THE YUKON BIODIVERSITY WORKING GROUP

2008 ANNUAL FORUM



PROGRAM AND ABSTRACTS

YUKON COLLEGE WHITEHORSE, YUKON APRIL 5, 2008

http://www.yukoncollege.yk.ca/documents/public/Yukon_Biodiversity_W orking_Group_2007_Annual

THE YUKON BIODIVERSITY WORKING GROUP

2008 ANNUAL FORUM April 5, 2006

ORGANIZING COMMITTEE

Scott Gilbert Dave Mossop

FOOD AND BEVERAGE

Joanna Plecke

OUR VISION AND PURPOSE

The Biodiversity Working Group is a non-government open-membership group of those involved in ongoing biodiversity assessment and monitoring projects throughout the Yukon. It is hosted through the Northern Research Institute at Yukon College and meets informally during winter months. The vision is in four basic parts: a) To foster partnerships and networking, -- including coordinated contribution to national and local initiatives relative to the Canadian Biodiversity Strategy; b) to deliver public education on biodiversity issues; c) to provide coordination among field researchers promoting long term data bases on key focal species; d) to integrate local traditional knowledge into on-going field data gathering processes.

THE FORUM is designed as a single-day annual event, held this year April 5th from approximately 9AM to 4PM. The purpose is to give an opportunity for a broad cross section of exposure to current field projects that relate to biodiversity assessment and monitoring in the Yukon. Posters, coffee and lunch breaks are normally provided in the hallway immediately outside the Lecture Theatre at Yukon College. *A day for community members and researchers to share information and foster partnerships, learn about Yukon plants, animals and special habitats as well as to identify knowledge gaps and species or habitats that need monitoring.*

REGISTRATION: The sessions are open to all with an interest in Yukon biodiversity, its assessment, monitoring and conservation. There has been no registration fee to date. We provide name tags and would like to keep a registry of all those attending. Thanks go to the Yukon Government, Dept. of Environment for sponsoring the coffee and lunch sessions.

2008 FORUM AGENDA

| 9:00 | Jennifer Line, Greg Brunner, Rhonda Rosie and Kyle Russell <i>NatureServe Yukon</i> | Results of the 2007 Invasive Plants Roadside Inventory in Yukon |
|----------------|---|--|
| 9:20 | Ben Schonewille & Ted Murphy-Kelly | Migration monitoring of songbirds at Teslin Lake and Albert Creek |
| 9:40 | Syd Cannings Environment Canada / NatureServe Yukon | Insects of the Beringian Tundra |
| 10:00 | Katie Aitken, Fiona Schmiegelow, Pam Sinclair and Shawn Taylor Environment Canada / CWS | Impact of the spruce beetle outbreak on forest birds in southwest Yukon. |
| 10:20 | Coffee session - poster viewing | |
| | | |
| 10:50 | Doug Clark | The ecosystem-based approach for grizzly bear conservation: vulnerabilities and alternatives |
| 10:50 11:10 | Doug Clark Lea A. Randall ¹ , Robert M.R. Barclay ¹ , Thomas S. Jung ² , and Piia Kukka ² 1. Dept of Biol. Sci, Univ. of Calgary 2. Yukon Department of Environment | The ecosystem-based approach for grizzly bear conservation: vulnerabilities and alternatives Effects of spruce beetles, logging and fire on bats and small mammals in southwestern Yukon. |

11:50 2008 Biodiversity Awareness Award Presentation

12:05 LUNCH on site – Room 2103 plus poster viewing

| 1:10 | Ben Schonewille Environmental Dynamics Inc Michael Sheriff | Porcupine River Coho Telemetry Study | |
|------|--|---|--|
| 1:30 | | The effects of stress on reproduction | |
| 1:50 | Pam Sinclair | Rusty Blackbird: a boreal songbird in decline | |
| 2:10 | Bruce Bennett Yukon Department of Environment | New Yukon botanical discoveries: friend or foe? | |
| 2:30 | Phil Merchant Yukon Department of Environment | Yukon Elk and Ticks | |

| Poster Title Katie Aitken <i>Environment Canada / CWS</i> | Author(s) Effects of the southwest Yukon spruce beetle outbreak on forest birds |
|---|--|
| Ben Schonewille | Songbird Migration Monitoring at Teslin Lake |
| Ben Schonewille & Ted Murphy-Kelly | Songbird Migration Monitoring at Albert Creek |
| Bruce Bennett Yukon Department of Environment | Invasive Species |
| Bruce Bennett Yukon Department of Environment | Grasslands |
| Bruce Bennett Yukon Department of Environment | The Changing Flora on the Yukon North Coast |
| Frank Doyle, Dave Mossop, Mike Nelligan and Don Reid | Is climate change affecting bird community composition and breeding on Herschel Island, Yukon? |
| Jamie Kenyon Ducks Unlimited | Waterfowl Breeding And Brood Surveys On The Macmillan River, Yukon Territory: 2007 Results |
| Jim Hawkings, Nancy Hughes & Pam Sinclair <i>Environment Canada /</i> CWS | Yukon Cooperative Roadside Waterbird Survey |
| Jim Hawkings and Nancy Hughes <i>Environment Canada / CWS</i> | Yukon Trumpeter Swan Survey |
| Erin Spiewak Ducks Unlimited | Wild About Wetlands In The Yukon |

As in previous years this is an informal event and we encourage short talks (15 min) and in "plain language" The audience is a cross section of "regular" folks, naturalists and biologists - by appealing to the average citizen we hope to make it more accessible to everyone - we have had strong feedback from attendees in previous years who said they appreciated the efforts of presenters to make their work understandable.

ABSTRACTS

1. Results of the 2007 invasive plants roadside inventory in Yukon

Jen Line (jen.line@gov.yk.ca)

Over the last decade non-native plants have been observed expanding their ranges in Yukon and a number of new non-native plants have been discovered. There is concern that with climate change invasive plants could cause ecological and economic damage like that seen in southern jurisdictions and in Alaska. In order to develop a strategy for combating invasive plants, we required a baseline inventory. Along major Yukon highways, we mapped the distribution of Sweetclover, a plant that threatens native habitats along rivers. The patterns of distribution of Sweetclover show that invasion is most pronounced in areas that have received recent highway construction and maintenance. Furthermore, populations around bridges and culverts pose a risk to river ecosystems. We also recorded the presence and abundance of non-native and invasive species at rest stops, campgrounds, gravel pits and other disturbed areas along major Yukon highways. Pullouts and rest stops which receive the most vehicle traffic had the highest diversity of non-native plants. This work provided baseline data for monitoring the spread of invasive plants along highways and offers suggestions for a long-term monitoring methodology. Location information for invasive plants presented in this report can be used in an Early Detection and Rapid Response strategy.

2. Migration monitoring of songbirds at Teslin Lake and Albert Creek

Ben Schonewille and Ted Murphy-Kelly (bschonewille@edynamics.com)

The Albert Creek Bird Banding Station operated during both the spring and fall migration seasons during 2007. This year was the station's seventh consecutive year of operation and this was one of the most productive to date. The station operated for 100 days from April 23rd to September 22nd. Over this time period, 5,301 birds of 63 species were banded and 130+ species were observed. A number of these species are very rare in the Watson Lake region and the station has been successful in not only observing these species but also banding them. Species such as Western Tanager, Cape May Warbler, Black and White Warbler and Blue Headed Vireo were banded during the 2007 season. The Teslin Lake Station operated only during the spring season and completed its third consecutive year of bird migration monitoring in the south-central Yukon. A total of 25 days of operation between April 22nd to June 3rd resulted in the banding a total of 1,267 birds of 43 birds. The top five species banded accounted for 71% of all bids banded and included the following species; White-crowned Sparrow, Dark-eved Junco, American Tree Sparrow, Wilson's Warbler and Swainson's Thrush. The station continues to serve as a valuable community

based monitoring project with numerous members of the public and school groups visiting the site and assisting in day to day activities

3. Insects of the Beringian Tundra

Syd Cannings (syd.cannings@ec.gc.ca)

Beringia has left a legacy of species found nowhere else in the world. Mammoths and the big cats are gone, but there are many species that originated in Beringia still living in Alaska and the Yukon. In fact, there are 62 endemic species of global concern (as ranked by NatureServe) still here! These 62 are mostly plants; few of the endemic invertebrates have been ranked. In 2007, NatureServe Yukon organized a trip to the Mount Klotz region northwest of Dawson to search for Beringian specialties. Among the insects found by Cris Guppy and Gord Hutchings were:

Holoarctia sordida: A very rare tiger moth, previously known only from Pink Mountain and Banff.

Euchloe naina, the Green Marble: A rarely collected, poorly known Beringian butterfly Two specimens found; only other Yukon record from Windy Pass *Sympistis lapponica:* Widespread, but very rare Asian and East Beringian species;

Acsala anomala: A moth endemic to Beringian Yukon and Alaska; Widespread; Larvae eat black lichen on mountaintops

Psychophora new species: An undescribed species of geometrid moth: Four specimens captured in one small area near Mt. Klotz, appears to be similar to another north Yukon specimen in Canadian National Collection

Aspitates taylori: A very rare geometrid moth: four specimens almost doubled the holdings of the Canadian National Collection, Habitat little-known: dry, rocky shrub tundra

4. Impact of the spruce beetle outbreak on forest birds in southwest Yukon

Katie Aitken, Fiona Schmiegelow, Pan Sinclair and Shawn Taylor (kaitken@interchange.ubc.ca)

Spruce bark beetles (*Dendroctonus rufipennis*) normally occur at low levels throughout boreal forests but occasionally undergo population outbreaks. Due to high summer temperatures and mild winters, spruce beetles in the southwest Yukon have undergone the largest and longest outbreak on record, causing extensive spruce mortality. Insect outbreaks provide a pulse of food for insectivorous birds, and subsequent changes in forest structure may alter nest-site availability and habitat suitability for breeding birds. However, little is known about how stand dynamics, succession and subsequent salvage harvesting following an outbreak of the extent of that experienced in southwest Yukon may influence forest bird communities. The Southwest Yukon Forest Birds and

Spruce Beetles study was established by Environment Canada and Canadian Wildlife Service in 2007 to investigate the effects of white spruce (*Picea glauca*) mortality caused by the spruce beetle outbreak, subsequent changes in habitat structure and vegetation, and salvage logging on the avian community in the boreal spruce forest of southwest Yukon. Bird and vegetation surveys were conducted on 24 study sites located near Haines Junction, Yukon, between March-July 2007. The number of trees killed by beetle increased with tree size, with <50% of small-medium trees killed (<23 cm diameter at breast height [DBH]) but >75% of medium-large trees killed (>23 cm DBH). Density of tall shrubs (>1.4 m high) increased with increasing spruce mortality, as did percent cover of grass, forbs, dwarf birch (Betula nana) and juniper (Juniperus spp). Forest birds displayed mixed responses to these changes in vegetation and habitat structure. Densities of ground-nesting species such as Dark-eyed Junco Junco hyemalis) and shrub-nesting species, including Chipping Sparrow (Spizella passerina) were positively related to spruce mortality, while tree-nesting species such as Yellow-rumped Warbler (Dendroica coronata) declined with increasing spruce mortality. There was also a strong negative relationship between density of cavity-nesting Boreal Chickadees (Poecile hudsonica) and spruce mortality. Because natural disturbances such as insect outbreaks are an intrinsic characteristic of boreal systems, forest bird communities may show mixed shortterm responses and long-term resilience to changes in habitat structure and resource availability caused by disturbance. With further surveys and the addition of nest monitoring during 2008 and future field seasons, and through collaboration with the Yukon government, First Nations, and other local stakeholders, this project will incorporate adaptive management strategies that will assess the impacts of natural disturbance and subsequent forest harvesting on forest bird biodiversity and abundance in southwest Yukon.

5. The ecosystem-based approach for grizzly bear conservation:vulnerabilities and alternatives.

Doug Clark (<u>dclark@yukoncollege.yk.ca</u>)

A coordinated, regional ecosystem-scale approach that aims to preserve habitat in large wilderness areas and limit grizzly bear mortality is the prevailing conservation paradigm for grizzlies and other large mammals. Much fruitful research has been conducted on the biology of grizzlies to support such programs, but the human dimensions of bear management remain poorly understood. This imbalance has created conflicts between management agencies and local inhabitants that can jeopardize ecosystem-based management and planning programs in which grizzlies feature as key components. Multiple qualitative analysis techniques were used to analyze and compare four case studies of grizzly bear management in Canada, characterizing a range of social and ecological situations. Findings demonstrate that the prevailing approach is vulnerable to failure and suggest one alternative approach for grizzly bear conservation, based partially on interpretation of Aboriginal perspectives towards grizzlies. This new "respectful coexistence" approach to carnivore conservation requires local-scale communicative and adaptive governance institutions that make use of multiple information sources. The primary focus of those adaptive institutions should be on localized, place-based relationships between people and bears, but they must also recognize cross-scale social and ecological influences. Finally, we identify a need to determine limits to the application of respectful coexistence.

6. Effects of spruce beetles, logging and fire on bats and small mammals in southwest Yukon

Lea Randall, R. Barclay, T Jung and Piia Kukka (Tom.Jung@gov.yk.ca)

(no abstract submitted)

7. Central Yukon species inventory project: The creation of an E-Flora

Sylvia Frisch and B. Larson (friendsofdempster@gmail.com)

This is an initiative of the "Friends of Dempster Country". Presented is a Photo Inventory largely developed by L. Berwyn Larson. The Central Yukon Species Inventory Project (CYSIP) is a self directed study of the natural world by amateur naturalists. The goal of the study is to document all the species indigenous to Central Yukon. The purpose of the project is to be constructive in our studies of the natural world by creating an electronic database that can be shared with others. The result to date is the beginning of an online E-flora for the Central Yukon. The vision of the project initially, is focusing on the Plant Kingdom. In the future hopefully our studies will take us into the realms of the Fungi and Animal Kingdoms as well. Perhaps in the future others may want to expand the project to include other regions in, or the whole of, the Yukon. Knowledge is always changing and as information on the species grows and changes, so to will this database. We have defined the limits of the central Yukon as approximately the 63' N to 66"N : or from approximately the Pelly to the Peel drainage, with the Continental Divide (NWT border) creating a natural border to the East and Alaska creating an unnatural border to the West.

8. Porcupine river coho telemetry study

Ben Schonewille (<u>bschonewille@edynamics.com</u>)

A coho salmon (*Oncorhynchus kisutch*) radio tagging / telemetry project was conducted in the Canadian portion of the Porcupine River during the fall and winter of 2007 / 2008. The project was completed by EDI Environmental

Dynamics Inc. in conjunction with the Vuntut Gwicthin Government. The primary objective of the study was to build upon the information gathered during a 2005 pilot project to learn more about the spawning areas used by this unique run of salmon. During September, October and November of 2007, coho were captured using a gillnet and fitted with esophageal implant radio tags. Following the completion of tag application, two rounds of telemetry flights were conducted using a fixed wing aircraft to locate the radio tags. In total, 48 of the 50 tags applied were found, with the majority of tags located within the Fishing Branch River watershed. Smaller numbers of tags were also found in the Bluefish River and the Porcupine River mainstem. This project was successful in building upon the information obtained during the 2005 pilot project, and the combined projects have provided a general understanding of the spawning areas used by coho salmon in the Porcupine River.

9. The effects of stress on reproduction

Michael Sheriff (michael.sheriff@utoronto.ca)

This is an update of work presented as proposal in 2007. Initial results suggest that there seems to be a relationship developing that supports the basic thesis. Snowshoe hare populations fluctuate in an 8 to 10-year cycle through out most of the boreal forest (Krebs 1986; and Cary and Keith 1979). This cycle is severely impacted by predation, especially during the 2 to 3 year decline phase at which time reproduction reaches an all time low (Krebs et al. 2001; Krebs 1995). Reproduction starts to decline during the late population increase phase; changes in reproduction precede population changes by approximately 2 to 3 years and intensify until they reach a low during the decline phase in the population cycle (Stefan and Krebs 2001). The stress associated with predator avoidance may act as a potential mechanism for the falling reproductive rates, thus affecting population demography

10. Rusty blackbird: a boreal songbird in decline

Pam Sinclair (Pam.Sinclair@ec.gc.ca)

The Rusty Blackbird *Euphagus carolinus* is a forest wetland songbird which nests throughout the boreal forest region of North America. It winters in the southeastern U.S., also in forested wetlands. Populations of this blackbird have been declining dramatically for many decades, but this has been recognized only very recently. In 2005, the International Rusty Blackbird Technical Group was formed in order to encourage and guide research into the causes of the population decline. Likely long-term causes include loss of forest and wetlands on the wintering grounds over the past hundreds of years, but the current rate of habitat loss there may not be sufficient to account for the continued, current population

decline. Habitat loss in southern parts of the boreal region is implicated in more recent declines, and drying of more northern wetlands due to loss of permafrost may also play a role. Preliminary results suggest that productivity is good in breeding habitats which are currently being used; but overwinter survivorship is unknown, as is the effect of lethal blackbird "control" in winter and migration areas. In the Yukon, we have started monitoring numbers of Rusty Blackbirds as part of the annual Yukon Spring Waterbird Survey. We are also colour-banding Rusty Blackbirds at three sites, in order to collect information on the timing of migration and moult, and collecting a feather from each bird for stable isotope analysis which is used to determine the wintering locations of different breeding populations.

11. New Yukon botanical discoveries: 2004-7 friend or foe?

Bruce Bennett (Bruce.Bennett@gov.yk.ca)

A summary of the paper Bennett, B.A., P.M. Catling and G.W. Argus (in press) New Records of Vascular Plants in the Yukon Territory VIII Can. Field-Nat. Yukon is one of the richest botanical areas in Canada in terms of endemic plants. 45 taxa (35 native, 10 introduced) were added and 7 taxa deleted from the Yukon flora in the years 2004-2007. This represented 9 taxonomic revisions, 8 new species from herbarium material, and 28 taxa based on inventory or other recent collections. Four new species were added to the flora of Canada, including Alpine Tundra Sedge, Bering Sea Dock, Arctic Coast Saxifrage and Alaskan Moonwort. This work is the cumulative effort of many botanists.

12. Yukon Elk and ticks, be careful what you wish for

Phil Merchant (Philip.Merchant@gov.yk.ca)

In the late 1980's and early 1990's there were several releases of elk into the Takhini Valley and Braeburn/Hutshi herds to bolster populations that had been stagnant since initial introductions in the early 1950s. These elk came either directly or indirectly from Elk Island National Park in south central Alberta where elk and moose are known to be host to winter ticks. Some of the elk introduced in the early 1990s were observed to have low numbers of ticks but it was the opinion of experts at the time that the southern Yukon environment was not conducive to the establishment of winter tick populations. Elk numbers have increased to about 300 animals (approximately 200 in the Takhini herd and 100 in the Braeburn/Hutshi groups) in the last 5 years, which is about double the total population in the early 1990s. Along with this increase in elk numbers has come an increased number of observations of hair loss and rough coats in the late winter and spring, consistent with their being infested with winter ticks. In late winter 2007, 18 elk (12 in the Takhini population and 6 in the Braeburn population) were

captured for radio collaring. All of these elk were observed to have ticks that were subsequently confirmed to be winter ticks. While there have been no records of ticks on moose or caribou in southwest Yukon, there is concern that these species might be adversely affected if winter ticks spread from the elk to them. Efforts are underway to reduce the risk of winter ticks spreading from the elk to moose and caribou. In the late winter of 2008 approximately 130 elk in the Takhini herd were driven into a high fenced paddock and are being held until the ticks naturally drop off in the early summer. The Breaburn/Hutshi population, a much more scattered group was not captured or treated. Discussions with local First Nations, NGOs, and the public were initiated in January 2008 and will be continued with additional information and expertise in June 2008 with a view to assessing risk that winter ticks pose to moose and caribou in Yukon and developing a long term winter tick management plans for both the Takhini and Braeburn herds.

13. Circumpolar Biodiversity Monitoring Program Office

Gill, Michael, J. and M. Svoboda. (mike.gill@ec.gc.ca)

In response to rapid changes in the Arctic, ever increasing demands for timely and accurate information on the Arctic, and the Arctic Climate Impact Assessment's recommendation to expand and enhance long-term Arctic biodiversity monitoring, the Arctic Council's Conservation of Arctic Flora and Fauna (CAFF) Working Group launched the Circumpolar Biodiversity Monitoring Program (CBMP). The CBMP, currently lead by Canada, will harmonize and enhance long-term biodiversity efforts in order to improve our ability to detect, understand, report on and respond to significant trends and pressures. The resulting information will be used to facilitate effective decision making from the global to the local level engaging both the public and policy arena. The CBMP has over 60 partners to date and is strategically linked to other international initiatives.

BIODIVERISTY AWARENESS AWARD PRESENTATION

Dave Mossop (BscH, MSc):

Veteran educator and biologist Dave Mossop has spent the past 38 years sharing his knowledge and appreciation for Yukon natural systems (and birds!). He arrived in the Yukon in 1970 to conduct research on winter ecology of Willow Ptarmigan and in 1974 began with the "Game Branch". His interests in birds quickly led to the establishment of a "Non-game" program and the origin of a biodiversity section. Today's award recognizes his continued professional and personal involvement in countless field research and biodiversity monitoring projects, public education initiatives, specimen collections and cooperative management planning processes across the Territory. His passion is in understanding population ecology of northern ecosystems using birds as the 'vehicle' of study.

Dave was the catalyst who drew together the people and resources to put on the first Biodiversity Forum in 1998 and led to the establishment of the Yukon Biodiversity Working Group. In all likelihood his efforts would have been recognized with this award many years ago had he not used his persuasive powers to insist that members were not eligible. It took several years for the group to devise a way to work around him and see him properly acknowledged.

Dave has a strong commitment to education and public outreach. He makes regular forays into classrooms to inspire school children and continues to raise the awareness of biodiversity to a new generation of researchers. Many years ago he helped establish the Wildlife Viewing program at the Fish and Wildlife Branch. Later he developed the first conservation biology course at Yukon College and continues to teach it today.

He remains committed to ongoing monitoring and ornithological projects such as the annual ptarmigan count, waterfowl counts and banding, breeding songbird surveys, raptor surveys and nest box checks. Ensuring that these surveys are done requires a huge personal commitment by Dave to be in the right place at the right time of year, every year, rain or shine or storm, alone with his trusty hound or with a recruited student with whom he shares skills that probably can't be learned in a classroom. His monitoring records track the status of key Yukon wildlife species, and collectively comprise some of the oldest, most complete ongoing scientific databases for the Yukon Territory.

Dave continues to make biodiversity his priority. We are grateful for his leadership, his readiness to mentor students in his work and his continued devotion to unravelling the mysteries of Yukon biodiversity.

The Yukon Biodiversity Working Group would like to thank Becky Cadsand, Bruce Bennett and the Fish & Wildlife Branch, Yukon Environment for preparing the permanent wall plaques and artwork to honour our growing list of award recipients.

APPENDIX 1:

Participants (Attendees, registrants and absentee presenters)

| Ben Schonewille | Environmental Dynamics Inc | speaker |
|------------------|--|---------|
| Berwyn Larson | Friends of Demspter Country | speaker |
| Bruce Bennett | Yukon Department of Environment | speaker |
| Doug Clark | | speaker |
| Greg Brunner | | speaker |
| Jen Line | NatureServe Yukon | speaker |
| Katie Aitken | Environment Canada/CWS | speaker |
| Michael Sheriff | University of Toronto / UBC | speaker |
| Pam Sinclair | Environment Canada/CWS | speaker |
| Phil Merchant | Yukon Department of Environment | speaker |
| Syd Cannings | Environment Canada / NatureServe Yukon | speaker |
| Sylvia Frisch | Friends of Demspter Country | speaker |
| Ted Murphy-Kelly | | speaker |
| Thomas Jung | NatureServe Yukon | speaker |
| Dave Mossop | Yukon College | Poster |
| Don Reid | Wildlife Conservation Society Canada) | Poster |
| Erin Spiewak | Ducks Unlimited | Poster |
| Jim Hawkings | Environment Canada/CWS | Poster |
| Jamie Kenyon | Ducks Unlimited | Poster |
| | | |
| | | |

Adam Skrutkowski Aldo van Eyk Andrea Altherr Ann Marie Dillon Aynslie Ogden Brian Slough Cameron Eckert Carmen Wong Chandelle King Charlie Roots Chris Wilkinson Claire Eamer Collin Wright David Beloud Emeraude Dallaire-Robert Evelyn Church Georgina Sydney Geraldine Villemont Gord Bradshaw Heather Milligan Helmut Grünberg Ian Church Jenny Trapnell Jill Pangman

Julie Frisch Kate Alexander Kate Swales Kawina Robichaud Ken Jeffrey Kim Melton Lisa Knight Lori Schroeder Louis Schilder Lyndsay Doetzel Manfred Hoefs Maria Leung Mark Andruskiw Mary Whitley Michael Bendall Norm Easton Patrick Riopel Renate Raudaschl Scott Gilbert Scott Fraser Shirley Hill Stefan Alexander Sue Kemmett Tonya Makletzoff Val Loewen William Linklater

Kaz Kuba Ken Marr Lee Mennell Marie Ducharme Warren Maroun Jim Boyd Clive Osborne Brian Charles Helen Slama Linda Cameron

APPENDIX 2:

PAST YEARS

This is the fifth Biodiversity Forum held at Yukon College. The initial meet was held in 1998 and was designed to gather consensus among field people about the nature of Yukon needs for tracking the fortunes of wild species. One of the outcomes of that discussion was the development of the "Biodiversity Working Group" and the idea of an annual forum to allow updates of ongoing biodiversity work. The first in the current series was held in 2004. We also held a less formal 'roundup' of current field work two falls. (That effort has morphed into an on-line compendium of researchers, their on-going work descriptions and contact information. This initiative is designed to facilitate interested field workers' efforts at networking and inter-connecting related data bases.)

THE INITIAL FORUM: 1998

SPRING MEETINGS: 2004, 2005, 2006, 2007, 2008

FALL ROUNDUPS: 2006, 2007

Abstracts of past meetings can be viewed at our web site:

http://www.yukoncollege.yk.ca/research/forum-abstracts_06.pdf

http://www.yukoncollege.yk.ca/documents/public/Yukon_Biodiversity _Working_Group_2007_Annual