

Streaked Horned Lark Regional Working Group Meeting
4 September 2008



MINUTES

In Attendance: USFWS: Cat Brown, Jodi Bush, Kim Flotlin; Oregon State University: Randy Moore; NRCS: Jeremy Maestas; Washington State Parks: Lisa Lantz; ODFW: Ann Kreager, AnneMary Myers; WDFW: Derek Stinson, Michelle Tirhi, Scott Pearson; The Nature Conservancy: Hannah Anderson

Updates:

Publications / Manuscripts

- STHL Fecundity Survival Pop Growth Site Fidelity – *Scott Pearson & Alaine Camfield*
 - o WDFW – Population Modeling, model for Lambda and for site fidelity – *available at http://wdfw.wa.gov/wlm/research/papers/streaked_horned_lark/streaked_horned_lark_fecundity_survival_pop_growth.htm*.
 - o Ecologia – STHL and alpine larks – life history trade offs across a latitudinal elevational gradient – *In press*
 - o J. of Wildlife Mgmt – use of demographic models to evaluate management scenarios for endangered STHL – there is a useful table with mgmt actions – *In press*
 - STHL nest predation and identification of predators – *Scott Pearson* - Western Meadowlark was identified as predator on Fort Lewis prairies through the use of remote sensing cameras placed on nests. Subsequent lit review reveals that WEME can be significant predators in grassland systems. They have been reported killing chicks; both predation events documented in South Sound were eating eggs. In South Sound, we know that there is a lot of suitable lark habitat, but it is not all occupied. Perhaps larks could be avoiding WEME? Management recommendations include aiming to keep WEME and STHL segregated by promoting appropriate spatial distribution of the disparate habitat types preferred by each species.
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- STHL Winter Range – *Randy Moore* – *Report at: www.southsoundprairies.org/documents.htm*
 - Corvallis airport management recommendations – *Randy Moore* – *Draft of the recommendations will be finished sometime soon, but the final will be caught up in a fairly lengthy process because it has to be vetted, approved, and discussed by many agencies, IAP, City of Corvallis, FAA.*
 - *Randy Moore* - After analyzing data and preparing owed reports for rep success, there will be another paper discussing rep success in different habitat types Willamette, correlates of rep success in middle and southern W. Valley.

Survey & Monitoring

- Oregon breeding monitoring – *Randy Moore*

There are some fairly correlative clear indicators, birds that breed in consistently available habitat along runways do worse than in the crapped out grass seed habitat. Ephemeral habitat seems to be better habitat. Did put cameras on nests at the airport, the six or seven predation events were all northern harriers, gobbling both chicks and eggs. No other predation observations, but some other indicators that they suspect rodents. 187 STHL chicks banded in 2007.

- Finley Wildlife Refuge – *Randy Moore*

A “natural experiment” occurred this year through a miscommunication between farmer that prepares the site for winter goose forage and the refuge managers. Under normal circumstances they would till the field that they were studying larks in. This year the farmer was told not to till, but word never made it to the farmer and the tilling did indeed happen on half of the field. Turned out to be a good thing, 7-8 pairs that were on the tilled territory, moved out, came back and were incredibly successful. Nests were incredibly cryptic in the tilled area, where they were not as successful in the un-tilled area. Couldn’t even see the “patio” larks build on their nests in the tilled field. That scenario could be replicated as a management tool, but would be very shy about plowing up occupied sites during the breeding season based on one year’s data. Tended to nest and forage within 30 to 40 meters of edge.

- “Linn county 600” – *Randy Moore*

Second largest breeding population found at MDAC farms, a 600 acre WRP in southern Linn County. In 2007, there was one breeding pair. It was burned and then within two weeks there were 20 breeding pairs on territory. Bare ground lasted through to the next breeding season, restoration scraped out 7-9 wetland depressions, and in May 2008 all 600 acres were perfect for larks, except where there was water, and housed 75 pairs of larks. The landscape setting is perfect for larks, very open. By June of 08, the habitat was denser, and difficult to find and follow birds, and the birds seemed to be having “trouble” changing their behavior to deal with weedy veg. by having to helicopter into their nests, couldn’t walk into their nests. It was sprayed out with herbicide in June. Breeding activity “seemed” to pick up, (or couldn’t see them mid season) late in the season. As the water evaporated, the birds moved onto the lake shore drawdowns. This speaks well of creation of seasonal wetlands and STHL habitat. Restoration plans are to drill that habitat with native vegetation. This will likely be too thick next year or the one afterward for good STHL habitat. But the drawdown areas will be there every year. It is difficult to restore a mosaic of wet prairie areas and lark habitat as well. NRCS interested in including larks in their incentive programs, i.e. Farm Bill. Jeremy Maestas is the contact at NRCS.

- Herbicides and lark eggs

Herbicides are sprayed often in agricultural areas and at airports. Birds are fairly safe from most herbicides, sort of considered not very toxic to birds, although there is one that is quite horrible and is often used in airports. The implementation and logistics of a study to determine the effect of herbicides on lark eggs has proved too difficult to manage, and results may not be worth the trouble.

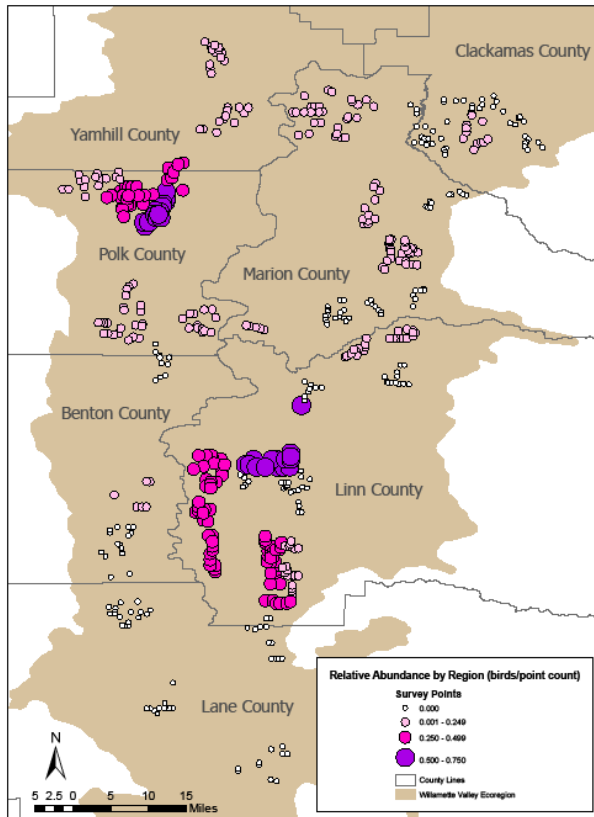
- Columbia River Island Habitat Analysis – *Hannah Anderson & Scott Pearson*

Lark and habitat surveys have been conducted on selected islands. Analysis upcoming to overlay time of dredge material deposition, vegetation successional stage, lark presence/absence, and potential for future depositions. Based on the results of spatial analysis and associated data collection, management guidelines for dredge-material deposition will be prepared, as well as future habitat restoration activities planned for the islands.

- Oregon roadside surveys – *AnneMary Myers*

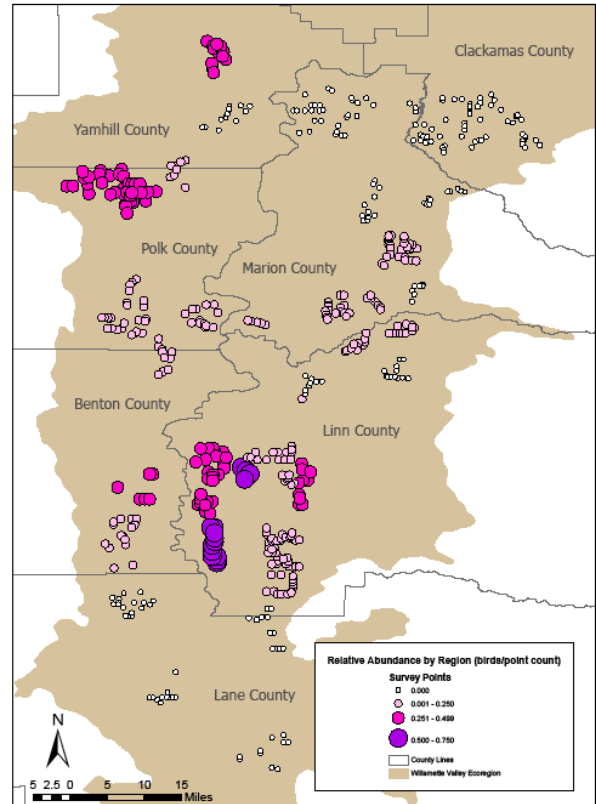
Results pooled by region, that is how the graphic is displayed (below) by relative abundance = # of HOLA detections per point count, points not randomly selected, but selected in 1996 as areas that were thought to be suitable for grassland birds. In some areas there was a slight decrease, but in 2008 there were HOLAs in 5 regions in Northern W. Valley that they were not detected in 1996. Relative abundance was similar between the 2 sampling years, but the areas that they were detected was different.

1996 Horned Lark Relative Abundance



Horned Lark relative abundance by region based on point count censusing in Willamette Valley grasslands May-June 1996

2008 Horned Lark Relative Abundance



Horned Lark relative abundance by region based on point count censusing in Willamette Valley grasslands May-June 2008

None of the surveys were conducted at the Corvallis airport. Decreases in 3 density transects, and increases in 3. Birds can respond very quickly to changes in land use, within 2 weeks. Results of the surveys will help to direct where to work with landowners and detect available habitat and where to do restoration and enhancement activities.

Research

- Mini-exlosures on WA coast – *Scott Pearson*

2 nests exclosed this season at Ledbetter Pt., and 2 prairie nests several years ago and all females did go back to the nest during incubation stage. In 2 of the 3 cases there were single dead chicks, and in one of the cases one of the chicks was very much smaller and the small one died and the others fledged. It is important to pay attention to increased predation on adults when using exclosures, peregrines on coast have perched on them or keyed in on them.

****Action:** A pre-proposal to USFWS Recovery for range-wide nest exclosure study is forthcoming.

Restoration

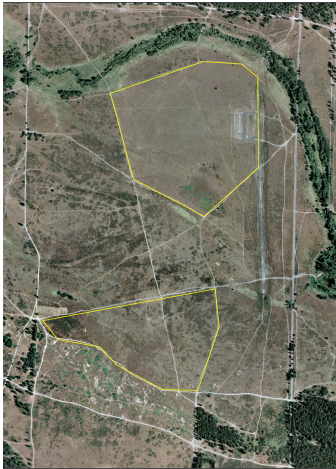
- Ledbetter HRA – *Scott Pearson, Lisa Lantz*

There is an HRA for snowy plovers, now 100 acres + that has been cleared and flattened and a portion has had oyster shell added to it. STHLs have moved into the site and they have been breeding there. Management for plovers can be a good thing, larks on the edge, plovers in the middle.

- Long Beach State Park - *Scott Pearson, Lisa Lantz*

Last year a set of plots was determined, they went in to spray the American beach grass and want to evaluate the efficacy. However, sand deposits on the tip of the peninsula and erodes on southern end. There was considerable sand deposition in plots and they were not able to evaluate efficacy. They

smoothed out the sand and will do it again. Surveyed the plots for snowy plovers and STHLs, a lark was detected, no snowys, but not lark breeding determined.



13th Division Prairie at Fort Lewis, WA. Yellow polygons indicate 2008 planned fires.

- 13th Division 2008 Fires Planned – *Hannah Anderson*

The northern planned fire is in a core Lark breeding area. This site is the only “native” prairie lark breeding site remaining in the South Puget Sound. All other breeding sites are on airports.

- St. John's Landfill - *Randy Moore Updates*

The project saw an explosion of tall thick plants from the dredged spoil from Hayden Island – so no larks in the new area, but construction is proceeding. Unless they see some results in the dredged area then the project may not be pursued. These 200 acres of open land surrounded by open landscape are the only known breeding population between Multnomah County and the middle Willamette – McMinnville. It is a tenuous connection. Ramifications of losing those 2 populations (landfill and PDX) unknown, but certainly won't help connectivity between OR & WA. PDX spoil area for the 1st time was colonized by 3 territorial males.

****Action:** PDX may be a great place to put exclosures next year.

****Action:** perhaps USFWS could work together with the landfill to manage for larks in the area, especially if they are not managing for something else. Portland Metro has a clear conservation mandate, and this would be a good thing to manage for, and should be fairly easy to manage for ruderal habitat.

Email Update from Paul Vandenberg at Portland Metro:

“Some background: In 2007 the Port of Portland started to develop a dredge spoils field near the confluence of the Willamette and Columbia rivers, which has been supporting the only known breeding population of SHL in Multnomah County (up to 20 nesting pairs according to Randy Moore of OSU).

The landfill's proximity to that field, and its physical features and protected status (within the Metro-



Aerial photo that shows the Smith-Bybee Natural Area in the direct center. The landfill is the large, green “butte” on the right side of the Natural Area. The Port's dredge spoils field is the large brown area in the lower center, between the Willamette R. and the Natural Area.

managed 2,000-acre Smith-Bybee Wetlands Natural Area) made it an appealing alternative site that might at least partially compensate for the lost habitat. On that basis, Metro and the Port signed a cooperative agreement to create experimental SHL habitat on a relatively flat section of the landfill surface. In September 2007, about 7,200 cubic yards of sand were imported from west Hayden Island on the Columbia R. to the landfill site, and spread over 5-acres to an average depth of nine inches. The area was then lightly seeded with native grasses and forbs that were selected based on seed size and mature height.

Unfortunately, the imported sand was full of weed seeds that responded extremely well to abundant rains during spring and early summer of 2008. This, combined with better-than-expected production by the native plant seed, resulted in a lush plot that does not remotely resemble SHL habitat.

We are implementing a vegetation plan to deal with this situation, and although it's unlikely we'll have suitable conditions for the 2009 nesting season, I'm hoping our efforts will eventually produce desired results, so that future updates will offer more useful information toward the regional effort to restore SHL habitat."

Policy

- Benton County HCP

Suspect that STHL will not be included as one of the species because larks don't occur almost at all and certainly not commonly on County lands. City of Corvallis has not yet formally signed on to HCP. They may want to work with USFWS for a candidate conservation agreement between city of Corvallis and potentially including the FAA.

- DNR Aquatic Lands HCP

STHL are not included in HCP. Not submitted yet, it is on track, but it is not complete, they are still in negotiation. Wanted to get STHL included, because of islands in Grays Harbor and Willapa bay there seems to be appropriate habitat, and at Damon Point, the DNR portion has had larks on it.

Discussions

- Federal decisions for listing of candidates by 2012? - Briefing by Cat Brown

Center for Biological Diversity is suing USFWS over the backlog of Candidates and the warranted but precluded species, some of which have been parked on the Candidate list. There are 250 candidates covered by the lawsuit, which has not yet been settled. They are working to come up with a solution, very likely there will be a step-up of candidate listing – funding to go to high priority species. STHL has a listing priority status of 3 out of 18, determined by threats and monotypic status, etc. Although it is a 3, there are many of species are 3s. There could be some funds in the next few years to list it, but a better use of funds is to preclude listing. They don't expect to be directed to list in the next couple of years, but it could happen.

- Larks and airports

o Olympia Airport -WA briefing by Michelle Tirhi

WDFW is under negotiations with the Port of Olympia, writing a 20 year mgmt plan for the airport. Need for that because of how they manage Mazama Pocket Gophers in the county. The Port owns property surrounding the airport, which is leases for commercial purposes. When those lessees apply for building permits, conditions were put on because of the needs of Mazama pocket gophers, a State Endangered Species that occurs on the leased land. When the lessees apply for a city or county permit, it must be approved by DFW, thereby giving the State a seat at the table.

WDFW and Port of Olympia agreed to revisit a draft management plan for the airport written in 2006 and never completed. WDFW responded to that 5 year plan and rewrote it. WDFW encouraged planning on a longer time scale, and so now looking at production of a 20 year plan. Mgmt plan addresses ongoing surveys and habitat manipulations where they are occupied. This would include DFW bios going on to the airport for ongoing monitoring of the birds and their habitat and feeding the results of that into the ongoing management of the site.

A meeting was held with many parties and included FAA. The FAA outlined that airports are obligated to do certain things and are under federal restrictions, but at the same time needed it to be made clear to FAA that rare species can not be ignored. A good relationship is begun and it was raised that the FAA will consider paying for needs for the species, such as reintroduction of gophers, habitat manipulations for STHLs on the surrounding lease land. This all morphed into good PR for FAA, as well as them being kind of stuck between a rock and a hard place because the Olympia airport is placed under city jurisdiction and is bound by those codes.

****Action:** Perhaps if DFW proposes doing some tilled habitat management (like at Finley) on leased land outside the airport, perhaps they could not only do that work, but have FAA fund the work.

- McChord

WDFW encouraging McChord to do more for STHL, but difficult because they are encouraged, but not required. One way would be to get the state listed and candidate species included in the INRMP. McChord Rodeo is a violation of the Migratory Bird Treaty Act. But difficult to enforce. Get the Service involved, to say they “know” the Act is being violated? The Service should verbally target federal agencies to do the best thing for the candidates. Start planning for next year now

- Corvallis Airport

Although STHLs don’t cause too much trouble in Corvallis; they are the most commonly impacted species in the nation. Air traffic in Corvallis is mostly piston driven, mostly pleasure planes, and only occasionally jets. It is not the breeding season birds, but flocks in the winter that are more of a problem. Trying to convince the FAA that by managing agricultural land near the airport in a certain way, we can mitigate the small threat STHL pose, and also mitigate wintering Canada geese. This is the only real chance to get mgmt plan in place at Corvallis airport.

- Moving Larks off of the airports?

Need the minimum patch size, but we can’t really answer that question, but the smallest patch is the Shelton airport, 320 acres. There are other habitat patches smaller than that on the WA coast and Col. River, but they are surrounded by water, and thus providing an open, treeless landscape.

****Action:** Develop action plan prescriptions for the airports and integrate plans between the OR and WA, perhaps with critical review by the Service. Olympia airport demonstrates the need for multi-species management; we have to really think about that as native prairie has so many components. As part of the Army Compatible Use Buffer Program in South Puget Sound, management plans are being developed for South Sound sites with a focus on Candidate prairie species. These could be a good template for additional sites and multi-species management.

- **Prairie Conservation Planning –Jodi Bush**

USFWS is working on prairie conservation strategy, which may sound loftier than it really is. Development is pushing prairie conservation and the Mazama Pocket Gopher is being brought into the forefront, like it is at the airport. Lots of developers want to throw money to make the problem go away. Leads to questions such as: Does a small patch of occupied MPG habitat mean anything? The

USFWS is developing a modeling exercise with all partners to come up with where the best prairie habitat is. They are beginning this analysis with MPG, they have 8 parameters, soils, distance to disturbance, contiguous habitat, already conserved properties, and others. USFWS is meeting with USGS next week to try and prioritize one patch over another. In October, would like to take the prototype to partners to get feedback before we bring in other species such as STHL, Taylor's checkerspot, etc. Initial focus is on SPS prairies: Thurston, Pierce, Mason Counties etc.

- **NRCS – *Jeremy Maestas***

The farm bill was just passed and if NRCS is told us what to do and how to do it, they can “create all the incentives you want.”

****Action:** Initiate discussions with NRCS to integrate STHLs into the incentive programs.

- **Implementation of the Oregon Conservation Strategy**

On permanently protected wetlands in the Willamette Valley focusing on grassland birds. WEME is the priority species. ODFW, NRCS, USFWS

- **USFWS STHL Draft Action Plan**

The group spent the remaining time working on revising the Action plan. The action plan is designed to be a short-term tool (5 year time frame) to prioritize actions that can be implemented now that would best promote recovery of the streaked horned lark. Not only can practitioners use the plan as a tool to move forward important recovery steps, the Service uses the action plans to direct their finite funding resources.