



Minutes of Streaked horned lark range-wide working group meeting November 1, 2011 – Portland, Oregon

Attendees

Hannah Anderson	Center for Natural Lands Management
Marnie Lassen	Center for Natural Lands Management
Cat Brown	US Fish & Wildlife Service
Kim Flotlin	US Fish & Wildlife Service
Tracy Leavy	US Fish & Wildlife Service
Jock Beall	Willamette Valley National Wildlife Refuges
Paul Meyers	Julia Butler Hanson National Wildlife Refuge
William Ritchie	Willapa National Wildlife Refuge
Karen Reagan	US Fish & Wildlife Service
David Clouse	Joint Base Lewis-McChord
Valerie Elliott	Joint Base Lewis-McChord
Jim Lynch	Joint Base Lewis-McChord
Elaine Stewart	Metro
Nick Atwell	Port of Portland
Dana Green	Port of Portland
Carrie Butler	Port of Portland
Randy Moore	Oregon State University
Ann Kreager	Oregon Department of Fish & Wildlife
Susan Barnes	Oregon Department of Fish & Wildlife
Mary Linders	Washington Department of Fish & Wildlife
Scott Pearson	Washington Department of Fish & Wildlife
Derek Stinson	Washington Department of Fish & Wildlife
Michelle Tirhi	Washington Department of Fish & Wildlife
Dave Helzer	City of Portland
David Shepherdson	Oregon Zoo
Bob Altman	American Bird Conservancy
Mary Coolidge	Audubon Portland

New Publications

- Camfield, A. F., S. F. Pearson and K. Martin. 2011. A Demographic Model to Evaluate Population Declines in the Endangered Streaked Horned Lark. *Avian Conservation and Ecology* 6 (2): 4.
- Northwest Science Cascadia Prairie-Oak Partnership Special Issue, including Altman, B. 2011. Historical and Current Distribution of Birds Species in Prairie-Oak Habitats in the Pacific Northwest. *Northwest Science* 85(2): 194.

Surveys

Washington surveys

Mary Linders, WDFW: Partners surveyed occupied sites in WA: 4 sites on Joint Base Lewis-McChord (JBLM), Olympia airport, Shelton airport, and Columbia River islands. Similar results as last year, but the overall down 15-20%. Rice Island numbers were up considerably.

WDFW produced a 2010 summary report that includes surveyed WA sites and Columbia River sites; 2011 report forthcoming. Not yet clear if method will produce data capable of detecting a trend in population numbers.

Bill Ritchie, FWS Willapa NWR: lark surveys were conducted in conjunction with snowy plover surveys at the Willapa National Wildlife Refuge, Ledbetter and Midway Beach. Conducted 4 surveys and made incidental observations. They are conducting both transect surveys, following WA protocol as well as territory surveys. Ledbetter: preliminary results show about the same numbers of larks as last year: 8-10 territories; 2 nests; 4 young of the year. Midway: about same as last year. There are no regularly scheduled surveys at Damon Point, only incidental sightings.

Dave Helzer, City of Portland: noted that a streaked horned lark was detected in southern WA at Sand Island, Near St. Helens. Possibly a new location? If funding is secured, Hannah Anderson will include that site in 2012 surveys.

Oregon surveys

Randy Moore, OSU: Most of surveys this year were done in Portland area. Also conducted survey of Corvallis Airport, in conjunction with genetic rescue project. Showed a population increase, about 85 pairs.

Did some monitoring at Finley National Wildlife Refuge. Likely lower numbers than previous years, but didn't survey. There may be movement between those Finley NWR and Corvallis Airport; will crunch numbers to see how much.

Rivergate –area of suitable habitat reduced from previous breeding season because of plant (building) construction. Number of pairs increased by one from previous year. Entirely due to Port's timely tilling of field that opened up habitat that wasn't suitable last year. Nest success – 100%, 3 years running. Probably because not many predators. 6 pairs of larks; about 50 habitable acres.

Portland International Airport – similar reproductive success. Probably fewer nests than last year, but 100% success. Vegetative structure is worse. One nest was abandoned – could have been egg predation but they never saw the eggs. Population up from 3 to 4 pairs.

Other Oregon surveys

Cat Brown, FWS: In May 2011 Randy Moore led survey training. Went to Basket Butte and looked at mostly agricultural sites with larks. Planned to survey Sauvie Island but didn't get out there. Mary Coolidge indicated that Audubon volunteers could be helpful in getting folks out to Sauvie. Biologists at Ridgefield NWR indicated there is not suitable lark habitat there.

Research

Columbia River island Restoration Trials

Hannah Anderson, CNLM: Restoration trials wrapped up last year. Did tilling treatments on the islands. Collected vegetation data in each of the 3 tilling treatments. Established that we can create lark habitat with the treatments. It needs to be done annually to maintain the habitat.

Hope to work with Army Corps of Engineers on their 5-year operations and management dredge deposition plan. Submitted a proposal for funding to FWS. That proposal also includes work to implement tilling and herbicide treatments on sites that are not slated for deposition and to continue Col River surveys in 2012 and 2013.

Nest exclosures

Scott Pearson, WDFW: Study results showed no difference in nest success between exclosed and unexclosed nests. Exclosures lead to higher nest abandonment, primarily associated with adult mortality – from kestrels seeing the exclosures (there is footage of this). This is unfortunate, because the biggest effect on population is adult survival rather than fecundity. But exclosed nests had a higher hatching rate than unexclosed nests. Nest exclosures may be appropriate on JBLM 13th Division prairie, because the predators there are different. Need to be careful about using exclosures in the future.

Genetic rescue

Scott Pearson, WDFW: Final report will be finalized shortly. JBLM has low hatching success – as low as about 40%. Assumption that this is due to low genetic diversity or inbreeding. Other grassland birds at JBLM are doing well, so we know it's not due to the site. This project is an attempt to increase genetic diversity to JBLM 13th Division prairie. 4 clutches of streaked horned larks eggs from Corvallis were swapped with JBLM nests. Hatching success and fledging success was much higher for Corvallis eggs. Intent is to conduct the rescue project in 2012. Collected feathers for future genetic analysis. There was a previous mitochondrial DNA study, and the report for that has been released. All young were banded. Discussion that captive rearing of JBLM eggs is a possibility or putting lark eggs into savanna sparrow nests.

The idea was raised of placing the removed South Sound eggs into Corvallis nests. Randy Moore expressed concern that potential genetic problems be introduced into the WV population, as there has been no genetic testing yet on the Washington eggs. In relation to the possibility of introducing chicks once they have hatched, Randy Moore didn't think there was a high probability of streaked horned larks feeding chicks that "aren't their own".

Conspecific attraction feasibility study

Hannah Anderson, CNLM: The study's aim is to see if attracting birds with songs and decoys can work. It was attempted in 2005 and 2010 without success. JBLM 13th Division prairie, GAAF, 13th Div, and Rivergate OR are source sites. Treatments sites have paired plots (treatment and control) within a mile of source sites: West 13th Div, North GAAF, TA6, and St. John's landfill, OR. Site-specific recordings were made at the source sites to use in playbacks. We need to prepare habitat before can commence the study, and that is not yet complete. Aiming to commence playbacks in spring 2012.

Restoration and management

Lovejoy

Elaine Stewart: Lovejoy was purchased by Metro, and is located in western Washington County, Oregon. When started restoration in 2006, a group of larks (almost certainly streaked horned larks) were following the disk. In 2007 and 2008 saw larks during surveys. 2009-11, not on site. Probably due to overseeding and overgrowth of grasses.

Now trying to open up small patches totaling about 10 acres of more suitable nesting habitat on site, within an overall site of about 100 acres. In about one year will know whether succeeded. The site is in a floodplain, and the surrounding 1,000 acres is dominated by agriculture, especially wheat and cereal crops. [See attached figure, "Lovejoy Streaked Horned Lark Plots".]

Prescribed fire

Jim Lynch, JBLM: We have an increased capacity for burning in South Sound. Burned 1,200-1,400 acres last year, but that was fewer acres than in previous years, and did not include areas occupied by larks. Trying to get all prairies into fire management program. Military trainers move into burned areas quickly, so need to manage outside the small areas identified for conservation. Mason McKinley (CNLM) has been successful in getting into more areas that haven't seen burns for years.

The group discussed the benefits of studying lark use of land after fires. Several people noted that burning alone is not sufficient to create lark habitat, as non-natives can grow back before the lark breeding season (particularly in the WV). But burning is good for creating wintering habitat if the timing is right. After a burn, if tall vegetation grows, it may need mechanical treatment, following by spraying. Can use glyphosate rather than the more costly chemicals because not worried about natives. If the vegetation is not tall, spraying alone may be sufficient to create lark habitat. Also, if the area is too thatch before spraying, it will be too thatch after spraying. Could do multiple treatments to get rid of thatch, but it will still only be good for one season; have to keep treating. The degree of regrowth differs between the South Sound, where soils are poor, and the more fertile Willamette Valley. Research in South Sound documented that larks will breed in areas burned the year prior.

Lark technical note

Randy Moore, OSU: Authored a new publication produced with CNLM: "Managing agricultural land to benefit streaked horned larks: A guide for landowners and land managers". [Electronic copies are available from Marnie Lassen, mlassen@cnlm.org. CNLM also has hard copies available.]

Elaine Stewart suggested distributing the publications to NRCS district conservationists. Randy Moore mentioned that the Columbia Land Trust wanted a copy of the publication, so that they can manage for larks on a property on the Columbia River that they are hoping to purchase.

Streaked Horned Larks and Pacific Northwest Airports Workshop

Hannah Anderson, CNLM: The workshop occurred in March 2011. It brought together many airports within the lark's range for the first time. The workshop covered lark status, biology, range, as well as the factors relating to bird strike hazards at airports. The workshop was seeking the middle ground between lark occupation and airport safety.

Next steps – work directly with occupied airports. Plan to prepare a “cheat sheet” about managing airports for larks, although a key message from the workshop was that every airport is different, and that management must be tailored specifically for each airport.

The group discussed the fact that even if larks are listed, the potential conflict between conservation and aircraft safety will still exist. Airports generally buy land to operate upon, now or in the future. They don’t want to manage for birds that may be struck, especially if it will constrain use of their property. Since most airports accept federal funding, creating the federal nexus that mandates consultation, it makes sense for them to get ahead of the curve with respect to listing, and find creative ways to mitigate for any impacts to larks that may occur. The group agreed that another larks-airports meeting would be useful, especially since the decision to list may occur within the next year.

Listing status review

Cat Brown, FWS: Multi-district litigation against the USFWS was settled, with USFWS agreeing to resolve the entire national outstanding candidate list. Since 1996-7, there have been over 1,000 species that are on deck for listing (are candidates), but listing was precluded by higher priority issues. In the settlement, USFWS agreed that between now and 2016, USFWS will decide to either list or not list those candidate species.

Streaked horned larks are in the group of candidates to be assessed in the first year, along with other Northwest prairie species – Mazama pocket gopher, Taylor’s checkerspot and Mardon skipper. USFWS needs a published proposal or withdrawal for the first group of candidates by mid-2012, and a final rule by mid-2013 for those candidates proposed to be listed. More information is available on the USFWS website:

http://www.fws.gov/endangered/improving_ESA/listing_workplan.html

Critical habitat may be designated at occupied sites for species to be listed as well as areas that aren’t currently occupied but are necessary for recovery. For any species proposed to be listed, critical habitat would be proposed for designation at the time of listing proposal, rather than later (as often occurred in the past). Critical habitat would include both breeding and wintering habitat. In designating critical habitat, need to get very specific. Have to define what it is about a site that makes it critical. For larks, relates to landscape context and structure; probably does not relate to specific plants since larks are not picky about what they eat. Will be an uncomfortable issue for places like airports. Need a conservation plan signed and completed before critical habitat is designated, to be considered for an exemption.

The group discussed the challenge of designating critical habitat where occurrence is ephemeral, as occurs with the streaked horned lark. A related difficulty is that as habitat changes, larks may stop using it. Cat Brown noted that generally USFWS does not de-designate critical habitat once it has been designated.

USFWS is currently undergoing a 5-factor analysis for the streaked horned lark, to determine whether it should be proposed for listing. Unlike some other species, the lark isn’t well protected

by other regulations as it mostly occurs on private lands. Lack of genetic diversity may also play a role in the analysis.

The listing proposal requires a discussion of the threats to the relevant species. Cat Brown asked whether there are there any threats that USFWS is not aware of? Cat Brown asked participants to send her an email with specific sites and threats that she wouldn't otherwise know about. Need to be as specific as possible about changes over time that have been documented. General loss of habitat is not enough to qualify as a "threat" for listing purposes.

The group identified the following threats:

- Scotch broom invasions at Damon Point, Midway and Grayland Beach.
- Shrubs and beachgrass invasions at Midway.
- Agricultural production machinery impacts to nesting birds.
- Land use changes. Possible sources:
 - The Oregon Department of Agriculture has statistics on change in land use in Willamette Valley.
 - John Christy's paper on urbanizing flora of Portland area discusses conversion of land and habitat changes (see <http://www.npsoregon.org/publications.html>).
 - John Christy and Ed Alverson's paper on Willamette Valley vegetation around 1850 (see <http://www.bioone.org/doi/full/10.3955/046.085.0202>).
 - Lower Columbia Estuary partnership has done a change model for the Columbia River.
- Any change from grass seed production (perennials and fescues rather than annual grass) is important, as grass seed field habitat is the best habitat we have so far.
- Bi-annual rodeo competition at McChord Field.
- Bi-Annual airshow at McChord Field.
- Conflict with knapweed and Scotch broom spraying at McChord Field.
- Planting commercial mixes of grass – lots of clover, which is not good lark habitat.
- Mowing regimes – where they haven't been coordinated with lark breeding season.
- Military exclusion under MBTA for military activities.
- Airshow at Olympia Airport.
- Washington State Patrol high speed car chase training in summer at Olympia and Shelton Airports.
- "Castles" in the Artillery Impact Area – eco-blocks used to replicate buildings for military training.
- Increased troop numbers at JBLM.
- Construction at JBLM coincides with lark nesting season, as it is the dry season.
- Brownfields (contaminated) sites along the Columbia River.
- Being hit by cars.

Cat Brown put two maps on the wall with occupied lark sites, and asked the working group to check to see if all sites are shown. Michelle Tirhi mentioned that she prepared a map for the South Sound showing sites that are occupied, and sites that have been surveyed but don't have larks.

Conservation Action Coordination Group

Scott Pearson raised the possibility of creating a lark conservation action coordination group. Early on, not many were involved in lark research so it was easy to communicate. Recently there's been a lot more activity and funding. Larks are endangered in WA State, so proposed actions – even if they are studies aimed to benefit the lark – need to be coordinated with WDFW so they can be evaluated whether they might have a negative effect. Wondering if there's similar desire in OR to evaluate proposals. Will be much more scrutiny of proposed studies if lark listed federally. E.g. playbacks, egg relocation, nest exclosures.

The group discussed this idea, and eventually concluded that it would be preferable to extend the annual working group meeting to 2 days. The first day could be updates and action planning, and the second day could address project planning. Topics could be narrowed down in advance via email.

Both the Port of Portland and Metro expressed an interest in participating in regional conservation planning beyond their own sites, given the limited habitat on their sites.

Action Planning

The group revised the streaked horned lark action plan, attached.

