel name, senior scientist, position, date and time, environmental conditions such as surface temmperature and salinity, wind speed and direction, and sea state, sediment and habitat descriptors, and species identification and organism counts and measurements

Category Oceanography-Biological

Key Words species, habitat, temperature, salinity, wind speed

Cooperators

Project Manager John Isaac

Project Manager Address

Dames and Moore
5761 Silverado Way
Anchorage AK 99518

Project Manager Phone ~ 907-562-3366 **Project Manager E-Mail** ancjdi@dames com

Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

Objectives

Resources and Parameters Being Measured

Sampling Platforms

Measurements/Data Obtained

List of Databases, Manager Name and Contact Information

Duration of Program of Project

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

Future Plans/Prognosis

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution USDOC/NOAA
NESDIS
OSDPD

Program Polar Operational Environmental Satellite (POES) Program

Program Summary

Program Manager

Program Manager Address
Copy Program Manager Address Here

Program Manager Phone

Program Manager E-Mail

Gulf of Alaska Monitoring/Long Time Series Projects

Project Title **The 14-km SST Fields from the NOAA TIROS/N Satellite Series**

Project Summary

The 14-km file is used by the OCNMAP subsystem for the dynamic gross cloud test With a latitude/longitude from the image product file, the OCNMAP subsystem accesses the nearest grid point in the SST field file to retrieve the field temperature

Category Oceanography-Physical/Chemical

Key Words sea surface temperature, SST

Cooperators

Project Manager John Sapper

Project Manager Address
NOAA/NESDIS/Office of Satellite Data Processing and Distribution
Product Systems Branch
Suitland Federal Center
FB#4, E/SP13 Room 2039
Suitland MD 20746

Project Manager Phone 301-763-4310 **Project Manager E-Mail** john sapper@noaa gov

Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

Although global in scope, the Gulf of Alaska geographic boundaries are 50 to 62 North Latitude, 126 to 160 West Longitude

Objectives

Resources and Parameters Being Measured

Sea surface temperature

Sampling Platforms

Polar-orbiting satellite using advanced very high resolution radiometer (AVHRR)

Measurements/Data Obtained

Frequency of the 14km Gulf of Alaska SST analysis is twice weekly

List of Databases, Manager Name and Contact Information

Format is native binary and can be found described on the web at http //perigee ncdc noaa gov/docs/podug/html/c5/sec52-1 htm
Retrospective data is stored at the National Climatic Data Center (NCDC) in Asheville, NC Database TD-9613 SST Local Scale Analysis 14-km Contact person for sea surface temperature products is Mr Sam McCown

Address NOAA/National Climatic Data Center

Duration of Program of Project

January 1, 1986 to the present

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

Not applicable for a single product

Future Plans/Prognosis

This product will continue to be produced until further notice or until replaced by a higher resolution product

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution USDOC/NOAA
NMFS
AR/AFSC/RACE

Program **Groundfish Assessment**

Program Summary

Conducts and reports results of surveys designed to establish time series estimates of the distribution and abundance of groundfish resources in waters off the coast of California northward to the Bering Sea Estimate growth, mortality, and recruitment to improve the precision and accuracy of forecasting stock dynamics of groundfish

Program Manager Gary Stauffer

Program Manager Address

NMFS
Route AKC2
7600 Sand Point Way NE
Seattle WA 98115-0070

Program Manager Phone 206-526-4170 **Program Manager E-Mail** Gary Stauffer@noaa gov

Gulf of Alaska Monitoring/Long Time Series Projects

Project Title **West Gulf of Alaska Pacific Cod Survey**

Project Summary
Wrong abstracts in Bering Sea Ecosytem Biophysical Metadatabase, # 739 and 743

Category Fish

Key Words Pacific cod

Cooperators

Project Manager Bernard Megrey

Project Manager Address NMFS, Route F/AKC2 7600 Sand Point Way NE
Copy Project Manager Address here

Seattle WA 98115-0070

Project Manager Phone 206-526-4147 **Project Manager E-Mail** bmegrey@noaa gov or Bern Megrey@noaa gov

Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

Objectives

Resources and Parameters Being Measured

Sampling Platforms

Measurements/Data Obtained

List of Databases, Manager Name and Contact Information

Duration of Program of Project

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

Future Plans/Prognosis

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution USDOC/NOAA
NMFS
OPR

Program **Marine Mammal Stock Assessment Reports**

Program Summary

Stock assessments of marine mammals including geographic range, a minimum population estimate, current population trends, current and maximum net productivity rates, optimum sustainable population levels and allowable removal levels, and estimates of annual human-caused mortality and serious injury through interactions with commercial fisheries and subsistence hunters

Program Manager Phillip Payne

Program Manager Address

National Marine Fisheries Service
SSMC3
1315 East-West Hwy
Silver Spring MD 20910

Program Manager Phone 301-713-2322 **Program Manager E-Mail** Michael Payne@noaa gov

Project Title **Pacific Marine Mammal Stock Assessments**

Project Summary

Stock assessments for U S Pacific marine mammals, including California, Oregon, Washington and Hawaii Reports include geographic range best and minimum population estimates, current population trends, current and maximum net productivity rates, allowable removal levels, estimates of annual human-caused mortality and serious injury including fishery information, and status of stock Pacific stock assessments include resident, transient and offshore killer whales that range into Alaskan waters (from 1995-1998, transient killer whales were included in the Alaska Marine Mammal Stock Assessment reports)

Category Mammals

Key Words offshore killer whales

Gulf of Alaska Monitoring/Long Time Series Projects

Cooperators NMFS/NMML

Project Manager Karin Forney

Project Manager Address

NMFS/SWFSC
PO Box 271

La Jolla CA 92038-0271

Project Manager Phone 858-546-7171 **Project Manager E-Mail** kforney@ucsd edu

Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

Stock assessments for Pacific marine mammals within the U S Exclusive Economic Zones of California, Oregon, Washington and Hawaii Separate Stock Assessment Reports are published for the Alaska Region and for the Atlantic/Gulf of Mexico Region

Objectives

To summarize the status of Pacific marine mammal stocks under NMFS jurisdiction, including geographic range, best and minimum population estimates, current population trends, current and maximum net productivity rates, allowable removal levels, estimates of annual human-caused mortality and serious injury including fishery information, and status of stock These reports are used for management under the Marine Mammal Protection Act

Resources and Parameters Being Measured

For all marine mammal populations, abundance, trends, population growth rates, and human-caused mortality are estimated and revised whenever new information becomes available

Sampling Platforms

Varies by species For cetaceans, shipboard and aerial surveys are most commonly used to estimate abundance and trends Photo-identification studies are also used to estimate the abundance of humpback whales, blue whales, and killer whales Pinniped abundance is estimated based on rookery counts Fishery mortality is estimated based on observer programs

Measurements/Data Obtained

Line-transect data, photo-ID catalogs, aerial and ground counts, trend analyses, fishery mortality database, life-history and genetic information for fishery specimens

List of Databases, Manager Name and Contact Information

Varies by species, general contact is Project Manager above

Duration of Program of Project

Gulf of Alaska Monitoring/Long Time Series Projects

Ongoing

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

NMFS

Future Plans/Prognosis

These assessments are part of ongoing management of marine mammals under the Marine Mammal Protection Act

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution USDOC/NOAA
NWS
NDBC

Program **National Data Buoy Center**

Program Summary

Serves as the focal point for data buoy and associated automated meteorological monitoring system technology

Program Manager David Yeager

Program Manager Address

National Weather Service
NOAA Stennis Space Center
SSC MS 39529-6000

Program Manager Phone 228-688-1722 **Program Manager E-Mail** David Yeager@noaa gov

Gulf of Alaska Monitoring/Long Time Series Projects

Project Title **Buoy Observations**

Project Summary

File contains data from 1979 through the present including air and dew point, temperature, sea level pressure, wind direction and speed, current weather, significant wave height, average wave period, and wave spectra data (frequency, resolution and density Geographic coverage encompasses US coastal marine (BUOY) and headland Coastal-Marine Automated Network (C-MAN) stations for the northern Atlantic and Pacific Oceans, the Great Lakes, Gulf of Alaska, Gulf of Mexico and the Hawaiian Island areas

Category Oceanography-Physical/Chemical

Key Words dew point, temperature, sea level pressure, wind direction, wind speed, weather, significant wave height, average wave period, wave spectra data, frequency, resolution, density, C-MAN

Cooperators NESDIS/NCDC

Project Manager McCown Sam

Project Manager Address
NOAA / National Climatic Data Center
151 Patton Ave, Room 120
Asheville, NC 28801-205001

Project Manager Phone, 828 271-4800 ext 174 **Project Manager E-Mail** smccown @ncdc noaa gov

Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

Objectives

Resources and Parameters Being Measured

Sampling Platforms

Measurements/Data Obtained

List of Databases, Manager Name and Contact Information

Duration of Program of Project

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

Future Plans/Prognosis

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution USDOI
USGS
BRD / ABSC

Program **AMMTAP - Alaska Marine Mammals Tissue Archival Project**

Program Summary

Long term archival of high quality tissue samples Determines current status on concentrations of chemical contaminants, biotoxins, biochemical components, and health in marine mammals Information is needed to determine trends related to the health of marine mammals and their ecosystems

Program Manager Steven Amstrup

Program Manager Address

USGS/BRD
Alaska Biological Science Center
1011 East Tudor Road
Anchorage AK 99503

Program Manager Phone 907-786-3928 **Program Manager E-Mail** steven_amstrup@usgs.gov

Gulf of Alaska Monitoring/Long Time Series Projects

Project Title **AMMTAP - Alaska Marine Mammals Tissue Archival Project**

Project Summary

USGS project to archive a representative collection of Alaskan marine mammal tissues for real time and future contaminant analyses and for documentation of long-term trends in environmental quality The AMMTAP collaborates closely with the National Marine Mammal Health and Stranding Response Program (NMFS), National Marine Analytical Quality Assurance Program (NIST), and the National Biomonitoring Specimen Bank (NIST) Specimens are almost exclusively from animals killed during native subsistence hunts Specimens are held by NIST in the NBSB

Category Birds/Mammals, Contaminants

Key Words mammal, contaminant, tissue, archive

Cooperators NIST, NMFS, USFWS, North Slope Borough, Kawerak Inc

Project Manager Geoff York

Project Manager Address

USGS/BRD
Alaska Biological Science Center
1011 East Tudor Road
Anchorage AK 99503-6199

Project Manager Phone 907-786-3928 **Project Manager E-Mail** geoff_york@usgs gov

Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

Objectives

Resources and Parameters Being Measured

Sampling Platforms

Measurements/Data Obtained

List of Databases, Manager Name and Contact Information

Duration of Program of Project

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

Future Plans/Prognosis

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution USDOI
USGS
BRD / ABSC

Program **Fisheries and Aquatic Resources**

Program Summary
Copy Program Summary Here

Program Manager William Seitz

Program Manager Address

USGS/BRD
Alaska Biological Science Center
1011 East Tudor Road
Anchorage AK 99503-6199

Program Manager Phone 907-786-3385 **Program Manager E-Mail** william_seitz@usgs gov

Gulf of Alaska Monitoring/Long Time Series Projects

Project Title **Genetics Research for Characterizing Alaskan Salmonids**

Project Summary
Population genetics analyses of Alaska salmonids

Category Fish

Key Words
fish, population genetics, DNA, microsatellite markers, chinook, coho, sockeye, chum, steelhead, rainbow trout, dolly Varden, Arctic char

Cooperators ADF&G, NOS, USFWS, UA

Project Manager Jennifer Neitsen

Project Manager Address

USGS/BRD
Alaska Biological Science Center
1011 East Tudor Road
Anchorage AK 99503-6199

Project Manager Phone 907-786-3670 **Project Manager E-Mail** jennifer_neilsen@usgs gov

Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

Alaska, eastern Pacific Ocean, Russia

Objectives

salmonid population structure, evolution, stock identification

Resources and Parameters Being Measured

genetic diversity, mtDNA, microsatellite DNA, biogeography, colonization trends, population structure, life-history models, local adaptation, habitat use

Sampling Platforms

Measurements/Data Obtained

List of Databases, Manager Name and Contact Information

Duration of Program of Project

Indefinite

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

USGS/BRD and cooperating agencies

Future Plans/Prognosis

Publication in peer reviewed literature

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution USDOI
USGS
BRD / ABSC

Program **STAMP- Seabird Tissue Archival and Monitoring Program**

Program Summary

Long term archival of high quality tissue samples Determines current status on concentrations of chemical contaminants, biotoxins, biochemical components, and health in seabirds Infomration is needed to detremine trends related to the health of seabirds and their ecosystems Sampling may develop to include prey species

Program Manager Steven Amstrup

Program Manager Address

USGS/BRD
Alaska Biological Science Center
1011 East Tudor Road
Anchorage AK 99503

Program Manager Phone 907-786-3424 **Program Manager E-Mail** steven_amstrup@usgs.gov

Gulf of Alaska Monitoring/Long Time Series Projects

Project Title **STAMP- Seabird Tissue Archival and Monitoring Program**

Project Summary

Beginning in 1998, this project will collect eggs from four common murre (Uria aalgae) colonies in the Alaska Maritime National Wildlife Refuge, Cape Lisburne (Chukchi Sea), St George Island (Bering Sea), Barren Islands (Western Gulf of Alaska) and St Lazaria (Eastern Gulf of Alaska) Bluff and Little Diomede Island colonies may be sampled as practical Other seabird species, such as kittiwakes, may be sampled Protocols may be developed for additional seabird specimens such as liver, muscle, feathers and blood and also to include prey species This project is the US response to the Arctic Council/AMAP calling for circumpolar monitoring of persistent organic pollutants (e g PCBs, chlorinated pesticides, dioxins, etc Alcid eggs were identified as the key media for testing The USFWS takes advantage of the capabilities already in place by the Alaska Marine Mammals Tissue Archival Project and the National Biological Specimen Bank of which it is a part

Category Birds/Mammals, Contaminants

Key Words common murre, Uria aalgae, eggs, kittiwakes, liver, muscle, feathers, blood, PCBs, chlorinated pesticides, dioxins, alcid

Cooperators USFWS, NIST

Project Manager Geoff York

Project Manager Address

USGS/BRD
Alaska Biological Science Center
1011 East Tudor Road
Anchorage AK 99503-6199

Project Manager Phone 907-786-3928 **Project Manager E-Mail** geoff_york@usgs gov

Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

Objectives

Resources and Parameters Being Measured

Sampling Platforms

Measurements/Data Obtained

List of Databases, Manager Name and Contact Information

Duration of Program of Project

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

Future Plans/Prognosis

Gulf of Alaska Monitoring/Long Time Series Projects

Agency or Institution USGCRP
WOCE

Program **Direct Current Measurements**

Program Summary
Copy Program Summary Here

Program Manager Worth Nowlin

Program Manager Address
US WOCE Office
Texas A&M University
Department of Oceanography
Mail Stop 3146
College Station TX 77843-3146

Program Manager Phone 409-845-3900 **Program Manager E-Mail** wnowlin@tamu edu

Gulf of Alaska Monitoring/Long Time Series Projects

Project Title **Acoustic Doppler Current Profilers**

Project Summary

Shipboard acoustic Doppler current profilers (ADCPs) when used in conjunction with reliable heading and navigation data candetermine absolute currents in the upper ocean Many WOCE hyddrography cruises include the collection and processing of underway ADCP data, and the DAC assembles, reviews, documents, archives and distributes these data The DAC is a joint effort between the Japan Oceanographic Data Centre (JODC) and the University of Hawaii

Category Oceanography-Physical/Chemical

Key Words current velocity, acoustic Doppler current profiler

Cooperators Japan Oceanographic Data Centre (JODC)

Project Manager Patrick Caldwell

Project Manager Address
UHSLC/NODC, MSB 317C
School of Ocean and Earth Science and Technology
University of Hawaii
1680 East-West Road, POST 802
Honolulu HI 96822

Project Manager Phone 808-956-4105 **Project Manager E-Mail** caldwell@soest hawaii edu

Gulf of Alaska Monitoring/Long Time Series Projects

Geographic Scope

Global

Objectives

Long-time archive

Resources and Parameters Being Measured

Upper ocean currents

Sampling Platforms

Ships

Measurements/Data Obtained

Presently 334 unique cruises

List of Databases, Manager Name and Contact Information

Gulf of Alaska Monitoring/Long Time Series Projects

US NODC Shipboard ADCP Database
Mr Patrick C Caldwell
National Oceanographic Data Center/
E Firing ADCP Lab , Univ of Hawaii
Joint Archive for Shipboard ADCP
1000 Pope Rd MSB 307
Honolulu, Hawaii 96822 USA
Internet caldwell@soest hawaii edu
office 808-956-4105
fax 808-956-2352
http //ilikai soest hawaii edu/sadcp

Duration of Program of Project

Indefinite

Gulf of Alaska Monitoring/Long Time Series Projects

Funding

US NODC

Future Plans/Prognosis

Continue to populate the database