A Stewardship Approach to Grassland Bird Habitat Conservation in Saskatchewan, Canada¹

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Introduction

Saskatchewan provides habitat for a number of grassland specialists that are of high conservation concern. For example, 10 of 12 "primary endemic," and 17 of 25 "secondary endemic" species of the Great Plains identified by Mengel (1970) regularly breed in Saskatchewan. In addition, each of the 30 species of high conservation concern currently identified in the Prairie Partners in Flight Bird Conservation Plan regularly breed in the province (Anderson et al., unpubl. data). Some species (e.g., Baird's Sparrow, Ammodramus bairdii), reach their greatest abundance in Saskatchewan (Sauer et al. 2002). While several species occur in seeded/introduced grassland (Davis and Duncan 2000), others such as Sprague's Pipit (Anthus spragueii) occur almost exclusively on native prairie (Owens and Myres 1973, Davis et al. 1999, McMaster and Davis 2001).

Nearly 162 million ha of native prairie was present on the Great Plains prior to European settlement. Land settlement and agricultural policies resulted in losses of 30-99.9 percent of the native prairie in North America, depending on the particular geographic area (Samson and Knopf 1994). In Saskatchewan, only 20 percent of the original native prairie remains, mostly in the southwestern portion of the province (Hammermeister et al. 2001). In some areas of the province where soils and landscapes are particularly suited for crop production, less than 0.1 percent of the original native prairie vegetation exists (Riemer et al. 1997). Existing native prairie continues to be threatened by cultivation, invasion by exotic plant species and woody vegetation, improper grazing management, and urban development (Riemer et al. 1997).

About 85 percent of Saskatchewan's 12.5 million acres of native prairie is privately managed with 45 percent under private ownership (Hammermeister et al. 2001). Therefore, it is important that any grassland bird conservation program include private land managers.

In 1996, the Saskatchewan Wetland Conservation Corporation (SWCC; now Saskatchewan Watershed Authority) recognized this need and subsequently focused its activities on voluntary habitat stewardship programs with private landowners. SWCC's Native Prairie Stewardship Program is focused on private individuals that own and/or manage native prairie.

Since 1996, over 750 private landowners have participated in the program through Voluntary Stewardship Agreements. The Voluntary Stewardship Agreement is a verbal agreement whereby the producer agrees to maintain their native prairie to the best of their ability and to notify SWCC of major changes in management or change in ownership. Our primary objectives are to (1) discourage breaking of native prairie, (2) provide technical assistance to the producers if they are contemplating changes in management, and (3) contact new landowners to encourage them to conserve the native prairie.

Native Prairie Stewardship and Grassland Birds

SWCC's Native Prairie Stewardship Program comprises habitat enhancement, restoration, and securement. While the program is delivered throughout the grassland region of Saskatchewan, current emphasis is placed on key landscapes under the North American Waterfowl Management Plan. Within these regions, the focus is on native prairie because research has shown that many high priority grassland songbirds reach their greatest abundance/occurrence on native prairie rather than in cropland or seeded pastures and hayfields (Owens and Myres 1973, Wilson and Belcher 1989, Davis et al. 1999). In addition, the program does not concentrate only on large blocks of contiguous grassland as small patches of native prairie have been shown to be as productive as large patches for several grassland songbirds including Baird's Sparrow (Davis 2003).

Restoration and enhancement activities focus primarily on converting cropland to perennial cover (primarily for grazing) and promoting range management activities that improve range condition (Abouguendia 1990).

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Converting cropland to seeded pasture provides habitat directly for grassland birds (Davis and Duncan 1999) and there is less chance of mortality due to management such as cutting hayfields (Bollinger and Gavin 1992, Dale et al. 1997). Converting cropland to pasture also helps to increase patch size and enhance existing native prairie by providing landowners the opportunity to defer grazing on their native prairie by grazing the seeded pasture earlier in the season. Improving range condition and increasing patch size can improve habitat quality for species of high conservation concern such as Sprague's Pipit (S.K. Davis, B.C. Dale and D.C. Duncan, unpubl. data; Davis 2003).

Native Prairie Stewardship and Private Landowners

In a survey of 148 landowners completed in January 2001, 36 percent said they joined our Native Prairie Stewardship Program because they wanted to preserve their prairie, 33 percent said it sounded like a good idea, 9 percent said they valued their native prairie, and 9 percent said they joined because it was something they were already doing. We also believe that many landowners have joined the program because it is non-threatening. The Voluntary Stewardship Agreements are not legally binding; no signature is required—only a handshake. Landowners maintain control of their land and are not worried about the "government coming in and taking it over."

The personal visit we make with the landowner also has contributed to the success of the program. In the first year of the program we determined the best methods to contact landowners. The methods involved:

- Mail-out only: 100 landowners were sent an information package in the mail that included a postage-paid reply card. Landowners who did not respond were sent a second letter five weeks later.
- 2) Mail-out and phone call: 100 landowners were sent an information package in the mail that included a toll-free telephone number to reply to. Landowners who did not respond were phoned 2-3 weeks later to arrange a personal visit.
- 3) Unannounced visit: 100 landowners were "dropped-in" on without notice for a personal visit.
- 4) Arranged visit: 100 landowners were phoned and a personal visit was arranged.

Only 10 percent of landowners contacted through mailouts alone (Method 1) responded, whereas 50 percent, 46 percent, and 48 percent of landowners contacted through Methods 2, 3, and 4, respectively, became voluntary stewards. All of these methods involved a personal visit. However, arranged visits (Method 4) have been determined to be most cost effective. Our personal visits let landowners know that our program is important enough for us to take the time to meet them in person. It also supplies the landowner with a face that they can associate with the organization, thus increasing their level of trust—an important factor in gaining participation.

Having joined the program, feedback from landowners indicated that frequent contact was required to maintain their interest. This was accomplished through information provided through a combination of personal visits, a monthly newsletter, and extension activities such as workshops. Extension activities are extremely important because they demonstrate why conserving prairie is important and how landowners can improve the condition of native prairie and economic viability at the same time. For example, workshops allow landowners to see economically and environmentally feasible management techniques that other landowners in their area are using. Seeing the benefits of these practices first-hand is more likely to inspire a landowner to adopt these practices than if an agency representative tells him about them or simply provides written information.

A preliminary evaluation indicated that the program is accomplishing our objectives but that more work is needed. We conducted a phone survey of stewards in 2001 to assess their attitudes toward the program and to learn how the program has affected their management of native prairie. Seventy percent of those interviewed said they had learned something new about native prairie, 33 percent said that they see their prairie in a new way, and 83 percent rated the program as "good" or "excellent." Although 95 percent of stewards contacted indicated they had not broken any native prairie since joining the program, eight (5 percent) landowners indicated that they had broken some native prairie. Reasons for breaking native prairie included, (1) seeding to tame pasture, (2) creating a trail, (3) establishing shelterbelts around homes, and (4) no longer had cattle and did not need some of the previously used grassland. Although these activities involved a small amount of native prairie (largest was 8 ha), our hope is to continue to gather more information about the effectiveness of the program so that we can further reduce the number of acres of native prairie

Recommendations

Our advice to individuals and agencies interested in delivering similar programs with private landowners is that trust, continual contact, flexibility, and credibility are extremely important principles for successful program delivery. Meeting landowners in person helps to gain their trust, and if landowners are only available at lunchtime or in the evenings, then adhering to traditional workday hours will hamper success. Be flexible and adjust your schedule to fit your target audience. After initial contact, a regular newsletter and periodic workshops are effective in maintaining relationships. Workshops should be scheduled at times that are convenient for landowners, not during calving or seeding, for example.

Workshops should be held in a setting that your audience is comfortable in to improve attendance and increase the effectiveness of your message. For example, landowners may be intimidated by the thought of attending a workshop being held at a university, but they will attend one being held out of their local community center. Going to their communities further emphasizes the importance you place on your message. Lastly, terminology and activities should be constructed at a level of understanding that fits your audience. Overly academic or unfamiliar terms and concepts may only alienate a group of landowners.

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