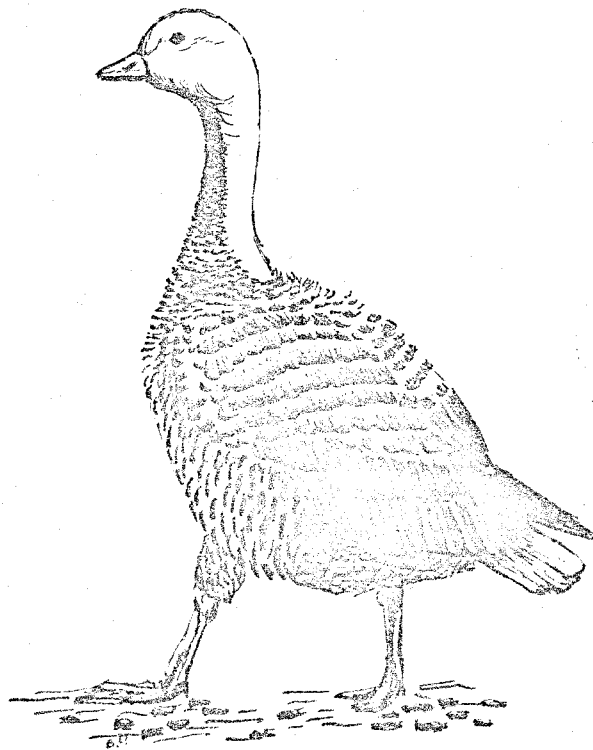


MINUTES and PROCEEDINGS

of the

FIRST ALASKAN  
MIGRATORY BIRD  
WORKSHOP



APRIL 2&3, 1973

## FORWARD

Since coming to Alaska a few short years ago, I have been a little awed at the tremendous numbers and diversity of our bird resources. Even though there are relatively few people working with migratory birds in Alaska, there seemed to be a lack of unity and information exchange between bird workers. Naturally the tremendous size of Alaska precludes much personal contact for many people.

Alaska is only in the embryonic stage of migratory and other bird work. With the creation of new refuges, parks, national forests, selection of state lands, pipelines and increased tanker traffic, native land claims, etc., migratory bird studies in Alaska will achieve new dimensions. Although people attending the First Alaskan Migratory Bird Workshop aren't the ultimate decision makers, the group can and will greatly influence the direction of migratory bird work in Alaska for years to come.

When Jim King and I spawned (maybe hatched would be more appropriate) the idea of a workshop, we first considered including only waterfowl and marine bird interests. We quickly realized that in the best interests of all bird resources and the unity and cooperation we were trying to achieve, the dicky birders (wee Richards) were as much a part of the group as anyone.

Response to the initial letters suggesting a workshop was excellent. Some of the people remembered the annual in-house sessions the Bureau of Sport Fisheries and Wildlife used to have, and welcomed another get-together. Several people also suggested including some Canadian biologists. This was done and the group really benefited from the three Canadians' presence. We also had one visitor, Dennis Raveling, from as far away as the University of California at Davis. Dr. Raveling's attendance resulted in a probable research project on cackling geese.

The meeting structure was purposely designed to foster informality. Although we only had less than two days, much ground was covered. Unfortunately there just wasn't time for much in-depth discussion of many bird studies being conducted. Some of the people handed out information sheets. In the interest of costs and a condensed minutes report, these supplemental sheets are not included. Everyone at the meeting should have copies of the handouts, though.

With this meeting I feel we accomplished two things and, to a lesser degree, a third. First, in less than two days a review of nearly all bird studies in Alaska was made. Ways to cooperate were identified, and many sources of information were uncovered. Secondly, the group decided where it wanted to go in the future. The birth of what could be a highly professional and influential group was created. Personally, I've got great hopes for future Northern Bird Resources Workshops. And thirdly, to a lesser degree, we identified needs and priorities for the future. Many of the future projects are self-evident, in that many individuals have areas of work planned.

In closing, I can only say that bird work in Alaska has come a long way, but the road ahead is much longer.

Dan Timm  
Discussion Leader

ATTENDANCE LIST  
FIRST ALASKAN MIGRATORY BIRD WORKSHOP

<u>Name</u>	<u>Agency</u>	<u>Address</u>
David Eisenhauer	Purdue University	West Dafayette, Anch. 47907
Vernon Byrd	Aleutian Islands NWR	Box 5251, Adak, Ak. 98791
Dan Tirm	ADF&G	Juneau
Jerry D. McGowan	ADF&G	1300 College Rd. Fairbanks
Crawford M. Barger	East High School & University of Ak.	SRA Box 108
Carl Lensink	BSF&W	Bethel & Anchorage
Jerry L. Hout	BSF&W	Bethel
Norm Howse	USFS	121 W. Fireweed Lane #205
Nathon P. Johnson	ADF&G	Anchorage
Jim King	BSF&W	Box 1287, Juneau, Ak. 99801
LeRoy Sowl	BSF&W	813 "D" St. Anchorage 99501
Larry Haddock	BSF&W	" " "
Don McKnight	ADF&G	RR 5 Box 5051, Juneau, Ak.
Ben Hilliker	Alyeska Pipeline S.	1815 S. Bracan, Anch. 99504
Edgar Bailey	BSF&W	Cold Bay, Alaska
Tom Barry	C.W.S.	Edmonton, Canada
Dennis G. Raveling	Univ. of Calif.--Davis	Davis, Calif.
Ernie Kuyt	C.W.S.	Box 508, Ft. Smith, N.W.T., Canada
Kees Vermeer	C.W.S.	1110-10025 Jasper Ave., Edmonton, Canada
Henry A. Hansen	BSF&W	1725 Brink Dr., Anch. Ak. 99504
Melvin A. Monson	BSF&W	Box 10036, Klatt Rd. St. Anch. 99502
Dave Spencer	BSF&W	Anchorage
Marvin L. Plenert	BSF&W	Anchorage
Dave Cline	BSF&W	Anchorage
Jack Alexander	ADF&G	333 Raspberry Rd., Anch.
Mike Perensovich	USFS	P.O. Box 1049, Juneau, Ak.
Jim Hemming	BLM	555 Cordova St., Anch. 99501
Phillip Havens	ADF&G	333 Raspberry Rd., Anch.
Ray Naddy	USFS	121 W. Fireweed Lane, Anch.
George Divoky	BSF&W	1412 Airport Way, Fairbanks, Ak.
Jim Bartonek	BSF&W	1412 Airport Way, Fairbanks, Ak.
Sig Olson	USFS	6927 Seward Hwy. Anch.
Palmer Sekora	BSF&W	Anchorage
Brina Kessel	Univ. of Alaska	Fairbanks 99701
Robert D. Jones, Jr.	BSF&W	Cold Bay, Alaska 99571

Phil Havens - ADF&G - Regional Waterfowl Biologist

Phil's work has been primarily involved with delineating critical waterfowl habitats in Region II, and collecting data on bird populations, etc., using the areas. His regional status has precluded work on other areas in the state.

He has also conducted an annual nesting-production study on dusky Canada geese on the Copper River Delta. Annual banding of the birds has also been accomplished the past few years.

Under cooperative agreement with the U. S. Forest Service, trumpeter swan counts in the Copper River drainage have been made every two years.

Cooperative management agreements for the Susitna Flats and Copper River Delta have been written. He is now working on such an agreement for the Chickaloon Flats.

Phil will be leaving the department in late June for a job in the State of Washington.

Dan Timm - ADF&G - Waterfowl Biologist

The state's working philosophy is that habitat protection and enhancement are vital to future migratory bird resources and resource users. Habitat related activities Fish and Game are active in include: designating critical habitat areas; cooperating in management agreements with other agencies; habitat enhancement on the Stikine River Delta, Creamer's Dairy and Potter Marsh; supplying data in relation to log sales, airport construction, etc.; assisting River Basins with a Southeast Alaska estuarine study; initiating an eel grass bed location data file; and possibly initiating a state duck stamp.

Other areas of work in which the Alaska Department of Fish and Game has been, or has become involved include:

Monitoring state waterfowl harvests - A mail questionnaire survey was initiated in 1971 and will be continued annually. Random field bag checks have been conducted annually since the early 1960's.

Southeast Alaska wintering waterfowl studies - Mallard and Canada goose food habit studies were started in 1971. Additional mallard banding, a complete winter inventory, and collection of mallard sex ratio information are planned.

Banding data analysis - Some analyses of selected species are planned.

Vancouver Canada goose study - A Ph.D. study is planned, and the student will be doing preliminary ground work this summer.

Swan studies - The state conducts a summer survey on the Copper

River drainage every two years. Random wintering and migration use records are being kept. Cooperation has been given to Bill Sladen in his trumpeter banding program. A limited whistler season proposal has been drafted and sent to the Bureau of Sport Fisheries and Wildlife.

Pacific Flyway Council and Technical Committee representation.

Dusky goose work - Nesting studies have been conducted in past years. Annual production surveys and banding will be accomplished in the future.

Sea birds - A sea bird colony data file was started this year. Duplicate data files are kept in the BSF&W office in Fairbanks and in the Juneau ADF&G files. George Divoky has since expanded upon and improved the data recording form. Assistance has also been given to the Bureau in aerial sea bird surveys in Bristol Bay.

Bob Jones - BSF&W - Refuge Manager, Izembek National Wildlife Refuge

Bob has recently been conducting M.S. and Ph.D. work on population dynamics of the black brant.

The average brant population on the wintering grounds has been about 124,000 the past few years. Annual recruitment is less than 20,000 in poor years to over 60,000 in good years. He feels annual season regulations haven't reflected changes in annual recruitment.

Bob feels the 1973 midwinter count of 118,000 is about 20,000 birds under what we should have had, considering 1972 production. LeRoy Sowl commented that he'd be flying the Shumagin Islands in a few days - perhaps some birds winter here?

Bob estimates hunter harvest in the U. S. to be 5,000 to 12,000 per year. He feels crippling loss at Cold Bay may be 1:1. Hank Hansen commented that Mexico does not provide accurate harvest estimates.

Ed Bailey - BSF&W - Asst. Refuge Manager, Izembek National Wildlife Refuge

Ed reviewed some of the studies ongoing at the refuge: emperor goose production studies; bag checks; and three years of banding passerines.

Emperor geese - Age ratios taken at Cold Bay were: 1969 - 42% young; 1970 - 33%; 1971 - 22%; 1972 - 33%. The mean family size has ranged from 3.3 to 2.7 young per pair. The birds winter in the Aleutians. In mild winters they have stayed in the Cold Bay area.

Hunter bag checks - Bag checks have been taken for three years. Emperor geese have constituted an average of about 52 percent of the goose bag, Canadas 25 percent and brant 23 percent. Pintails comprise

over 50 percent of the duck bag. Gadwall harvest has been decreasing since 1961.

Ed also reviewed the oil spill which took place on March 6. About 1,000 barrels of gas and 4,000 barrels of diesel fuel were spilled. No waterfowl mortality was recorded, as high winds rapidly dissipated the fuel. Clean-up operations indicate present clean-up techniques are not conducive to Arctic climates.

Vern Byrd - BSF&W - Asst. Refuge Manager, Aleutian Islands N. W. R.

Vern gave a brief review of the status of some birds in the Aleutian Islands, and outlined some potential projects.

Aleutian Canada goose eggs were picked up from Buldir Island in 1963. The eggs were hatched and birds raised at Patuxent. The 1971 release of progeny from these birds on Amchitka is apparently unsuccessful. Few data are available on the present population status of Aleutian geese.

Some of the studies planned, pending funding and manpower, include: emperor goose banding; complete study of Aleutian Canadas; documentation of, and population estimates by species of sea bird colonies; winter inventories of waterfowl; beach bird surveys (started in 1973 at Adak); ecology of common teal; effects of introduced predators on birds; ecology study of the genus *Ethya*; and development of land and water census methods for pelagic birds.

At this point in the meeting Gordon Watson presented a Distinguished Service Award to Jim King. This award is the second highest the Department of the Interior bestows.

Palmer Sekora - BSF&W - Wilderness Biologist

Palmer gave a brief resume of some of his pelagic bird work in the Aleutian Islands. He has been cataloging pelagic bird colonies and estimating breeding bird populations on some of the larger colonies.

Semidi Islands - total population estimate is 2.4 million birds: 64% murre; 17% kittiwakes; also many fulmars, kittiwakes and puffins.

Aleutian Islands - over 2.6 million birds on breeding colonies have been tabulated on 90 islands of the over 7,200 islands in the chain.

Cal Lensink - BSF&W - Refuge Manager, Clarence Rhode N. W. R.

Cal initially reviewed the importance of Clarence Rhode Refuge to waterfowl. The refuge has about one-half the continental brant

population, nearly all the cackling geese in the world, nearly all the Pacific Flyway population of whitefronts, about 75 percent of the North American emperor goose population plus a fall flight of several million ducks. The total 19 million acre refuge waterfowl fall flight is about 3 million birds.

Although he has some brant production sampling plots, most of the field work being done on the refuge is by graduate students under Cal's direction. Work is currently being done on emperor geese (Dave Eisenhower), cacklers (Pete Mickelson - study completed), spectacled eider (Cris Dau), and brant (two students). He's also had two part-time workers observing and studying birds on, and migrating past Cape Newenham. One student will begin work this summer on the glaucous gull.

Some experiments have been conducted on swapping emperor eggs in whitefront nests and vice versa. A record number of emperors were seen in the lower Pacific Flyway when this was done.

Additional studies on brant, whistling swans and small birds are desirable for the future.

#### LeRoy Sowl - BSF&W - River Basins Biologist, Pipeline Studies

LeRoy's work is oriented to effects on some birds the pipeline might have. His main projects are:

Waterfowl distribution on the Beaufort Sea - This has involved bird observations on cruises with the Coast Guard.

Nesting ecology, food habits and populations of migratory birds on the North Slope - Two graduate students from Iowa State University are currently working on the Slope. Ground, helicopter and fixed-wing data are available on breeding populations.

Surveys of cliff-nesting raptors along the pipeline route - He has found high densities in the Brooks Range and quite a few golden eagles.

Prince William Sound and Gulf of Alaska waterfowl and pelagic bird studies - New range extensions of several marine birds have been recorded and minimum pelagic bird populations of over 1,000,000 are projected for the Sound. Preliminary surveys show the Gulf of Alaska could have 10 to 20 million pelagic birds. During spring migration, densities of from 10,000 to 100,000 shorebirds per mi.<sup>2</sup> of mud flat are estimated in Prince William Sound. Two studies are planned in the Sound, a marine bird study on Wooded Island and a marbled murrelet population dynamics study.

LeRoy also stressed the need for international agreements for control and protection of migratory birds beyond the present three mile limit.



Larry Haddock - BSF&W - River Basins Biologist, Pipeline Studies

Larry has also been working on bird surveys in Prince William Sound. He elaborated on survey methods and some of the results. Bird counts from boats will provide an air-water index, which appears will increase air determined bird populations several fold.

Larry has been directly involved with the North Slope studies, previously described by LeRoy Sowl. Fixed-wing, helicopter and ground determination of bird populations have been conducted. Data so far indicate that helicopter counts account for from 100 percent of the actual swan population to 25 percent of the duck population. Shorebird and passerine observation rates are much lower. Population projections from fixed-wing counts result in much lower numbers than do helicopter counted projected populations. For example, about 35 percent of all ducks seen from a helicopter are seen from fixed-wing aircraft.

Initial figures for breeding duck populations on the North Slope are about 1.5 million birds. About 50 percent of the ducks are game ducks. Whitefront populations are projected to be about 170,000, representing 85 percent of the total geese.

Teshkepuk Lake on the North Slope should be considered as critical habitat due to large numbers of molting black brant.

Very few nesting snow geese have been found so far.

Jim King - BSF&W - Waterfowl Supervisor

Jim briefly reviewed the major programs in which he has been involved.

Breeding pairs survey - This has been annually conducted for 18 years in Alaska. Although no extensive air-ground comparison work has been done, the Rampart Study provided some data. Data obtained from this survey are not only used to predict the annual fall flight from Alaska, but they also have been used in various River Basin projects and in describing the waterfowl resources in various new refuge requests. These data also have been used by the Canadians for the Old Crow area. The latest estimate of Alaska's average fall flight of ducks is 12 million birds.

Production survey - This has been annually conducted for nine years, but no studies were done in 1972. A total of 38 lakes in the Tetlin-Fort Yukon areas are studied each July.

Trumpeter swan surveys - Periodic trumpeter inventories over most of the breeding range have been and will be conducted in the future. Future surveys will be flown over established flight routes.

Eagle surveys - Jim reviewed some of the work he has been involved in, and also that work which U. S. Game Management Agent Fred Robards

has been doing in the Panhandle of Alaska. A plot system has been developed to aerially census eagle populations. Fred has also been locating and marking those eagle nest trees which are in log sale areas. Each tree marked results in about an eight-acre leave strip around the tree. Plans are to eventually census eagle populations in all of Alaska.

Jim Bartonek - BSF&W - Research Biologist, No. Prairie Wildlife Research Center

Jim's work in Alaska has been mainly concerned with: identifying areas of bird research needed; and implementing research projects. Two of his problems are those experienced by everyone else in the room - lack of funding and adequate staffing.

Pelagic bird surveys in Bristol Bay were initiated by King and McKnight. In May of 1972 these were expanded to include off-shore areas. Hopefully, surveys will be conducted four times a year for several years.

The ERTS program has provided aerial photographs of Alaska which can be used to measure and, to some extent, evaluate all waterfowl habitat in Alaska. Ground studies will be necessary to supplement map analysis. ERTS data may also be useful to delineate prime sea bird use areas. Analysis of ERTS data is a priority project.

Two priority waterfowl related research projects needed in Alaska are: the effects of flooding and drought on production in Interior areas and what effects fire has on waterfowl production.

In Dave Klein's absence, Jim outlined the University of Alaska's Cooperative Unit waterfowl work. Three M.S. studies have been or will be conducted: 1) a kittiwake study on Tuxedni National Wildlife Range; 2) a waterfowl use study of Chickaloon Flats; and 3) a common eider behavior nesting study on the North Slope.

George Divoky - BSF&W - Research Biologist, Northern Prairie Waterfowl Research Center

George was recently hired and is working with Jim Bartonek, mainly on sea birds. He has previously spent time conducting sea bird work aboard ships in the Beaufort, Bering and Chukchi seas and Prince William Sound.

A comprehensive sea bird colony location and data bank will be initiated in the near future.

Collection of eggs from about five species, from ten different colonies will be conducted and coordinated by him for pesticide analysis.

A sea bird group was formed at the recent Sea Bird Symposium at Humboldt State University. George described the probable functions of

the group, one of which will be to provide a central data bank for the West Coast and Alaska. The group also hopes to begin standardizing methods of censusing sea birds.

Hank Hansen - BSF&W - Waterfowl Coordinator, Alaska

Although Hank might be called "the grand old man of waterfowl" in Alaska, he confined his presentation to recent national developments on waterfowl and other birds.

Mexican Migratory Bird Treaty amendment - The amendment has provided for 32 additional families of birds to be put under federal jurisdiction. It has also allowed for falconry as a federal regulated sport.

International Migratory Bird Treaty with Japan - The treaty will allow for extended protection of pelagic birds that migrate between the U. S. and Japan. Senate ratification may come this year.

Iron shot issue - The present timetable calls for mandatory use of iron shot for waterfowl hunting during the 1975-76 season.

Point system - The system is generally quite controversial and its future appears questionable.

Dutch duck plague - Hank described the mass die-off of mallards which has occurred at Lake Andes National Wildlife Range in South Dakota this past winter.

North American Wildlife Policy - The Wildlife Management Institute recently began an update of Aldo Leopold's 1933 management policy. The new policy will include problems of pollution, population pressures, and the "total environment."

Hank's presentation ended Tuesday's session.

On Wednesday morning the film, "Mutton Birds of Bass Strait" was shown. This film described the commercial harvest of slender-billed shearwaters which takes place in Australia. Most of the birds spend their winter in Bristol Bay and the Bering Sea during our summer months.

LeRoy Sowl described and circulated the book, A Field Guide to Australian Birds, by Peter Slater.

Norm Howse - USFS - Wildlife Biologist

Much of the Forest Service owned land has other important values besides timber. Management of their wildlife values is accomplished by

two main means: long-range planning, and coordination and cooperation with other agencies.

The Chugach National Forest's current role in migratory bird management involves: habitat management; eagle habitat preservation; and habitat management for rare and endangered species.

The Chugach Forest is part of a cooperative management agreement for the Copper River Delta. A similar agreement for the Chickaloon Flats is currently being drafted. Another area which may receive future protection is Wooded Island.

Future plans for the Copper River Delta call for pond construction and experimental draw-down, goose banding and an overall assessment of wildlife values.

#### Mike Perensovich- USFS - Wildlife Biologist

Although the North Tongass Forest apparently has little waterfowl production habitat, there are many resting and feeding areas. There are large gaps in our knowledge about what the effects of logging and log storage are on these waterfowl areas.

Interdisciplinary Team Planning is a new approach to evaluating effects of logging on birds and all wildlife. Under this system people representing several disciplines study a proposed logging area and recommend, as a team, what should or shouldn't be done to preserve wildlife values.

Mike also described and showed slides of the waterfowl habitat improvement work being done on the Stikine River Delta. Potholes have been blown and some experimental check dams have been built.

#### Jerry McGowan - ADF&G - Small Game Biologist

Jerry described the raptor work which has been done by the Alaska Department of Fish and Game.

In 1968, Roseneau began a breeding biology study of gyrfalcons.

In 1970, Jerry began a goshawk study near Fairbanks. His work entails locating nests on study areas with aircraft, following the fate of about 30 active nests, and banding and color-marking goshawks. He is also keeping a file on all known raptor nests in Region III (Interior).

Jerry has also been giving logistical support to Dr. John Haugh of New York State University on his studies of peregrines in the central North Slope and Tanana River drainage.

The two areas of falcon management the state will probably be involved in, in the future, are falconry and protection of critical nesting habitats.

Results of Jerry's work, and that of Dr. Haugh's, can be found in ADF&G research and S&I reports.

Brina Kessel - U. of A. - Professor, Curator of Vertebrate Museum

Brina has a number of on-going projects, which she reviewed, gave the current status of, and provided anticipated completion dates.

Birds of Interior Alaska - All data for this publication have been keypunched and the anticipated publication is ready to write up.

Seward Peninsula bird work - This work will include distribution and abundance of birds found on the Peninsula.

Birds of the Prince William Sound area - This work and its eventual publication are in cooperation with Pete Isleb of Cordova. Publication by the U. of A. is hoped for by January, 1974.

Birds of Alaska - This will be a joint effort by Brina and Dan Gibson to update the distribution, abundance, etc., of birds in Alaska. Publication date is probably five years or more hence.

Brina is also keeping reprint, old bibliography and rare bird files on Alaskan species. The nest records file formerly kept by Bob Weeden is now being kept by her.

She said that the biggest gap in bird information in Alaska is in the Southeast.

George West - U. of A. - Professor, Institute of Arctic Biology

Although George could not attend the meeting, he sent an outline of migratory bird work the Institute is doing or plans to do. A synopsis of his outline follows.

Lapland longspurs (proposed) - The study will deal with energetics in migratory birds compared to captive birds.

Sparrows - The work deals with population differences in song structure of fox sparrows on the breeding grounds, food habits of tree sparrows, and tree sparrow and Gambell sparrow populations in the Yukon Territory.

Redpolls - Work involves the study of metabolism rates on migratory birds.

Ray Naddy - USFS - Information Officer

Ray is quite interested in ornithological pursuits, and extended an invitation to people wishing to join the Anchorage Chapter of the Audubon

Society. The first meeting was held in March, 1973. Over 125 people attended.

Ben Hilliker - Alyeska Pipeline - Environmental Affairs

Ben described what his work on migratory birds involved while with the Alaska Department of Fish and Game.

His duties with Alyeska Pipeline now include a mile by mile environmental assessment of the pipeline. Key wildlife and special environmental consideration areas are being identified.

Tom Barry - Canadian Wildlife Service - Waterfowl Research Biologist

Although two other Canadian Wildlife Service biologists were present - Kees Vermeer and Ernie Kuyt - Tom agreed to present one discussion of all Canadian Wildlife Service activities in the far north.

The high probability of extensive oil drilling on the Mackenzie Delta has prompted numerous wildlife studies off the Beaufort Sea coast and on upland areas. Kees Vermeer has been delegated the responsibility of assessing Canada's pelagic bird resources off both the Arctic and Pacific coasts. Ernie Kuyt will be assisting with the northern pelagic bird work, as well as other waterfowl studies. The Canadians are using data from the Canadian Land Inventory, with some refinements, as base data for the Mackenzie Delta study.

A raptor nesting inventory, with emphasis on peregrines, is being done in the Mackenzie Delta. Another related pipeline study includes research on the effects of sound associated with drilling on goose staging areas. Some preliminary information suggests that extensive drilling and the associated compressor noise may affect the hundreds of thousands of snow and other geese staging on the Delta (and Alaska's North Slope for that matter).

Tom has been working on whistling swans for a number of years, and has conducted an extensive banding program. In recent years Bill Sladen of John Hopkins University has been color marking swans in the Mackenzie Delta area, as well as in Alaska. Canadian Wildlife Service studies are near completion.

Between 800 and 1,000 black brant have been banded each year for a number of years. A large number of snow geese have also been banded. The Canadian Wildlife Service will be working up all snow goose banding data for North America in the near future.

This summer Tom plans to emphasize his studies of white-fronted geese on the Anderson River.

Jim Hemming - Bureau of Land Management - Wildlife Biologist

Jim indicated his interest in securing information pertinent to key habitats and life histories of migrating birds and other wildlife, as it relates to the pipeline. Data would be used by the Interagency Pipeline Study Team.

Ray Tremblay - BSP&W - U. S. Game Management Agent

In 1968 Ray started a white-front banding program in Alaska, with the objective to band as many birds as possible in known breeding areas. Another objective of the project was to try and locate the elusive tule goose.

Measurements and weights are taken from about 20 males and 20 females caught in each trap set. To date, no birds meeting tule specs. have been found.

Numbers of birds banded, by year and area, are as follows: 1968 - Yukon-Kuskokwim Delta, 4,000; 1969 - Lower Yukon River, Seward Peninsula and Noatak drainage, 1,348; 1970 - North Slope, 1,235; 1971 - North Slope, 3,625; 1972 - no banding; 1973 - banding planned in the Kanuti-Koyukuk drainages and possibly the Noatak River. During the North Slope operations, 571 snow geese, 749 lesser Canadas and 776 black brant were also banded.

Ray gave a brief description of banding techniques, and equipment and manpower needs.

Some concern was expressed that because nearly all of the birds banded were subadults, perhaps the locals produced in a given area do not necessarily migrate to the same areas as do the subadults. Cal Lensink and Tom Barry commented that their experiences indicated migration patterns were the same.

Ray's presentation concluded the regular schedule of individual talks. Because of the activities associated with Native Land Claims and the long-term impact that bill will have on migratory bird resources in Alaska, Cal Lensink agreed to brief the group on the act and on BSP&W refuge requests. Sig Olson also reviewed what the Forest Service is requesting.

The Native Land Claims Act allows for 42 million acres to be selected by natives and 80 million acres to be studied for national forests, wild rivers, federal refuges and national parks. Each federal agency with vested interest in these potentially classified areas will be submitting their land requests by mid-May, 1973. During April and May, 1973, 38 land-use planning commission public hearings will be held to achieve public input into how the 80 million acres will be classified.

By December 18, 1973, the Secretary of the Interior has to have submitted his proposals to Congress.

The Bureau of Sport Fisheries and Wildlife is requesting about 50 million acres and the U. S. Forest Service about 40 million. There is considerable overlap in areas between these two agency requests. The Park Service is also requesting millions of acres of land, but they have little overlap with other agency requests.

Some discussion regarding the magnitude and future consequences of subsistence waterfowl hunting in Alaska and Canada took place near the meeting's end. It appears that subsistence hunting is taking divergent courses in Alaska and Canada. The Supreme Court of Canada recently ruled that, in effect, hunting outside the Migratory Bird Treaty Act was illegal. There has been no enforcement of the Treaty in remote areas of Alaska for many years. Although the Native Claims Act specifically precludes all aboriginal preference rights to wildlife, the Marine Mammal Act gives preference use of these animals to natives. About the only conclusion the group would make about future subsistence use of migratory birds in Alaska is that the future is uncertain.

At the meeting's conclusion, Hank Hansen summed up what he felt was accomplished at this session, and also asked the group where they felt we should go from here.

Much new raptor work, and new emphasis on small birds has been initiated in recent years. Also, considerable marine bird work has been started. In general, it appears there is as much or more non-waterfowl activities being carried on in Alaska as there is waterfowl work. Oil development and the recent Native Land Claims Act has precipitated much of the recent bird work. Actually, the "tip of the iceberg" has only been uncovered in Alaska.

Areas of cooperation between agencies have been identified at this meeting. Although we've identified some places of replication, in many instances duplication of effort is desirable. Future individual cooperation will be enhanced by this meeting, through personal contact with persons who many people only hear about.

Hank stressed the need for new data, and indicated that information about Alaska's birds should be published as soon as possible.

A general group discussion followed about what direction the group of migratory bird workers wanted to take from here. A consensus of opinion was that an organized group of some sort should be formed. Because northern Canada has more in common with Alaska than other parts of Canada, it was decided that Canada should be a part of the group.