From the President

2018 Martes Update: Planning continues for the Martes 2018 symposium to be held in the upper Great Lakes region, USA during August 2018. We have a small team assembled to help with the arrangements for the symposium. We have posted an on-line survey ([https://www.surveymonkey.com/r/RV922YV](https://www.surveymonkey.com/r/RV922YV)) and would appreciate your input. It’s especially important because we are trying to find a location that will meet the needs of the symposium participants.

The Science Team has reconnected recently after a hiatus. We are starting to develop a theme to the 2018 symposium. We have several thoughts coalescing around the theme of the Martes Complex, but also have areas for suggestions within the survey. This process is in the early stages of development. If anyone has thoughts on a theme or ideas on how to structure the symposium, please feel free to contact Jonathan Gilbert (jgilbert@glifwc.org) with your ideas. As we continue to move forward with planning for Martes 2018 we will be sure to keep everyone informed. Thanks for your interest.

Background on our new president, a biography in brief – After college Jonathan joined the Peace Corps and taught science and math to high school students in the Fiji Islands then rejoined Peace Corps working in the Ivory Coast, West Africa. Jonathan’s MS research was on the habitat preferences of the Senegal Kob, a savannah antelope that forms lek territories. Since completing his MS degree at Michigan State University, for over 30 years he has been working with the Ojibwe Indians in northern Wisconsin, Michigan and Minnesota through the Great Lakes Indian Fish and Wildlife Commission. He continues to conduct research on martens (known as waabizheshi) and fisher.
Update from the Treasurer and Membership Coordinators

Scott Yaeger; 1176 Marchant Rd.; Brentwood Bay, BC V8M 1 G7; Canada.
jscottyaeger@gmail.com

Sean Matthews; Oregon State University; P.O. Box 751, Mail Stop:INR, Portland, OR 97207 sean.matthews@oregonstate.edu

The intervening years between Martes Working Group symposia offer our society challenges and opportunities to maintain enthusiasm and connections fostered at symposia, remain engaged on wider Martes complex issues, and continue to invest in the evolution of our Working Group. Working through our day-to-day responsibilities of crafting proposals, reviewing management plans, or perhaps snow-tracking a study animal on a crisp winter morning, offer reminders of our individual contributions to the Martes complex. These individual efforts, taken collectively, scale-up to our membership that makes for a successful and thriving Martes Working Group. The executive committee is working together with the 2014 symposium organizers on publication, developing creative and engaging methods of communication across our membership, planning for the 2018 Martes symposium, and fostering the continued, collective success of the Martes Working Group.

To that end, we encourage your continued participation. In early December we will be sending out notifications to those needing to renew their membership. Membership status can be checked on our website (http://www.eko.uj.edu.pl/mwg/membership.html) using the current password “flavigula123” (to be updated in January). Membership rates are $18 USD for one year, $30 for two, or $40 for three years. Please send Scott an email if you are in need of updating and he will send an invoice via PayPal for you to conveniently pay with a credit card. To encourage participation, we waive fees for students or any Martes enthusiast who feels the dues are a financial burden. Along with keeping your own membership current, we challenge each member to recruit a young professional or student this year. Perhaps you could put a renewal on your holiday wish list or gift a membership to a colleague.

As always, we are eager to answer questions members may have about the group and want to hear your ideas of what we can do to make membership more fulfilling.

Fisher (Pekania pennanti). Photo by Michael Durham, Durmphoto.com
Update from the Newsletter Editor

Katie Moriarty, 3625 93rd Ave SW; Olympia WA 98512. ktmoriarty22@gmail.com

The newsletter is about 5 months overdue. As the newsletter editor – I take full responsibility. I won’t drone on about what distracted me, but I don’t expect it to happen again.

We have a vision for a more frequent and shorter edition – a goal of an update every 2 months or so. Over time, we’ll be transitioning to make the newsletter integrated more with more resources, linking articles to journals, updates to our website, and including a more interactive opportunities for providing resources to our membership.

Our goals is to provide information and opportunities for collective learning. As such, we hope to start incorporating links to videos of field techniques or projects, your field sites, and information with increased opportunities for communication and support.

When you feel inspired, please send Katie Moriarty (ktmoriarty22@gmail.com) any or all:
• Short project updates with photographs (<1 page)
• Your favorite field photographs with a caption
• Citations and summaries for new articles, books, or other media
• Dates (and links) to upcoming meetings or workshops that may be of interest
• Links to field videos or technique videos
• Complaints for not getting the newsletter out (which likely won’t make it into the next issue, but it’s the least I can do)

Our next goal is to integrate some of these features into the website.

Thanks for your understanding and your updates!

Bobcat (Lynx rufus, above) and beautiful, tasty, but painful path to set field cameras in coastal Oregon.
The War on Predators in Western Canada Kills Martens, Fishers and Wolverines

Gilbert PROULX, Alpha Wildlife Research & Management Ltd, 229 Lilac Terrace, Sherwood Park, Alberta, T8H 1W3, Canada. gproulx@alphawildlife.ca

There is a new trend in western Canada: killing large and medium-sized predators to protect big game and livestock. In the last 15 years, Alberta Environment and Sustainable Resource Development (AESRD) has promoted the killing of wolves through shooting and strychnine poisoning to allegedly recover the threatened Little Smoky boreal caribou population (Hervieux et al. 2014). The agency also incited trappers to trap wolves in Alberta Fish and Wildlife Division Districts encompassing caribou range.

While these measures did not result in an increase in caribou abundance – likely because habitat loss and deterioration are the true factors impacting their numbers (Brook et al. 2015, Proulx 2015) instead of wolf predation (Kuzik et al. 2006) – the use of strychnine baits and snares resulted in the loss of hundreds of non-target animals. The recovery of carcasses in the field, and data collected from voluntary submissions by trappers indicated that at least 175 fishers and 38 wolverines were accidentally snared or poisoned since 2000 – this is, of course, a minimum (AESRD 2012, Hervieux et al. 2014).

Strychnine bait sites were checked only every 8 days on average to recover the carcasses of animals that were poisoned (Hervieux et al. 2014). Many animals may die away from the bait site or be picked up by scavengers, who in turn would be killed through secondary poisoning. In the case of snaring, many trappers do not bother reporting non-target catches.

Since 2007, predator control probably had an impact on martens, fishers and wolverines as Alberta and Saskatchewan municipalities established wolf and coyote bounties in areas where ranches are adjacent to forests, particularly near the Canadian Rockies and along the northern boreal forest (Proulx and Rodtka 2015). Farmers have access to Compound 1080 baits and snares to poison and capture wolves and coyotes, for which they receive a bounty of $15 per animal killed (Proulx and Rodtka 2015). This year, I initiated a study of wolf and coyote food habits in counties with bounties, and I found that other predators such as cougars and fishers were being captured in snares. Wolverines are most likely captured in snares set near the Canadian Rockies, but there is no mandatory reporting (Newman 2016).

Although the use of strychnine baits (Proulx et al. 2015a) and neck killing snares (Proulx et al. 2015b) is inhumane and non-selective, the war on predators in Alberta and Saskatchewan reminds us of the 1950s’ campaigns to poison all predators to counteract a rabies outbreak (Ballantyne 1958, Boumez 1989). Such a program resulted in the decimation of many species, including fishers (Douglas and Strickland 1987) and wolverines (Kelsall 1981). It took many decades for some of these species to re-establish themselves in their original distribution range. However, today’s Alberta and Saskatchewan predator control programs could regionally endanger, once again, the persistence of some American marten, fisher and wolverine populations.
The War on Predators in Western Canada Kills Martens, Fishers and Wolverines

Literature Cited, continued from Page 4


Southern Vermont Field Project Update

Patrick O’Brien (Graduate Student) and Paul Hapeman (PI); Biology Department; Central Connecticut State University; 343 Copernicus Hall; New Britain, CT 06050; (860)832-2671

We are wrapping up the second year of a multi-year project involving marten and fisher on the Green Mountain National Forest (GMNF) in southern Vermont. The project is a collaboration between Central Connecticut State University, Vermont Fish and Wildlife, and the U.S. Forest Service. The primary objectives of the project are to verify the presence of marten in southern Vermont and identify their extent of occurrence, develop estimates of occupancy, evaluate a recently developed predictive model for marten presence, and examine marten and fisher interactions. To date, our camera surveys have detected marten in what appears to be a core area of the GMNF. Marten have been detected in 33% of sampled units while fisher have been detected in all units. During the winter of 2015-2016, we also began collecting genetic samples using hair snares to assist in an effort to identify the potential source of marten found on the GMNF. Camera surveys and collection of hair samples will continue in November 2016.

Field Reports and Commentary
Update for the Fisher Reintroduction to the northern Sierra Nevada in California

Roger A Powell, North Carolina State University
Deana Clifford, California Department of Fish & Wildlife
Aaron N Facka, North Carolina State University
Sean Matthews, Oregon State University
Kevin P Smith, Oregon State University and North Carolina State University

From late 2009 through late 2011, we released fishers \( (Pekania pennanti) \) (24F, 16M) onto the Stirling Management Area owned by Sierra Pacific Industries in the Northern Sierra Nevada and Southern Cascade Mountains of northern California. We have monitored all reintroduced fishers and their progeny as closely as possible to document their survival, reproduction, dispersal, and home range development through 2015 (year-6).

Released fishers experienced high survival during both the initial post-release period (4 months) and for up to 2 years after release. We have documented 26 fisher mortalities since 2009, including 5 in 2015. We estimate annual survival to be 0.78 for both sexes and that age and time of year affect survival. We have documented reproduction in all years of the study and from each of the 3 translocated cohorts. On average, 79% of our adult females den and produce kits each year with an average estimate of minimum litter size of 1.7 kits.

During our annual trapping effort in October–November 2015, we captured 46 individual fishers (33 F, 13 M) 84 times, including 25 new fishers (16 F, 9 M), 22 juveniles (14 F, 8 M), 2 females and a male released in year-2, and 2 males released in year-3. Our best estimates of survival and reproduction are consistent with a stable or growing population on Stirling. Our population modelling, however, shows that short-term population stability can not be confirmed before year-10 of the project, or 2020.

New Literature (since 2015)

There’s been quite a bit of new literature for martens, fisher, tayra, and wolverine since 2015. I expect the first thing you’ll want to do is see if your favorite recent publication is included. If it’s not, please send along the citation. In the future, we hope this will be a much shorter list – typically with the newest literature (but we welcome your favorite classics).

Send a suggested article citation with a short 2 sentence summary about that reveals why it’s pertinent to our membership.


Bardonnet, C. 2015. Analysis of functional landscape connectivity: Study of movements and genes flow of a forest mustelid, the Pine marten \( (Martes martes) \). La soutenance est prévue le 17-12-2015.


New Literature (continued)


New Literature (continued)


New Literature (continued)


Zárybnická, M., J. Riegert, and M. Kouba. 2015. Indirect food web interactions affect predation of Tengmalm’s Owls Aegolius funereus nests by Pine Martens Martes martes according to the alternative prey hypothesis. Ibis 157:459-467.


International Martes Working Group Contact Information

President: Jon Gilbert (jgilbert@glifwc.org)
Treasurer and Membership: Sean Matthews (Sean.Matthews@oregonstate.edu) and J. Scott Yaeger (jscottyaeger@gmail.com)
Newsletter Editor: Katie Moriarty (ktmoriarty22@gmail.com)

Representatives From 2004, and needing to be updated: David Payer (Alaska, Yukon, Northwest Territories); Richard Weir (Western Canada); Bill Zielinski (Western United States); Clément Fortin (Central and Eastern Canada); Lem Mayo (Canadian Maritimes); Bill Krohn (Northeastern United States); Johnny Birks and John Messenger (Central and Western Europe); Andrzej Zalewski (Poland and Eastern Europe); Steve Buskirk (Eastern Asia).

If you’re interested in helping represent your region, please write the board!

Short Photographic Narratives

Lake Constance In Olympic National Park, Washington, USA. Remote cameras were placed at high elevation sites in hopes of documenting Pacific marten. Keith Aubry, Katie Moriarty (USDA Forest Service, Pacific Northwest Research Station) and colleagues are working to understand marten distributions and genetics on the Peninsula – there have been 6 verified locations since the 1990s. This is appears to be a significant decline compared to trapping records from the mid-1900s.

Photo: Jason Moriarty (vagabondlife@smugmug.com)

Scooby, a rescued dog now working with the University of Washington Conservation Canines, alerts after finding a marten scat in coastal Oregon. Scent detection dog teams have been trained on identifying marten, fisher, bobcat, mountain lion and porcupine. These teams have been working with Katie Moriarty and colleagues to survey much of Oregon. They are part of a study to evaluate survey effectiveness. Hence far the teams are able to detect rare species as well or better than baited remote cameras and were slightly cheaper than field crews checking remote stations weekly, but results would likely vary with the experience of the dog and handler. Further, detection dog surveys were only conducted 4 days after heavy rains.

Photo: Jen Hartman