Connecticut Warbler Conservation Summit
October 21,2022

Attendees:

1. Ryan Brady, WI DNR in Ashland. Avian Conservation Biologist
2. Alexis Grinde, NRRI, Avian Ecologist, we work in MN
3. Annie Bracey, NRRI, Avian Ecologist, taking notes
4. Steve Kolbe, NRRI, Avian Ecologist
5. Craig Thompson, WI DNR, migratory/international bird conservation
6. Jacques Ibarzabal, U of Quebec, interested in work on CONW since 2007
7. Andy Forbes, Twin Cities in MN, assistant regional director for migratory bird program, U.S Fish and wildlife service, and on management board for Upper Miss-Great Lakes JV
8. Brianne Boan, biologist in Ottawa National Forest, Michigan
9. Dave IIes, analyst in Ottawa
10. Bruno Drolet, senior biologist in Quebec, worked on CONW in the past
11. Erin Bayne, U of Alberta, Boreal avian modeling project
12. Josh Bednar, NRRI, worked in black ash in MN
13. Judith Toms, boreal ecologist, Alberta, CWS
14. Junior Tremblay, boreal birds modeling, based in Quebec City
15. Kevin Fraser, U of Manitoba, helped on immigration ecology project
16. Kevin Hannah, CWS in Ottawa, some work on vocal behavior of this species, interested in future research ideas
17. Marcel Gahbauer, CWS in Ottawa, co-chair of COSEWIC, national focus on this and other species of concern
18. Adam Smith, senior biostatistician, Canadian Wildlife Service
19. Mark Phinney, Canadian Forest Products (CANFOR Corporation), lives and works in NW breeding range. Interested in this species for decades.
20. Mary Beth Albrechtsen, Michigan, wildlife technician, Ottawa NF, habitat projects
21. Michael Paling, Forestry for Birds, American Bird Conservancy, Marquette, MI
22. Mike Burrell, central Ontario, Ontario National Research CDC National Heritage Information Center
23. Mike Hallworth, Conservation Ecologist at Vermont Center for Ecostudies
24. Nick Anich, WI DNR, works with Ryan. Coordinator for WI Breeding Bird Atlas.
25. Tim Poole, Species at Risk Biologist in Winnipeg, ON. Natural Resources and Northern Development, Wildlife Branch
26. Carly Lapin, Ecologist, Wisconsin DNR, did M.S. work on CONW in MN
27. Steven Van Wilgenburg, Birds Canada

Overview of Status and Range

Ryan Brady: US Overview

- PIF estimate ~ 1.8 million, with 97% in Canada
- Rely on similar habitat structure across breeding range. Remote, difficult to access habitat
- Most aspects of the bird's ecology are poorly understood
- In the US the highest modeled abundance is in north-central Minnesota. Low numbers in WI, probably extirpated from MI.
- Conservation status: No special status at National level, yellow watch list species on PIF, listed as Regional Species of Greatest Conservation Need.

State/Province Updates

Wisconsin (Ryan Brady)

- 1995 - 2000: WI BBAtlas. northern WI and small area in central WI where species breeds. Three core areas. NE, NW, and West-central.
    - Using 3 primary habitats
        - Black spruce-tamarack lowlands
        - Older jack pine on sandy soils
        - Occasionally, aspen-pine/spruce/fir
- 2015 - 2019: WI BBA2. substantially fewer birds detected in 3 core areas, overall found in 70-80% fewer survey blocks.
    - Declines especially steep in the NE part, but substantial everywhere.
    - WI population seems to be contracting to stronghold in the NW part of the state (Bayfield/Douglas county line area)
- 2021: found 0 birds in 58 historical and high-quality sites.
- 2022: only 3 pairs left at one known breeding site, though did breed successfully
- Habitat management and public dissemination have been undertaken

Q: Mark Phinney: Are Jack pine stands natural or plantations? A: Seems to prefer natural (uneven spacing) but found in both.
Q: Mary Beth: How old were Jack pine stands? A: ~40 - 60 yrs but have seen birds using younger stands.

Minnesota (Alexis Grinde)

- Red Lake Peatlands is where stronghold is in the state, also in more fragmented area in NE MN: Sax-Zim Bog
- MN National Forest Long-term monitoring (1995 - 2022). Range retracting to the northern portion of the state.
- In MN: almost exclusively in black spruce-tamarack lowlands, large blocks of lowland conifer. Stand structure is key. Not in dense forest, more in pole size timber, mossy ground cover.
- SGCN in MN by MNDNR
- 2019 study of breeding ecology
    - Sax-Zim Bog (2019)
    - Red Lake Peatlands (2020-2021)
        - Male territories, nest monitoring, tracking juveniles
        - Juveniles don't disperse far from nest in first week or so post-fledge

- Q: Kevin Fraser: Juveniles did not leave far from their nest. When did they start to move? A: They stayed within 200m of the nest for at least 3 weeks.

Michigan (Brianne Boan)

- UP is in the southern portion of range in MI. Distribution in that area is patchy.
- 2021 - 2010: Last detection was 2005.
- eBird does show detections in MI but primarily during migration.
- Habitat where sites varied from conifer to deciduous, white pine, balsam fir
- Very high ground cover component. Stands adjacent to wetlands
- Now they focus on lowland conifer but do include some hardwood stands
- Large KIWA habitat project, which should protect a large area of land for this species which could provide appropriate habitat for CONW if left to age.

***Canada (A. Smith & M. Gahbauer*)**

- Marcel – overview of BBS trends & status assessments
- Boreal Avian Modeling Project estimate ~4.7 million, PIF estimate ~1.7 million in Canada
- BAM mapping shows core in Alberta
- 2020 status improved from imperiled to apparently secure and in Ontario from apparently secure to secure
- Audubon climate projections based on climate envelope, not habitat related (Junior Tremblay)
    - CONW at +1.5C, range projected to become unsuitable except for far northern area
    - COSEWIC: Identified CONW as candidate species, but stalled due to data limitations and uncertainty.
    - Difficult to propose and defend a specific status change due to these limitations.
- BBS Status
    - Increasing or stable in US and western Canada until ~1990, since then declining almost everywhere
    - CONW losing ~ >30% of population every 10 years
    - Trends sensitive due to sparse data:
        - 4 modeling approaches
            - GAMYE x2, First Difference x2
        - Long- and short-term trends. Most models suggest a threshold of 50% decline could be reached in the US already. Although models are sensitive due to sparse data, overall trends are relatively clear for overall declines.
        - Regional trajectories align well with observed data. No data in NW territories. Similarly in Quebec, there seems to be an increase but there were only 1 or 2 BBS routes.
        - Bruno Drolet: Is there habitat-dependent condition associated with regional trends in Canada?
            - Good question. Would be interesting to investigate habitat change with trend data if information available
        - Rolling trend in 10 yr increments. (1980 - 2020)
            - Continental trend stable or increasing? How variable status assessment if done so in any specific year.

        - CA 30% decline
        - US 50% decline
    - Marcel Gahbauer: Since trends vary by region, challenging to determine conservation status in CA

Quebec (Bruno Drolet)

- Jacques Ibarzabal doing primary research using telemetry. Vocalizations, was able to see variation among seasons among individuals. Areas with different dialects. Blood samples contributed to genoscape project.
- eBird data 2002 - 2022: sporadic sightings in region
- Second BBA in southern Quebec
    - Reduction in breeding distribution
    - Modeling potential habitat in areas where they do not have data about bird occupancy
- Nesting in mature Jack Pine forest that is not dense but has dense shrubby cover. Bird recently detected but suspected to have been there. Also found in Jack Pine forest in Ontario.
- Maybe people don't go to those habitats to look for this species.
- Very challenging to study, capture due to behavior
- Jack Pine forests are under threat due to clearcut harvesting for blueberry farming. Big market and increasing.
- Does forest/blueberry farming management allow for cohabitation with CONW?
- No special status but vulnerable
- Habitat preferences
    - Avoid open areas, moss and lichens, prefer high coverage of Ericaceae, mainly blueberries
- Used nesting phenology to identify seasonality of breeding phases

Ontario (Kevin Hannah and Mike Burrell)

- Transect surveys in north central Ontario
- 44% occupancy rate. 5% of sites had 3 birds detected
- 230 sites ARU deployment by helicopter (30% with one CONW)
- Most of the sites with 3 or more birds were in flat bogs (widely spaces stunted black spruce, 2-6 m height) complete shrub cover
- Ontario in third BBA very few detections of three birds; quite a few with a count of two
- Occurring in fen and bog habitat (little swamp and forest)
    - Similar habitat associations with Blackpoll Warbler (companion species to think about for future work)
- Increased probability of detection from Atlas 1 to Atlas 2 in both northern shield and lower Hudson Bay area.
- Typical habitat in Ontario: open spruce, treed fen with leather leaf, cottongrass and Sphagnum moss.

Manitoba (Tim Poole and Kevin Fraser)

- First nest documented in 1883
- BBA 2009 - 2014
    - 6 confirmed, 57 probable, 384 possible
    - Highest density border with MN, east of Lake Winnipeg.
    - Primarily roadless, seem to avoid roadsides.
- Habitat in Manitoba
    - 'Dead flat' terrain and low understory with open areas (canopy gaps) near cedar and spruce bogs
- Once again, breeding range of CONW exists farther north than previously thought
- Status in Manitoba
    - Not listed
- Kevin Fraser: The mystery of the missing warbler
    - Address major gaps in migration information for this species
    - Migration tracking project led by Emily McKinnon
        - 29 geolocator deployed; 4 retrieved
    - Breeding locations: open aspen forest, peatland/bog, woodlots
        - Eastward migration to US Atlantic coast
        - 48-hr non-stop flight, stops in Cuba/Hispaniola, Wintered in Brazil/Bolivia

Saskatchewan (Steve Van Wilgenburg)

- Sampling 2014 - 2020
    - Boreal Taiga Plains
    - Boreal Softwood Shield
    - Taiga Shield and Hudson Plains
    - ~3% of point count stations had detections
    - SK appears to be part of East-West transition
    - Habitat types where observed: Black Spruce/conifer in eastern part of SK, mixed forest in central SK, mostly hardwood in western SK
    - Prelim models suggest weak evidence of longitude*needleleaf and mean annual temperature. Species more likely to be detected in the southern range in SK similar to the BAM model but predicting fewer detections in the north.
    - Pop size estimate for SK highly variable 500k - 1 mil?
- First BBA just finished

Alberta (Erin Bayne)

- Species secure
- Used ARUs to systematically sample across region
- Distinct clumping
- BBS trends are not representative due to the fragmented landscape where most of the routes occur.
- Habitat associations
    - White spruce, pine, deciduous, mixedwood, black spruce
    - Birds more likely to be found in younger stands post-harvest vs. post-fire

        - Prefers: 60 yr old deciduous forest
        - ~70% of this landscape is black spruce lowland and ~30% upland hardwoods
        - Predicted abundance based on habitat
            - A lot of variation
            - Reasonably closed canopy
            - Larch wetland
            - Anecdotal- Shepherdia canadensis, found in flat, non-wet habitat
    - Wildtracks (point count and ARU data across Canada)
        - Song variation in Canada based on habitat?
            - Lots of variation
            - Did not find distinct vocalizations by region/habitat type
    - Differential habitat selection in Canada
        - Niche overlap by region
        - Change from east to west can not project across regions/habitats
        - Not due to lack of availability of similar habitat types across regions
    - What are most likely drivers of decline
        - Correlation between amount of habitat loss on breeding grounds but also about shared wintering habitat/locations

British Columbia (Mark Phinney)

- Range restricted to area east of Rocky Mountains (Boreal Taiga Plains)
- BBA in 2012, two separated locations in northern and southern Boreal Taiga Plains
- Habitat
    - Pure, middle aged aspen (~40-120 yrs)
    - Warm, mesic sites
    - Closed canopy with open understory
    - Very selective about ground cover
    - Sparse coarse woody debris, lush herbaceous growth, grass, peavine, low to moderate amount of low shrubs (rose, soopolallie, saskatoon).
    - Avoids areas with significant ‘tall’ shrubs (willow, alder, aspen)
    - Unable to model suitable habitat due to VRI (land cover classification) constraints
    - All occupied stands have been ‘natural’ fire origin
    - Best: low intensity spring burns, creates good habitat but infrequent
    - Regenerating cutblocks are now becoming suitable age. No information about suitability of this habitat. Use ‘light touch’ soil preservation practices resulting in different ground cover than when created by fire.
- Status
    - Due to BBA results has been downgraded to ‘blue-list’ = Special Concern
    - Listed as a species at Risk under BC Forest and Range
        - Eligible for habitat protection through the establishment of ‘Wildlife Habitat Areas’ where forestry practices are prohibited or strictly managed.
- Conservation Issues
    - Cattle grazing widespread on public land with deciduous forest

    - Low-level grazing probably compatible with suitable habitat however, overgrazing is common and renders habitat unsuitable
    - Cattle presence also attracts BHCOs deep into forest stands. Not sure how big of an issue but it does occur
    - Forest products: only place in BC with active deciduous forest products industry. Allowable annual cut in 3 main timber supply areas which overlap with CONW habitat.
    - No forest management which focuses on CONW to minimize harvest during the breeding season. Suitable habitat is almost certainly declining.
    - Focused monitoring needed
- Outlook pessimistic.

South America (Mike Hallworth and Craig Thompson)

Mike Hallworth

- Integrating tracking technology with remote sensing across the annual cycle to ID causes of population decline.
- How does habitat loss throughout the annual cycle contribute to population declines?
    - Delineated 8 natural populations from BBS data
    - Migratory connectivity
        - Used pre- and post-Atlantic stopover locations and stationary non-breeding locations in 500 x 500 km to accommodate for uncertainty.
        - Weak connectivity, high mixing among regions on wintering grounds
    - Birds moving to Atlantic coast to stopover before migrating to South America
    - Habitat loss extracted from 50 km radius of BBS routes from 2000 - 2018 to determine forest cover loss.
    - Limited inference due to few distinct stopover regions.
    - Results:
        - Breeding habitat loss by population
        - pre-Atlantic: lots of habitat loss
        - post-Atlantic: northern portion of South America:
        - Stationary non-breeding area:
    - Most bars suggest higher habitat loss on breeding grounds than elsewhere in the annual cycle with wintering habitat loss a close second.
    - In addition to habitat loss looked at habitat fragmentation
        - Largest patch index (area to edge metric)
        - Number of patches
        - Total core area
        - Landscape metrics R package
        - Large, forested landscapes support more CONW
            - Breeding grounds, largest patch index very important, total core not important, number of habitat patches important.
            - Secondary impacts on wintering habitat
    - Sources of habitat loss
        - Breeding grounds

                - Conversion of forest to agriculture
                - Peat mining
                - forestry/wildfire
            - Wintering grounds
                - Gran Chaco ecoregion is global deforestation hotspot which has increased since 2020
                - Lost >20% from 1980s - 2013
    - Framework for integrating community science, tracking data, remote sensing, etc. across full-annual cycle to assess impacts across seasons simultaneously
    - Lots of other species can benefit from CONW conservation

Craig Thompson

- Full-annual cycle conservation necessary
- The Gran Chaco (SE Bolivia, western Paraguay, central and northern Argentina)
    - South America's 2nd largest forest
    - Under great threat to habitat loss
    - Dry Chaco - seasonally wet in western portion
    - Humid Chaco - eastern portion, grassland, savannah, shrublands
    - Global biodiversity hotspot
    - Extensive habitat loss: forest converted to agricultural lands
        - Removal of old growth trees
        - Cattle production
        - Soybean (largest producer in the world). Large-scale agriculture.
        - SA has seen the largest expansion to agriculture than anywhere else in the world in recent decades.
    - 2022 FWS awarded two significant grants to do work in the Chaco (Georgetown University and Birdlife International). Will document habitat use by different species.
    - Partnership to create working group for migratory and resident species in Chaco:
        - Guyra Paraguay, BirdLife International, Aves Argentina, USFWS, Georgetown University, WI DNR, WCS, Pew Charitable Trusts, WWF

BREAK

Research and Monitoring Needs (45 min)

What is available and should be used?

- Bruno Drolet: Range-wide boreal monitoring, off-road, BAM, Wildtracks, Alberta monitoring
- Erin Bayne: How to identify intermittent monitoring locations and revisit some proportion of those locations to update occupancy.
- Ryan Brady: Atlases play a role in region-wide monitoring
- Bruno: Flight calls (but CONW does not have a distinct flight call so can't monitor them this way). eBird data to assess trends. Important database to utilize

- Steve Van Wilgenburg: Migration Monitoring Network. Need to generate interpretable species distribution models to accurately estimate trends.
- Steve Kolbe: Agrees that eBird should be used to identify stopover hotspots
- Ryan/Alexis: Annual monitoring in U.S. national forests
- Kevin Hannah: Habitat photos challenging. They are very loud singers so it is hard to pinpoint where they are singing/nesting. Resolution issues about placing ARUs in suitable locations.
- Andy Forbes: CONW not well represented in standardized banding datasets

What are the greatest needs/challenges?

- M. Hallworth: Greatest need is to get uncertainty down to a point where meaningful conservation can get put into action (i.e. getting the species uplisted).
- Steven Van W.: Incorporate other data across Canada
- Marcel G.: CONW didn't hit the sample size threshold to be included in trends analysis. Doubtful adding additional data will help resolve uncertainty issues.
- M. Burrell: BBS trends only sampling the southern edge of the species range. We don't really know what is happening in the northern ⅔ of the range. How to make up for this?
- Ryan Brady: Thinks that US needs to do more off-road monitoring
- Erin Bayne: Due to magnitude of habitat loss across annual cycle, and urgency of this issue, would a concerted effort to do a blitz to help interpret trends, reduce uncertainty by identifying how many of XX number of locations that were previously sampled be resampled to determine occupancy? Would this provide sufficient information to be meaningful.
- Dave IIes: Where are areas of high and low density. Across a gradient. Resample those locations.
- Kevin Hannah: species get listed, more work is done and determined species can be downlisted. Lose conservation momentum when this happens. Getting better data from across the range is important.
- Steven Van Wilgenburg: Focus more on broad signals of change that would be concerning and not necessarily focused on CONW. What is happening with hemi-boreal/boreal species in general? How easily can that be designed? Especially since CONW is inherently challenging to study and hard to detect.
- Bruno: Challenge. Wide distribution and situation varies from one area to another. Best to come up with management units that can be meaningly managed and conserved. Different places will require different solutions.
- Ryan Brady: Will need to come up with subcomponents. Expanding efforts and revisiting historical sites to get better coverage.
- Acoustic interpretation. More research needed to determine variation in vocalizations to make automated identification better capture variability.

Future Research

- Motus tags: Don't need to recapture individuals. Can put tags on when captured during migration at banding stations.
    - Steve Kolbe: Would be good to do that during spring and fall migration. Stage about 10 + days before heading to wintering locations.

    - Kevin Hannah: Yes but would need to catch them in June/July and hope tags stay on and function until October.
    - Marcel G.: Agreeing that the U.S. stopover would be place to target for tagging efforts.
- Bruno: Is habitat limiting? Don't have the impression that habitat is limited in the breeding season. On wintering grounds it is another level of magnitude. Where should we invest?
- Ryan: Agrees that breeding habitat does seem to be available, may be microhabitat issue
- Josh Bednar: Found to be highly vulnerable to window collisions.
- Ryan: What is the extent of that issue?
- Junior T.: We don't have a lot of information about their demographic parameters, productivity. We need to get a better understanding of these things.
- Alexis: Steve update about basic ecology
- Steve Kolbe: In modeling, we treat black spruce/tamarack but they like a very specific aspect of the habitat that is not widespread across the landscape. Last 2 years 12 CONW nests. Found that young fledge early from nest (at 6-7 days old). Don't travel very far away.
- Erin Bayne: Lidar can be used to get better ground cover/structure data.
- Alexis: Agrees limiting factor is lack of high-resolution structural data.
- Bruno: If habitat is not limited is it a priority for conservation? What about wintering grounds. What will it matter if wintering grounds are lost? Should focus on wintering grounds. Do female and male winter in same place? Carry-over effects?
- Ryan: Do we need to get more geolocators out or go all in on Gran Chaco? Do we need more research on climate change effects?
- Mike: Should not go all-in on Gran Chaco but should try to get other info.
- Steven Van W/Erin: BAM has done some of that modeling.
- Brianne: BMPs could be more useful with better habitat information
- Junior T: Landis habitat models. Forest management and climate change impacts are intertwined. NE Alberta suggests it may not be bad there for this species.
- Judith Toms: Projected climate change impacts. Critical to understand where the stronghold is and what we can do to keep the high-quality places high quality.

Threats and Limiting Factors:

- Wintering Habitat
- Humans :)
- Climate Change
- Steve Van W: Work by Michael and Bruno's countering point that we could address.
    - Stratified sampling of areas with CONW with human impact vs. CONW in areas with lower human impact. Is trend an artifact of sampling from roads where human disturbance has been high?
- Nick Anich: Habitat improvements in WI, getting rid of shrubby mid-layer.
- Ryan Brady: Jack Pine stands regenerating with high, dense understory. Is this soil-dependent.
- Ryan: Invasive species an issue anywhere?
- Erin Bayne: boreal does not have as many invasive species.
- Mark Phinney: in the west, some extent of temporary habitat loss and associated degradation. Cutting down forest faster than it can recoup. Also, thinning out the tall shrub layer. New edge created and changes in microhabitat conditions.

- Brianne: with KIWA habitat management. Soil is becoming more nutrient rich so Jack Pine is not able to regenerate as well due to competition with other species that do better with richer soils. Increasing burns
- Ryan Brady: any diet impacts, i.e. are CONW prey items declining?
    - Mike/Steve: Get poop samples to get an idea of what prey items they are eating.
- Bruno: We need to have a South American perspective. We should connect with a researcher there that could address some of our answers.
- Ryan: other potential issues include collisions (known supercollider) and threats to migratory stopover habitat
- Ryan: Is resource extraction a major issue in Canada? Predation? BHCOs?
    - Steven Van W/ Tim Poole: increased road density in Canada could be future threat, reducing core area
    - Mike Hallworth: Cats during migration could be a major issue
    - Erin Bayne: Red squirrel main predator, not known to be changing in population size.
    - Erin Bayne: BHCOs not a massive issue in Canada at the moment
    - Bruno: Not a major concern because of nest location and CONW behavior makes it challenging to find a nest.
    - Marcel: BHCOs declining in Canada. Low consideration for CONW at moment
- Jacques has video of CONW being attacked by chipmunk
- Josh Bednar: With increase of agriculture in Gran Chaco, would it be worth looking into insecticide exposure?
    - Mike Hallworth: thinks that would be worth looking into and collecting feathers to ID contaminants and look at general body conditions upon arrival in NA in spring
- Bruno: There is methodology developed to collect this information. Aside from adding information, what is the impact?

Future Efforts- Where do we go from here?

- Working Group Valuable?
    - Mike Hallworth: Likes the idea of creating a working group. His experience has shown that these groups can be valuable to keep things moving forward in a collaborative effort.
    - Junior T and Brianne: Agrees this is a good way to move forward.
    - Junior T: Thinks that working groups keep momentum and organization.
    - Steve Van W: Need to do a range-wide assessment and literature review to update habitat selection data across the range. Should this be wrapped up into a manuscript as the placeholder and way to move forward? Current status and research needs? Would be a way to gain broader interest.
    - Bruno: talks about his experience with other working groups. For Black-poll warbler. Enhanced communication. Identified research and monitoring gaps, etc. all the same process. Nobody is against this idea but momentum is difficult to keep. Number of species of concern and working groups, etc. continue to rise. At the end of the day we need coordination. After 3 or 4 meetings, we determined the key to success is having one person to organize and keep people together.
    - Michael Paling: Northern Forest Bird Network soon to hire a coordinator via American Bird Conservancy. Could this position provide support to assist the CONW effort?

    - Kevin Hannah: Impressive group to come together today. Look at low hanging fruit. As a collaborative effort we could address some of the questions that we are needing to address.
    - Ryan: Sub-working groups
        - Brianna and Michael. Not necessarily geographically separated but more by annual cycle.
        - Mike H.: Stronger together at the moment
- Funding Opportunities?
    - Keep consistency in methodology and design and individually gather funds locally.
    - Coordinated sampling strategy is key
    - International strategy?
        - Steven Van Wilgenburg: The Canada Nature Fund
        - Seems like we should invest on the wintering grounds since we know so little about what is happening there.
        - Graduate student from So. Amer. to do work there through US or Canadian University
    - Talk with Pete Marra and others who have funding to work in the Gran Chaco to see if there is any preliminary data that could be collected while there are boots on the ground. Also, they could identify researchers from SA who could be future potential partners.
    - Bruno: get people interested and then get funding and target efforts. PIF science committee should know about this meeting and our intended efforts to raise awareness of this species.
    - Judith Toms: meeting to discuss creating a document or manuscript.
    - Steven Van Wilgenburg: Worth approaching individuals independently on items of interest.