Benton County Prairie Species Habitat Conservation Plan – Streaked Horned Lark Technical Advisory Committee

August 13, 2007 Meeting Minutes

Attendees

- Bob Altman (American Bird Conservancy)
- Randy Moore (Oregon State University)
- Nicholas Testa (Oregon Department of Transportation)
- Laurie Starha (Benton County)
- Ann Kreager (Oregon Department of Fish and Wildlife)
- Carolyn Menke (Institute for Applied Ecology)
- Michelle Michaud (Institute for Applied Ecology)
- Lori Wisehart (Institute for Applied Ecology)

Minutes

Introductions

Review of Randy Moore's 2007 Roadside surveys

- Randy provided handouts summarizing the results of his roadside fieldwork for the 2007 breeding season. The goal of the field work was to determine how extensively Streaked Horned Lark (STHL) use Benton Co. and in a few cases, City of Corvallis roadsides.
- Previously, it was unclear how extensive larks used roadside habitats in Benton Co., although STHL were known to use roadsides in Linn and Polk counties. Another question his survey work addressed was the impact of roadside maintenance on reproductive success. All accessible and appropriate roads were surveyed and where birds were found on roads, notes were made about how roads were used. Based on the information collected, Randy concluded, during 2007 STHL did not use roadsides in Benton Co. for nesting. Habitat structure was perfect in some places but too narrow to be used by the birds for nesting and there was too much traffic on the roads. Other roadsides had steep banks or other geographical/topographical features not favorable to STHL.
- Randy mentioned that flat shoulders with sparse vegetation can be good habitat, but they have to be in the right landscape (treeless plain or sparse trees) and if there is good habitat nearby (open fields) they're more likely to use that habitat instead of the roadsides. This preference for fields over roadsides may be due to traffic disturbance. In Benton Co. traffic disturbance is much greater compared to roadsides elsewhere (e.g., Baskett Slough National Wildlife Refuge) where roadsides are suitable for breeding.
- STHL are more likely to use habitat along private roads in Benton Co. (compared to county and state maintained roads), but Randy did not have access to these areas.
- One breeding pair was found on Herbert Rd. (non-county managed section), with annual rye fields on either side of the road (inappropriate habitat- too tall). Weedy vegetation on the roadsides provided seed forage for adults and the road receives relatively little traffic; however, the nest was abandoned within a week. The same breeding pair moved their nest out into the adjacent field but continued to forage on the roadside for seeds. Although Randy believes traffic on the city road was

probably too much disturbance for the birds, Bob cautioned that the relationship between traffic disturbance and nest site abandoning is not known for sure. The birds could be abandoning their nests for reasons other than traffic disturbance. The area is also frequented by people walking their dogs.

- Nick asked about STHL use along state highways. Randy did not find good habitat on state roadsides which were generally too disturbed (high traffic) and/or had steep slopes or other unsuitable habitat conditions.
- Bob asked about flat graveled shoulders off paved roads, which may provide good habitat. Bob said such habitat is found in Linn Co. but committee members were not sure about the potential for these habitats in Benton County. Randy suggested that if such habitats do occur in Benton Co, they are rare, and it would be even more rare that larks would use them (for breeding).
- Randy concluded that although the exact criteria for STHL habitat are not known, three important components have been identified: landscape setting (large, open areas), low disturbance, and correct habitat structure (low vegetation and lots of open bare ground – 20 to 50%).
- Bob said to make clear that by "using" we're referring to nesting, the birds are still foraging in roadsides but nest in fields or other habitats.

- Ann indicated that the amount of birds affected by habitat loss would be used to calculate take.

Future survey needs:

- Bob: If not nesting, to what degree are they foraging in roadside areas? Info needed for regulatory standpoint.
- Randy: Such surveys would be easy to do, based on info collected this year, it would be possible to revisit areas where birds were found on roads.
- Bob: Might be good to assess "activity budgets" of the birds to understand how much time is spent where and doing what? Understanding degree of use in roadside areas would help with understanding then predicting degree of impact.
- Committee also discussed the idea that outside the STHL breeding season, the birds may use roads for foraging. Randy cautioned that while this may be true, the use of roads is still likely to be less in Benton Co. than in Linn and Polk Counties.
- Randy: Interns could do observations from blind placed near where larks are known to use roadsides. There are 2 fields adjacent to SH 99 off Finley Rd. where the birds nest in fields but probably use roadsides for foraging, dust baths, etc.
- Lori Starha: County maintains Finley road up to Finley boundary.
- Carolyn: Interns should also observe responses of birds to cars during activity budget surveys. The committee agreed this would be feasible and a good use of time.

Habitat use by birds:

Nick asked for clarification about the row of conifers between fields and SH 99.

- Randy and Bob: The birds are prevented from using SH 99 because the conifers provide too much vertical structure.
- Michelle cautioned that the conifers may not be there for the next 50 years.

Nick indicated the State is doing a large burn in 60 acres of wet prairie. Could it be used by STHL?

- Randy and Bob: Possibly if it's in the right landscape. Randy said wet prairie would require active management to keep it from filling in.

Impacts of County activities:

- Michelle: What activities is Benton Co. performing that could affect the STHL, and to what degree are they impacting the lark?
- Randy: Impacts by County not likely to be significant. Impacts of road maintenance activities will be minimal.
- Michelle: What about cumulative effects of mowing and spraying?
- Bob: Baseline study determining degree of use will be helpful to extrapolate and determine cumulative effect for 50 year period.

- Randy: County should conduct random sampling of places with suitable habitats on gravel roadsides and sampling presence/absence of larks.
- Bob: Random sampling will give a lot of negative data.
- Committee: This information (absence data) was also important for county.
- Lori Starha: Other road control impacts include: Dust control, spraying, rocking, ditching, mowing, etc.
- Michelle: Do presence/absence surveys or surveys for suitable habitat need to be done every year in order to determine if lark habitat may be affected by County activities?
- Randy: Yes, if you want to be sure, but County HCP will have to determine level of risk.
- Ann: USFWS can't require research. HCP is based on best available science. They will want worst case scenario based on best available science.
- Michelle: Is it best to say there will be continual impacts, but to what degree we're not sure, and mitigate by acquiring habitat for the lark?
- Committee agreed that a 100-acre field in the proper landscape in Benton Co., would be a great investment, and could serve as a tradeoff for unquantifiable impacts resulting from roadside activities.
- Randy: Herbert open space has some of the best potential habitat.
- Ann: County may not be able to exclude people from area if County dollars are used for acquisition.
- Michelle: There may be a problem with Herbert because of its proximity to airport. Mitigation for birds may be restricted within 10,000 feet of runways.
- Randy: All open fields at the airport are managed for lark inadvertently. If Herbert was maintained for larks, birds might move there from the airport, but the birds would continue to use the airport so long as sufficient habitat was present.
- Michelle: Annual maintenance by city (at the airport) may negatively impact birds in the short term, so the City may need to mitigate for those impacts.
- Randy: Number of larks nesting on roadsides may go up depending on how roads are defined. If runways are counted as roads and lots of maintenance to maintain runways is conducted. The Corvallis Airport Manager may be interested in getting information about maintaining runways for lark habitat.
- Nick: What about new runways proposed over next 50 years?
- Randy: The most important habitat at airport is not located near future planned construction. Population will still be valuable if grass seed fields are maintained. If surrounding fields were managed as lark habitat, then the population could be even greater.
- Carolyn: What are negative impacts at the airport?
- Randy: The airport sprays gravel roadsides but they do it outside of the nesting season. Randy observed no effects of herbicide spraying on adults, some pairs fledged kids, but the overall effect on reproductive success is unknown.
- Bob: There are negative effects, but despite negative effects it's a large population at the airport. However, if those maintenance activities (with negative impacts) were dropped, the population might be even larger.
- Randy: Larks are not a big threat for airplanes because they're small, but they do flock in winter which can be a bigger threat.
- Michelle: FAA lists the bird as a hazard wildlife. Also, traffic at airport might increase in next 50 years.
- Randy: May be able to keep the birds in one field in winter (if high quality food is provided), to minimize risk to airport from flocking larks. Disturbance applied at the right time of year then left alone will most likely result in good quality lark habitat.
- Carolyn: Management recommendations are needed to provide land managers like the airport with a way to avoid and/or minimize impacts to STHL?
- Carolyn: What is the best time for this disturbance?
- Randy: Based on observations fall scraping will result in unsuitable habitat early in breeding season, but winter through late spring disturbance (scraping) results in good quality lark habitat through breeding season.
- Ann: How far do the birds travel? Are they looking for open spaces? Can they go through any kind

of habitat? Conservation is constrained in county, so how do we link that to outside the county?

- Randy: Birds are nomadic here because they have to be. Habitat is ephemeral, dependent on disturbance. The birds can travel long distances.
- Bob: Corridors and distances not an issue for STHL. Linkages good for larger populations, birds will find new patches without trouble.
- Randy: Creation of spatially appropriate habitat is key. Habitat should be spread out, not clumped. Minimum territory sizes and what constitutes best habitat is not known. Nests are generally 30m apart, however, in some places they are packed in (reason unknown). These areas are highly disturbed, sprayed and mowed, with diverse vegetation.
- Bob: Theoretically, a 100-acre field could sustain a lot of birds. Maybe 50+ pairs. Maximum territory size in literature is 7-10 acres per breeding pair, minimum is less than 2 acres.
- Ann: What is the reproductive output in the county?
- Randy: That will be determined next year. Twenty (20) nests found this year with 50% success, relatively good.
- Bob: Elsewhere it is less than 20% (i.e. Puget Sound).
- Ann: What genetic information do we have?
- Randy: They are basically clones. Genetically the STHL in Benton Co. are very similar to each other but they are very different from other lark subspecies populations. The Benton Co. population is probably currently bottlenecked or was in the past.
- Nick: A botanical survey of airport might be helpful to understand what makes that habitat good.
- Randy: Will probably find that consistent seed production is important.
- Bob: A survey would be good to identify the food source in gravelly areas that can be maintained over time.
- Randy: The Evergreen wetland mitigation bank site may be good lark habitat, but FWS wetland mitigation standards limits the percentage of bare ground. How can wetland and prairie restoration happen and lark habitat restoration too? Wetland restoration methods may be modified to be conducive to larks.
- Michelle: What is the geographic scope of lark habitat in the county?
- Randy: Narrow strip of grasslands south of city. [Circled area on map, most open part of valley.]
- Michelle: What about larks in northern Benton Co.?
- Randy: Just north of Benton Co. lark habitat gets better.
- Ann: Herbert is already in mitigation by BPA.
- Randy: EE Wilson has potential habitat depending on how it is managed. [Randy did roadside surveys by EE Wilson, but none had good habitat].
- Ann: Consideration of future development will be important to ensure that birds don't get surrounded by urban areas.
- Randy: Landscape in northern Benton Co. is suitable but the habitat isn't there. No larks were found during surveys this year. There are a lot of options for managing larks, which need to be further investigated before implementing restoration/mitigation.
- Michelle: What are the best potential sites for restoration?
- Bob:
    - Philomath (sewage treatment) - low
    - Herbert - high
    - Evergreen - low
    - EE Wilson or Adair property - high
    - Winter Creek (WRP) – low
    - Lands adjacent to Finley - high
- Bob: Lands adjacent to Finley might be favorable because so much of the neighboring land would be protected.
- Randy and Bob: Land doesn't have to be close to current breeding populations.
- Ann: What is the minimum size of land needed to sustain a population?
- Randy and Bob: Size is irrelevant as long as landscape is appropriate (i.e. no trees).
- Ann and Bob: Need to expand upon existing populations and ensure that fields don't get surrounded.

- Ann: Would like a general buffer size to know how big, if surrounded by development or non-habitat, a piece of land would need to be to sustain a population.
- Ann: If/when species status changes, mandates on refuges will change. Currently wildlife refuges are required to treat candidate species as if they were listed, but this policy is not always implemented.
- Randy: In many cases the policy is not implemented because they don't know what to do to help the STHL.
- Michelle: If the area south of Corvallis was outlined as a conservation focal area, then any property in that area would be ok.
- Bob: Forty (40) acres adjacent to Finley would be better than 80 acres a few more miles down the road.
- Ann: A prioritization scheme for different parcels would be good for HCP and has been done for other HCPs.

Priorities for field work next year:

- Randy and Bob: Reproductive success information in stratified set of habitats to understand criteria for management and creation of lark habitat.
- Ann: What is the long term viability of STHL population in Benton County? How could the population be increased as opposed to keeping it static? What information is out there currently about trends in population size?
- Bob: Information is available from last 35-40 breeding bird surveys, although sample sizes were low, about 7% per year. With so few detections the value is probably not that accurate, but it is the best information available. A plot of relative abundances of STHL from surveys also showed declines in population sizes over time.
- Ann: If bird is listed, recovery plan will be needed. Information put together now as part of HCP would be helpful for understanding long term projections. Not just mitigating for take but also for recovery.
- Carolyn: HCP is not responsible for Recovery.
- Bob: If and when the bird is listed, it will be grouped with other bird species.
- Bob: There will be a STHL workshop in Vancouver Washington, September 28, 2007 from 9-4 (Friday), and the HCP is on the agenda. Will need someone from IAE to present.

Tasks

- Develop plan for future field work
- Distribute STHL workshop information to N. Testa and A. Kreager