Missouri Bird Conservation Initiative Grant Program
FY2022 Call for Proposals
Proposals due September 30, 2020
Work Period July 1, 2021 – June 30, 2022

The Missouri Bird Conservation Initiative (MoBCI) serves as a conduit in providing financial support from the Missouri Department of Conservation (other partners provide funding at times) to private and public organizations, or to individuals who have partnerships that carry out bird habitat conservation projects in Missouri. **MoBCI financial support is to be specifically spent on bird-habitat improvement projects that meet the needs of native birds that use native habitats in Missouri and must address bird conservation goals/objectives.** Eligible activities include projects that protect, enhance, or restore bird habitats in priority areas (defined below) in Missouri. All projects should be habitat-based and not strictly designed for monitoring; however, monitoring can be a component of the project (<10% of the MoBCI request); some component to monitor effectiveness is recommended. MoBCI grant funds cannot assist applicants with administrative overhead costs and cannot be used to purchase equipment. Applicants can include their administrative overhead as match provided it is directly related to the bird habitat improvement project or monitoring of the project being proposed through this current Call for Proposals.

Strong priority in the review scoring will be given to projects that address habitats found in MO’s Natural Community/Habitat Management Tiers from the Comprehensive Conservation Strategy (Appendix A) and partnerships generated through MoBCI. Priority habitats are founded on the Conservation Opportunity Areas (COAs) identified in the 2015 State Wildlife Action Plan, which is being revised in 2020 (Figure 1; https://mdc.mo.gov/sites/default/files/downloads/SWAP.pdf, page 31). Names of individual COAs can be found in the chapters relating to the primary habitat type for that COA. Appendix A at the end of this call for proposals describes the tiers and includes maps showing the locations encompassed by them. Higher scores will be given to projects occurring within higher priority tiers. Due to budget constraints, few projects will be funded in tiers 4 – 6. If your project is on land found in a priority tier (e.g., priority geography, natural area, other COA), please include the name of that geography within your proposal.

Page 1
Projects should benefit an array of bird species (e.g., grassland, forest, wetland, or glade birds). An acceptable project may target one or more high priority bird species, but should include benefits to other bird species, involve habitat and ecosystem level planning and management, and engage partners with shared goals and objectives. Missouri’s priority species are outlined in the Missouri Bird Conservation Plan’s Technical Section (Appendix B; https://mdc.mo.gov/sites/default/files/downloads/MOBirdConservationPlanTech.pdf, page 16). A checklist of Missouri species and communities of conservation concern can be found at https://nature.mdc.mo.gov/sites/default/files/downloads/2020_SOCC.pdf, bird species listed on page 40. The State Wildlife Action Plan also has a list of Species of Greatest Conservation Need found in Appendix A on pages 36-39 in the 2015 State Wildlife Action Plan. (https://mdc.mo.gov/sites/default/files/downloads/SWAP.pdf).

Applicants need to establish partnerships to qualify for receipt of these funds. Partnerships can enable leveraging of funds as well as providing expertise of others. Partners often educate each other and result in increased conservation of wild bird populations and habitats needed to support them beyond the life of the project being funded.

**Grant awards**

The Missouri Department of Conservation (Grantor) will consider all selected projects during its FY22 budget process. There will be no total minimum or maximum amount of funding provided to MoBCI. Individual grant awards are available for a minimum award of $1,000 to a maximum award of $25,000 annually. MoBCI grants require a one-to-one match of [local, state, or federal] funds that DO NOT originate from the Missouri Department of Conservation (including Wildlife Diversity Funds, Habitat Challenge match, or any other Department sources).

The match may include acquired realty, partner financial contributions, monitoring and evaluation costs, stewardship costs, volunteer time, etc. Projects which include a significant amount of overhead as match (i.e., indirect administrative expenses) are strongly discouraged. Donated or acquired property or easements may be included as part of the project match for a maximum of 5 years as long as the following conditions are met:

- A copy of the appraisal is included (not included in the page length limit) to document the valuation (must be provided from a non-recipient of the property or easement);

- A table documenting each year and value that the property/easement has been used as match toward MoBCI funding, the cumulative value already used as match toward MoBCI funding, and the current year’s requested match provided by the property/easement to document the total use of the property/easement as match and relation to its total value (see example in Table 1).

- The property/easement may not be used as match if the cumulative value of the match claimed toward MoBCI projects exceeds the value of the property/easement.
• At least 50% of the match toward MoBCI funding should be from sources other than donated or acquired property or easements.

<table>
<thead>
<tr>
<th>Match Plan</th>
<th>Proposal I</th>
<th>Proposal II</th>
<th>Proposal III</th>
<th>Proposal IV</th>
<th>Proposal V</th>
<th>Total $</th>
</tr>
</thead>
<tbody>
<tr>
<td>XYZ Easement</td>
<td>$12,500</td>
<td>$12,500</td>
<td>$12,500</td>
<td>$12,500</td>
<td>$12,500</td>
<td>$62,500</td>
</tr>
<tr>
<td>Totals</td>
<td>$62,500</td>
<td>$50,000</td>
<td>$37,500</td>
<td>$25,000</td>
<td>$12,500</td>
<td>$0</td>
</tr>
</tbody>
</table>

Table 1. An example of a spend-down table for the “XYZ Easement” valued at $62,500 used as match over five years.

**Application and Review Process**

Grant applications must follow the format listed in the General Requirements section below (see Appendix C for Sample Proposal). The MoBCI Grant Subcommittee will review, score (based on the ranking criteria below), and provide funding recommendations to the MoBCI Steering Committee. The MoBCI Steering Committee will make recommendations for final approval to the Missouri Department of Conservation (MoBCI grant administrator).

Proposals will be ranked by the MoBCI Grant Subcommittee based on

- Priority and non-priority bird species addressed (15 points)
- Priority habitats conserved (e.g., Priority Geography/Natural Area, other COA, Quail Restoration Landscape) (20 points)
- Purpose of grant (detailing goals and objectives) and project description/narrative (15 points)
- Partnerships developed (20 points)
- Capacity of the organization(s)/individual to accomplish the project (10 points)
- Budget (15 points)
- Bonus for first-time MoBCI proposal from an organization (5 points).

**General Requirements**

(Failure to follow these requirements or failure to include any of these elements will result in your proposal being disqualified.)

- Maximum length is six pages for the entire proposal, including maps, etc., and at least an 11-point font.
- Grant Title
- Purpose of Grant (Clearly define goals, objectives, or activities to be achieved with applicable time lines.)
- Project Location (include map)
- Is this the first time you have submitted a MoBCI Grant Proposal? Yes or No
- Project Description including narrative and any pertinent tabular information.
- Habitat types, birds, and other wildlife benefited.
Project Calendar (work period is July 1, 2021 through June 30, 2022)
Measurable Outcomes (Identify specific and measurable outcomes that will be used for tracking progress.)
Measurable Deliverables (Describe products or services that will be provided by the grantee. Note: Mandatory deliverables will include 3-5 good quality digital photographs of people conducting project actions and 1-2 photos clearly illustrating habitat improvements. Semi-annual and annual financial and progress reports are also mandatory deliverables.)
Budget should include a table including Grant Request Amount and columns for funds requested from MoBCI and funds provided as matching dollars (see Table 2). A detailed narrative of how the funding will be used is also necessary.

<table>
<thead>
<tr>
<th>Task</th>
<th>MoBCI Funds Requested</th>
<th>Match Source &amp; Amount</th>
<th>Total Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cut and remove cedar trees</td>
<td>$7,500</td>
<td>$3,500 (paid by landowner)</td>
<td>$11,000</td>
</tr>
<tr>
<td>Burn crew</td>
<td></td>
<td>$2,500 (from partnership volunteer hours)</td>
<td>$2,500</td>
</tr>
<tr>
<td>Pre- and post-monitoring of birds</td>
<td></td>
<td>$1,500 (from Missouri University)</td>
<td>$1,500</td>
</tr>
<tr>
<td><strong>Sum of Costs</strong></td>
<td><strong>$7,500</strong></td>
<td><strong>$7,500</strong></td>
<td><strong>$15,000</strong></td>
</tr>
</tbody>
</table>

Table 2. Sample budget table for restoring glade habitat.

Reporting and monitoring plan (Describe process for monitoring and reporting progress and identify a point-of-contact with e-mail address.)
Lead organization, point-of-contact and their capacities (Provide names, titles, addresses, electronic addresses and phone numbers of parties who can answer questions relating to the agreement; if applicable, include a list of NGO Board members and officers.)
List of partners involved in the project and point-of-contact for those other partners (same as above for Lead Organization).
Fiscal Responsibility/Management (Describe fiscal management and identify grantee fiscal agent.)

A proposal that was funded under slightly different guidelines follows this Call for Proposals to assist you with preparation of your submission.

**Deadlines**
All grant proposals **must be received by Susan Hazelwood at hazeldhs@missouri.edu no later than 5:00 p.m. September 30, 2020. Only electronic applications in pdf format will be accepted.** Please put “MOBCI GRANT PROPOSAL (Your organization’s name)” in the subject line of your submission email. The MoBCI Grants Subcommittee will notify applicants of their status within three months of due date and indicate recommendation for funding made to
Missouri Department of Conservation or reasons for rejection and/or suggestions for making the proposal more competitive. Grantees will be required to complete a cooperative agreement with the funding agency (i.e., Missouri Department of Conservation).

To learn more about MOBCI go to www.mobci.net.

For Grant Assistance Contact:

Susan Hazelwood, Grants Committee Chair
3750 Miller Dr., #1308
Columbia, MO 65201
hazelwoods@missouri.edu
(573) 819-9252

Norman Murray
Missouri Department of Conservation
P.O. Box 180
Jefferson City, Missouri 65102
Phone: 573-522-4115 ext. 3353
E-mail: Norman.Murray@mdc.mo.gov
Appendix A: Natural Community/Habitat Management Tiers from the Comprehensive Conservation Strategy (revised 2020):

1. The Priority Geographies (PGs) and Natural Areas (NAs)

2. Conservation Opportunity Areas (COAs) not located within PGs or NAs

3. Priority Forest Landscapes (PFLs); Quail Restoration Landscapes (QRLs); Priority Watersheds (PWs) that overlap COA Stream Reach Watersheds for Reference; Comprehensive Conservation Wildlife Strategy (CWCS)/Aquatic GAP landscapes within PWs and COA Stream Reach Watersheds for Reference; MO and MS River Alluvium and Riparian (Bootheel); and Department lands adjacent to conservation landowner cooperatives not located within PGs, COAs, or NAs
   (NOTE: Many, or a large portion of these focal landscapes are represented in PGs/COAs.)

   Remaining Missouri communities of conservation concern with state rank = SH, S1, S2
   (NOTE: Many, or a large portion of these communities of concern are represented in PGs/NAs/COAs)

   Remaining natural communities harboring federally threatened and endangered (T&E) species, state endangered species, or select high priority species of conservation concern (typically those with state rank = S1 or S2) when the habitat management contributes to the recovery or persistence of the species
   (NOTE: Many, or a large portion of these communities harboring T&E species are represented in PGs/NAs/COAs)

4. Remaining PWs and CWCS/Aquatic GAP landscapes not located in the above-listed priority landscapes

5. Maintenance of high quality natural communities

6. Areas striving toward natural community restoration/management that have high restoration potential
MDC Tiered Approach to Natural Community and Habitat Management

Tier 1
Tier 2
Tier 3
Tier 4

0 25 50 100 Miles

Page 10
Appendix B: Missouri Bird Conservation Plan’s priority bird species.

<table>
<thead>
<tr>
<th>Natural Community</th>
<th>Common Name</th>
<th>MO Concern Score</th>
<th>Population Trend, MO</th>
<th>Threats to Breeding, MO</th>
<th>Relative Density - Breeding, MO</th>
<th>Population Size, Global</th>
<th>Breeding Distribution, Global</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRASSLAND BIRDS</td>
<td>Eastern Kingbird</td>
<td>15</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Grasshopper Sparrow</td>
<td>15</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Henslow’s Sparrow</td>
<td>17</td>
<td>2</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Bobolink</td>
<td>11</td>
<td>1</td>
<td>4</td>
<td>2</td>
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<tr>
<td></td>
<td>Eastern Meadowlark</td>
<td>17</td>
<td>5</td>
<td>4</td>
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<td>1</td>
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<tr>
<td>SAVANNA, WOODLAND, AND YOUNG-FOREST BIRDS</td>
<td>Dickcissel</td>
<td>16</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>2</td>
<td>2</td>
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<tr>
<td></td>
<td>Northern Bobwhite</td>
<td>16</td>
<td>5</td>
<td>4</td>
<td>4</td>
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<td>2</td>
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<tr>
<td></td>
<td>Yellow-billed Cuckoo</td>
<td>16</td>
<td>5</td>
<td>3</td>
<td>5</td>
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<tr>
<td></td>
<td>Chuck-will’s-widow</td>
<td>16</td>
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<td>4</td>
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<tr>
<td></td>
<td>Eastern Whip-poor-will</td>
<td>18</td>
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<tr>
<td></td>
<td>Chimney Swift</td>
<td>16</td>
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<tr>
<td></td>
<td>Red-headed Woodpecker</td>
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<tr>
<td></td>
<td>Eastern Wood-Pewee</td>
<td>14</td>
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<tr>
<td></td>
<td>Bewick’s Wren</td>
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<td>5</td>
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<tr>
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<td>Brown Thrasher</td>
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<td>3</td>
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<tr>
<td></td>
<td>Eastern Towhee</td>
<td>15</td>
<td>4</td>
<td>3</td>
<td>4</td>
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<tr>
<td></td>
<td>Field Sparrow</td>
<td>17</td>
<td>5</td>
<td>3</td>
<td>5</td>
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<tr>
<td></td>
<td>Yellow-breasted Chat</td>
<td>13</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Orchard Oriole</td>
<td>13</td>
<td>3</td>
<td>3</td>
<td>5</td>
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<tr>
<td></td>
<td>Blue-winged Warbler</td>
<td>15</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Prairie Warbler</td>
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<td>5</td>
<td>3</td>
<td>5</td>
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<td>2</td>
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<tr>
<td></td>
<td>Blue Jay</td>
<td>14</td>
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<td>3</td>
<td>4</td>
<td>2</td>
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<tr>
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<td>Wood Thrush</td>
<td>14</td>
<td>3</td>
<td>3</td>
<td>4</td>
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<td>2</td>
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<tr>
<td></td>
<td>Worm-eating Warbler</td>
<td>15</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Prothonotary Warbler</td>
<td>13</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>2</td>
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<tr>
<td></td>
<td>Kentucky Warbler</td>
<td>15</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>2</td>
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<tr>
<td></td>
<td>Cerulean Warbler</td>
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<td>4</td>
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<td>2</td>
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<tr>
<td>WETLAND BIRDS</td>
<td>Green Heron</td>
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<td>5</td>
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<tr>
<td>GENERALIST BIRDS</td>
<td>Common Grackle</td>
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<td>5</td>
<td>4</td>
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<td>1</td>
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<tr>
<td>SPECIAL CIRCUMSTANCE BIRDS</td>
<td>Ruffed Grouse</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Greater Prairie-Chicken</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<td>-</td>
</tr>
<tr>
<td></td>
<td>King Rail</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<td>-</td>
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<tr>
<td></td>
<td>Bachman’s Sparrow</td>
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<td>-</td>
</tr>
<tr>
<td></td>
<td>Brown-headed Nuthatch</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<td>-</td>
</tr>
</tbody>
</table>

1 MO Concern Score = sum of other five scores: MO Population Trend, MO Threats to Breeding, MO Relative Density, Global Population Size, and Global Distribution.

2 Special Circumstance Birds were not scored due to extremely low breeding populations caused by various circumstances. See SPECIAL CIRCUMSTANCE BIRDS section of the Missouri Conservation Bird Plan for more info.
Appendix C: SAMPLE MOBCI GRANT PROPOSAL

Grant Title: Ha Ha Tonka State Park Bank Branch Glade Restoration

Purpose of Grant: Grant funding of $8,607.20 would allow Missouri State Parks to hire a two-person crew for the purpose of restoring 14 acres of dolomite glades and their associated woodland edges through cedar removal.

Project Location: Ha Ha Tonka State Park (3,751.74 acres) is located 3.7 miles via US Hwy 54 and State Rd D, from the town of Camdenton in Camden County. State Rd D bisects the park, and the facility is surrounded by privately owned property of similar land types. The facility contains two Missouri Natural Areas (NA). The Ha Ha Oak Woodland NA consists of 2,995 acres of woodlands, glades, and a large sinkhole possessing glacial relict populations. The 70-acre Ha Ha Tonka Karst NA highlights the park’s significant karst resources. Missouri State Parks designated the entire park as an Ecological Stewardship Management Area. This allows for the occurrence of stewardship management activities including prescribed fire, cedar removal projects, and hardwood thinning. Currently 52.73% of the park’s woodlands and glades are actively managed with fire and cedar removal projects.

Ha Ha Tonka State Park is within the boundaries of the Upper Niangua Conservation Opportunity Area (COA) and has been designated as an area for active ecosystem restoration activities in the Woodland and Glade Restoration Strategic Conservation Initiative (2008). The facility is also located in the Niangua River Watershed Important Bird Area (IBA) and is highlighted in The Nature Conservancy’s (TNC) Ecoregional Assessment for its contribution to the greater conservation goals of the Niangua Basin. Ha Ha Tonka State Park is within the boundaries of the Central Hardwoods Joint Venture Project’s Bird Conservation Region (BCR-24) which prioritizes conservation of woodland, grassland-shrubland, and forest interior birds such as Blue Winged Warbler, Kentucky Warbler, Orchard Oriole, Yellow-breasted Chat, Field Sparrow, and Bewick’s Wren.

A contributing factor for these designations is the vital role the park’s managed woodlands and glades play in the life histories of birds, plants, and other forms of wildlife. Continental Priority species such as American Woodcock, Red-headed Woodpecker, Worm-eating Warbler, and Prairie Warbler are common inhabitants in the park’s managed ecosystems. Ha Ha Tonka State Park’s woodlands, glades, and karst...
features have been nominated in 1976 and in 2012 for National Natural Landmark status, sponsored by the National Park Service. The Missouri Bird Conservation Initiative (MoBCI) awarded three grants for cedar removal, woodland restoration, and fireline construction to Ha Ha Tonka State Park since 2010.

**Project Description:** This project will be completed on a 14 acre glade complex and their associated woodland edges, situated above Bank Branch. The project area is adjacent to 110 acres of diverse glades and woodlands currently under fire management within the Bank Branch Burn Unit. The project glades are not currently under fire management, and they all possess dense to scattered cedars creating a barrier to native flora growth. The entire glade restoration project will occur in the 2,995 acre Ha Ha Tonka Oak Woodland NA.

The fire-mediated woodlands and glades of the Niangua Basin have existed for thousands of years. Unlike in other regions of the Ozark Highlands, private landowners in the Niangua River watershed have managed their lands with frequent fires since settlement, thus maintaining some of the best remaining examples of this native landscape type. Based on Floristic Quality Indices, a standard guide by which species richness is calculated, Ha Ha Tonka State Park and Bennett Spring Savanna (TNC) possess the highest quality woodlands and glades in the Niangua Basin; scientific research projects frequently occur in both sites. In 1995, 1999, and 2009 researchers conducted extensive bird surveys in the Ha Ha Tonka Oak Woodland NA. The results of the survey suggest that the natural communities managed with fire host a wide array of songbirds, several of which are declining throughout their range and have been identified by Partners in Flight (PIF) as priority species for management objectives. Large populations of breeding Yellow-breasted Chats, Prairie Warblers, Northern Bobwhite Quail, and Field Sparrows were detected in 2012 on the park’s glades and surrounding woodlands in the MoBCI grant project areas. This shows a marked increase in populations from the 1995 survey which was conducted after only four prescribed fire events in the area.

Park staff wish to initiate glade restoration efforts on the glades adjacent to Bank Branch to expand the acres treated in order to enhance bird habitat and encourage species richness. The removal of cedars and the following treatments of fire would allow sufficient light to the glades in turn, rejuvenating endemic flora. This correlates to thriving bird, invertebrate, and other vertebrate populations. Currently cedars dominate the land in the project areas, however there are stands of little bluestem, big bluestem, Indian grass, and scattered glade coneflowers restricted to the open pockets between the cedars with no exotics present. The suppression of native flora by the cedars has also allowed understory species such red bud to begin colonizing the cedar shaded portions of the glades. Cedar removal will involve cutting and burning the cedars on site. Prescribed fire will be applied to the area in winter 2021 as a part of the newly expanded Bank Branch Burn Unit (122 acres).

The cedar tree colonization of this glade resulted in their dense to scattered thickets unsupportive of grassland-shrubland birds. Funding would allow for the hiring of a two-person crew, for 400 hours each, to assist park staff with clearing the cedars from the glades. Cedar removal will enhance habitat for grassland-shrubland birds identified in the Partners in Flight Priority List and Central Hardwoods Joint Venture priority list (Prairie Warbler, Blue-winged Warbler, Yellow-breasted Chat, Field Sparrow, Northern Bobwhite). Cedar trees will be cut at the base, placed in windrows, and burned on site while green to mitigate soil damage that comes with burning red needle stage trees. The glades will be burned after the clearing project in winter 2021 during the regularly scheduled prescribed fire for this burn unit. A partnership between The Lake of the Ozarks Chapter of the Missouri Master Naturalists and Missouri State Parks will provide for three birding events in the area by the Missouri Master Naturalists to increase the bird occurrences in the area for the SPARKS checklist program and to track bird occurrence in the
glade complex. This partnership will represent the first collaboration between Ha Ha Tonka State Park and The Lake of the Ozarks Chapter of the Missouri Master Naturalists.

The glade restoration project will begin in winter 2020 and continue through spring 2021, or as funding is available. Grant funding will be matched by the salary and fringe of one fulltime Interpretive Resource Specialist III (IRS III) for 100 hours, who will direct and oversee the project, and one part-time stewardship crew member funded by the Stewardship budget from the Resource Management and Interpretation Program for 400 hours.

**Habitat Types and Wildlife Benefited:** Restoration of glades identified for this project will result in a larger, more contiguous tract of habitat for both grassland-shrubland and woodland birds, such as those listed on Partners in Flight’s Yellow List (Eastern Kingbird, Prairie Warbler, Prothonotary Warbler) and Red List (Golden Winged Warbler). Along with the Partners in Flight priority bird species, breeding populations of the Central Hardwoods Joint Venture priority species including Prairie Warblers, Wild Turkey, and Yellow-breasted Chat are well represented in the surround NA, such as in the glade impacted by the 2010 MoBCI grant. Summer Tanager, Field Sparrow, Bobwhite Quail, Great Crested Flycatcher, Brown Thrasher, and Indigo Bunting are common inhabitants on the park’s restored glades. Northern Bobwhite Quail, and other birds that depend on glades and adjacent woodlands are identified in Missouri’s Comprehensive Wildlife Strategy as species targeted for conservation actions. Of these, Prairie Warbler and Field Sparrow are recognized as conservation priority species for the physiographic region; 5% of the global populations of these birds breed in the Ozark-Ouachitas (Fitzgerald & Pashley, 2000). The restored glades at Ha Ha Tonka State Park possess characteristics desirable to grassland-shrubland birds such as old growth structure, floristically rich ground layer, and in some areas, a developed shrub layer dominated by oak and sassafras that is managed by regularly occurring fire. Restoration potential of areas indicated in this proposal will directly impact migratory songbirds as well as species which depend on grass-forb structure for their breeding cycles. Confirmed breeding birds from other restored glades and feathered edges of the surrounding woodlands include Field Sparrow, Prairie Warbler, Kentucky Warbler, Yellow-breasted Chat, Eastern Wood Peewee, Norther Flicker, and Orchard Orioles.

Federally endangered gray bat populations at Ha Ha Tonka State Park continue to increase with active management in the surrounding ecosystems and restrictions on caving activities. Thriving populations of invertebrates, namely pollinating insects upon which these and other bat species prey, coincide with the park’s managed woodlands and glades. Increasing acreage under active management will also aid in burgeoning bat populations.

The prescribed fire program at Ha Ha Tonka State Park will continue to maintain and restore existing terrestrial natural communities for the sustainability of the park’s diverse ecosystems. The glades serve a vital role in the life histories of grassland-shrubland birds, woodland birds, and other endemic fauna. Glade restoration projects involving cedar removal will allow for more contiguous landscape management that will benefit wildlife. Management activities involving prescribed fire remain a stewardship priority to Missouri State Parks.

**Public Benefits:** Visitation at Ha Ha Tonka State Park averages 550,000 visitors annually. To provide visitors with the highest quality landscapes in which to view native plants and animals as once existed over thousands of acres in Missouri remains a priority to the Missouri State Park system. Restoring these areas will enhance wildlife viewing and research opportunities. The biodiverse character of the project area will likely result in significant invertebrate populations; a two year bee survey on a nearby glade has netted rare and unusual bees with specimens collected on the now-abundant glade flora. Furthermore,
restoration of warm season grasses to the glades directly impacts water quality and quantity in Bank Branch, a tributary of the Niangua River.

**Measurable Outcomes:** Progress of acres treated with cedar removal will be measured quantitatively by the restoration of herbaceous ground flora following the cedar removal.

**Measurable Deliverables:** The IRS III for Ha Ha Tonka State Park will serve as project leader. The project leader will provide interim and final written reports detailing the scope of work, bird data, and reports accumulated by the Missouri Master Naturalist volunteers. Photo documentation of work in progress will accompany the report and the IRS III will create a poster if warranted for the 2021 MoBCI Conference.

**Grant Request Amount:** This grant request is for $8,607.20 to fund a two-person stewardship crew for 400 hours and supplies for cedar removal.

2-person crew x 400 hrs. x $10.00/hr. = $8,000.00  
Part-time fringe rate 7.59% x $8,000 wages = $607.20  
**TOTAL Grant Request** = $8,607.20

Match will be provided by salary and fringe for one of Ha Ha Tonka State Park’s seasonal stewardship crew members for 400 hours and one full time IRS III for 100 hours. The Missouri Master Naturalists will provide third party in-kind match in the form of bird monitoring and reports on three occasions during the grant cycle. No funds will be transmitted from Missouri Master Naturalists to DNR.

1 person crew x 400 hrs. x $10.00/hr. = $4,000.00  
Part-time fringe rate 7.59% x $4,000 wages = $303.60  
1 IRS III x 100 hrs. x $19.66/hr. = $1,966.00  
Full-time fringe rate 50.68% x $1,966 wages = $996.37  
Supplies (bar oil, chainsaw chains, fuel) = $200.00  
4 Missouri Master Naturalist Volunteers x 30 hrs. x $10/hr. = $1,200.00  
**TOTAL Match** = $8,665.97

**Reporting and Monitoring Plan:** Vegetative monitoring transects, installed in 2020 will be sampled across the project areas and data analyzed using Floristic Quality Analysis. Plots will be sampled following each prescribed fire event on the glades. Bird surveys conducted by the Missouri Master Naturalists will occur in July 2020, August 2020, and again in early June 2021 following the cedar removal. The project contact person, Jacob Bryant (Jacob.bryant@dnr.mo.gov), will provide the reports to the MoBCI Committee to track progress in the project areas.

**Budget:**

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<tr>
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<td>Supplies</td>
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<td>MoBCI Crew</td>
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Monitoring bird response to restoration efforts.
Lake of the Ozarks Mo.
Master Naturalists
$0
$1,200.00

Lead Organization:
Missouri Department of Natural Resources
Missouri State Parks
P.O. Box 176
Jefferson City, MO 65102
Phone: 573.522.3260

Project Coordinator: Jacob Bryant
Ha Ha Tonka State Park
1491 State Road D
Camdenton, MO 65020
573.346.2986

Grant Manager: Rachel Senzee
P.O. Box 176
Jefferson City, MO 65102
573.522.8773

Additional Partners:
Lake of the Ozarks Chapter of the Missouri Master Naturalists, Tricia Barrett

Fiscal Responsibility/Management: Project funds will be administered by Missouri State Parks-
Financial and Resource Management (FIRM) Section in association with planning implementation by
Missouri State Parks’ Natural Resources Management Section, Ozark Regional Office, and Ha Ha Tonka
State Park.