

PRIORITIZING IMPLEMENTATION AT IMPORTANT BIRD AREAS

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INTRODUCTION

The Important Bird Area (IBA) Program in the United States has grown to include over 2100 sites (National Audubon Society 2008), leading to the inevitable challenge of how to advance conservation at numerous sites with limited resources. Many factors must be evaluated in order to thoroughly prioritize sites for conservation action, including the site's biological value, threats to the site, services provided by other organizations, and the probability of success. Existing conservation efforts must be surveyed to avoid duplication of effort and social, political and economic conditions must be evaluated to determine the likelihood of an initiative's success.

Once conservation priorities and plans are established, progress towards plan implementation must be constantly monitored to allow for adaptive management. A key consideration is to keep the monitoring system simple and uncomplicated so that it may be implemented quickly and easily by the program coordinator.

METHODS

Five factors were selected for inclusion in the Important Bird Area (IBA) prioritization process: biological value, threat level, ownership and management, local leadership, and local implementation team. We attributed 45%, 25%, 15%, 10% and 5%, respectively, of a site's total score to these factors. The higher the total score, the more deserving the IBA is of attention and investment.

Biological value was deemed the most critical factor because the entire IBA program is based on working on sites that are most important to bird populations. Threat level was the second highest ranked factor because sites with prime resources but no threats likely do not need much work in the near future. Ownership and

management takes into account the number and type of landowners. Each additional landowner makes IBA implementation more complex. The willingness or ability of the landowners, no matter how many there are, to manage the land for bird populations is also clearly an important variable. The presence of strong local leaders and implementation teams is believed to be critical for the success of IBA plans, so sites lacking these key ingredients were ranked highly.

Each factor is then ranked from 0 (no need) to 10 (pressing need). Of note is that the factors dealing with local leadership and local implementation team may be counter-intuitive because we are ranking the absence of these factors. For instance, a site with a strong leader in place would receive a zero in the lack of leadership category, while a site with a recently-installed leader who is still getting organized might receive a six.

Each rank score is multiplied by the category's weight to calculate the total score (Table 1), which can range up to 1000 points.

RESULTS

Sixteen IBAs in southeastern Pennsylvania were evaluated using the prioritization process described above. The five highest-ranked sites are currently being investigated more thoroughly and will be the focus of a more in-depth conservation planning process. Results of the ranking process can be viewed as a histogram, highlighting what each factor contributed to the overall score (Fig. 1). This graphic approach allows board members, program directors and others to see at a glance why one IBA ranks higher than another.

DISCUSSION

The selection of factors to evaluate in prioritization is always a subjective practice. The

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TABLE 1. A SAMPLE CALCULATION OF AN IMPORTANT BIRD AREA PRIORITIZATION SCORE, USING THE FACTORS AND WEIGHTS USED IN SOUTHEASTERN PENNSYLVANIA. MULTIPLYING THE RATING BY THE WEIGHT GIVEN TO THE FACTOR GIVES THE SCORE. ADDING ALL OF THE SCORES GIVES A TOTAL SCORE, WHICH CAN RANGE UP TO 1000 POINTS.

	Rating	x	Weight	=	Score
Biological value	8		45		360
Threat level	6		25		150
Ownership and management	5		15		75
Lack of local leadership	8		10		80
Lack of local implementation team	6		5		30
TOTAL	-		100		695

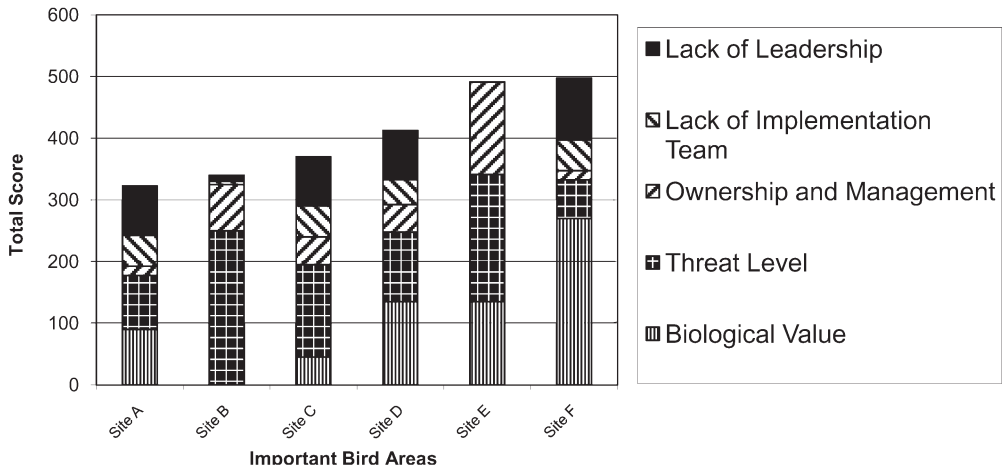


FIGURE 1. A sample histogram of the results of the Important Bird Area prioritization. The histogram allows the program coordinator to easily see what each factor contributed to a site’s overall score.

factors used in this analysis were selected based on the reason a site is an IBA, and key reasons it might cease to be an IBA. The ranking of each site was influenced by organizational goals set by Audubon Pennsylvania, particularly with the use of the organization’s priority bird species list as a way of scoring biological value.

The prioritization process used in this paper can be adapted for use in other regions. The factors and their weighting can be customized to any location. National Audubon Society, which directs the U.S. IBA program, is interested in seeing this type of approach to IBA prioritization transferred to other regions of the country. There are currently no plans to evaluate all IBAs in the U.S. by this or a similar process. Instead, Audubon’s national efforts are focused on the prioritization of global and continental-level IBAs based solely on the biological value of the sites. Each state or regional program will then be able to take these biological rankings into account when completing localized

prioritization and goal-setting. The factors examined by this process would be difficult to assess on a national scale and may not be the most important variables in every region. The species and habitats of highest conservation concern, real or potential threats, and local socio-political climate will greatly influence the manner in which any group undertakes prioritization. Similarly, these factors will influence the short- and long-term goals that are established and towards which progress must be monitored. The use of a standardized format greatly enhances the ability of a local coordinator to track progress at IBAs and report progress to others within and outside the organization.

LITERATURE CITED

NATIONAL AUDUBON SOCIETY. 2008. Important Bird Area program status. [Online.] <http://www.audubon.org/bird/iba/prog_status.html> (19 May 2008).