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### Marketing Ecosystem Services Using a Lindahl-Style Individual Price Auction Mechanism: A Case study from Vermont

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#### Introduction

Ecosystem services are the contributions that nature provides to human well-being, including both goods (e.g., food) and services (e.g., carbon sequestration). One type of service recognized by the Millennium Ecosystem Assessment (MEA, 2005) is cultural services that includes aesthetic enjoyment that nature delivers. Agricultural land traditionally supplies food and fuel which are purchased through the market. However, it can also provide ecosystem services like wildlife habitat that may affect the aesthetic quality of rural communities. Our goal is to test the potential to establish an actual market for ecosystem services, wherein the farmers provide ecosystem services generated by their agricultural land and the public purchases those services in the market.

One fundamental problem regarding provision of aesthetic ecosystem services is its "public good" nature where any individual can receive benefits from the provision of the good without paying for the cost of its provision. Every potential beneficiary can wait for philanthropists or conservationists to "do the right thing" and free ride on their generosity. This leads to underprovision of the public good. There are institutions and public policies in place to mitigate the "public good" nature of ecosystem services but, to date, they remain short on the ability to mainstream ecosystem services into policies that affect the use of natural resources (Swallow et al. 2008). Experimental economists explore incentives and mechanisms that stimulate individuals to support public goods financially by transforming a higher portion of their values into revenues. One important line of thought in the field of experimental economics evolves around public goods that require a threshold level funding that a market-maker needs to achieve in order to provide the first unit of the public good. Past studies have shown that providing a threshold, also known as a "provision point", increases contributions to public goods as compared to

standard donation approaches (Poe et al. 2002). Provision points reinforce the possibility of nonprovision in the event of insufficient contribution and combining provision point with rebate rules can reduce the cost to an individual of any excess contribution above the threshold which in turn reduces the incentive to free-ride or cheap-ride. In this study we combine such aspects of experimental and applied economics literature to better understand the nature of private provision of a public good.

The overall goal of our field experiment is to explore the potential to establish an actual market in which the public can purchase ecosystem services generated by agricultural land. Specifically, this paper examines different mechanisms, considering Lindahl's (1919) framework, to generate revenues for provision of ecosystem services by reducing individuals' incentives to free-ride. Traditional fundraising organizations ask for a direct donation from any contributor and if the organization is unable to deliver the project then the money is channeled to some alternative good cause (Swallow 2013). In contrast, a Lindahl-style mechanism connects specific units to specific payments and enables a market-maker to integrate individual benefits into business plans. Based on this idea we focus on mechanisms to translate the public's Willingness to Pay for ecosystem services into actual revenues. Insights from this experiment on public preferences regarding provision of ecosystem services are potentially useful for private enterprises that are looking to establish new markets for such services and also policy makers trying to create a balance between the public value of environmental quality and the alternative uses of environmental resources.

In this paper we report a large scale field experiment which uses an individualized pricing approach to elicit actual monetary contributions from private citizens toward provision of a public good, the nesting habitats of grassland birds. In 2013 we conducted a campaign among the

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residents of Addison and Chittenden Counties in Vermont that elicited payments to support grassland nesting bird habitats, using both direct mail and web solicitation methods. This benefits the local people by maintaining the agrarian landscape in harmony with Nature, which can be considered as the cultural ecosystem service. Through our experimental market we made contracts with the local farmers who agreed to postpone their hay harvesting during the nesting season of grassland birds, which starts from the end of May and lasts to the beginning of August. Then the residents (the consumers) in nearby communities were given an opportunity to protect the nesting habitat of these grassland birds, with a specific focus on the Bobolink, by supporting the farmers. We report the role that alternative elements in the solicitation for contributions might or might not play in the successful generation of revenues.

#### **Basic Framework for Soliciting Donations to a Multiunit Public Good**

Previous research shows that under-contribution is typical (Ledyard 1995) for public good provision. Designing payment mechanisms based on inaccurate consumer preferences implies that the public good is produced at a suboptimal level and accentuates the need for a market mechanism to reveal the true consumer demand for ecosystem services.

Insights from laboratory experiments offer potential to set up real market for ecosystem services. Our market mechanism incorporated a "provision point," which corresponds to the minimum amount of contribution that the consumers must provide to cover the costs of the public good: the public good is not provided if the provision point is not reached. For our experimental market, this provision point is determined by the cost of contracting with a farmer. Laboratory experiments have shown a money-back guarantee supports the use of a provision point (Rondeau, Schulze and Poe, 1999). In our experimental market, all participants were provided with a "money-back" guarantee in the event of non-provision: if we do not receive enough pledges to fund any habitat for grassland birds the participants have contributed for, we return the entire amount of money received. Lab experiments have also shown that rebating excess funds improves the mechanism's performance in terms of the proportion of willingness to pay (Marks and Croson, 1998; Spencer et al. 2009, Rondeau, Schulze, and Poe 1999): if we receive pledges for more than enough money per field, then the total contributions towards a field is totaled, and the amount above what is needed is refunded to the participants in proportion to each individual's contribution. The above market mechanism helps us reduce the incentives to free ride.

Erik Lindahl proposed a system of individualized pricing in 1919 for provisioning public goods based on setting an individuals' marginal cost equal to the marginal benefit they receive from provision of the good (Lindahl 1919). In Lindahl's framework, the sum of marginal payments across individual consumers of the public good equals the marginal price that the supplier of the good receives. This establishes one level of the good with many individualized prices. Lindahl's approach would solicit bids on units and contributors pay a price that is no higher than their marginal benefits for each unit. This price reflects the benefit that she will receive if the good is provided and therefore this approach creates an incentive for individuals to pay (Smith and Swallow *2013*). So the resulting prices are different for each contributor. The Lindahl-style mechanism, that we explore, is not incentive compatible but it has the ability to tie provision of specific units of good to specific payments (Swallow 2013).

#### The "Public Good"

The ecosystem service of interest in this study is the habitats of grassland-nesting birds, specifically the Bobolinks (*Dolichonyx oryivorus*). Bobolinks are legally protected but not endangered. Bobolinks are facing substantial population declines (Perlut et al. 2006; Sauer et al. 2008) and they have been labelled as a "species of concern" by Partners in Flight, a collaborative of governmental and non-governmental organizations. They are one of only a few species that sing while in flight and also are easily identified due to their prominent yellow and black color. Bobolinks establish ground nests in hay fields from mid-May to early June, which coincides with the peak nutritional value of hay. This, in turn, causes farmers to schedule harvests during that time which unfortunately destroy nests or expose eggs to immediate predation. Hay harvesting causes almost complete (99%) loss of Bobolinks (Bollinger et al. 1990). Their visibility and entertaining character, combined with the evidence that bobolinks are experiencing population declines make these birds a leading candidate to attract public interest in financing our effort to manage farmland for vulnerable wildlife. Our novel market for ecosystem services compensates farmers to alter their hay management plans and delay harvesting to allow nesting success of grassland birds.

Wildlife ecologists suggest that nesting bobolinks require at least 10 acres (4.5 ha) of hayfield for breeding (Vickery et al. 1994). Thus, we established contracts for fields of at least ten acres with farmers in Vermont. In order to assess public preferences for cultural ecosystem services and viability of farm contracts, we asked residents of Addison and Chittenden counties in Vermont, to support those farmers who were willing to manage hayfields for grassland nesting bids.

#### Application of Lindahl-style mechanism to create market for ecosystem services

A Lindahl-style mechanism solicits bids based on units provided. The mechanism requires each contributor to make decisions over the entire possible range of units available, to trace out their demand schedule. However, this is not particularly practical if the relevant range for the quantity to be provided is large. Therefore, our purpose is to explore some of the factors affecting how one can solicit a range of offers from individuals, covering a range of potentially relevant outcomes of a market equilibrium, in order to establish a practical approach to implement a Lindahl-type framework for generating revenues for public goods.

Therefore, we follow the five-step auction process in Swallow (2013) to set up our market for grassland bird habitat protection. We first identify the beneficiaries and the likely relevant range of fields suitable for providing good bobolink habitat by using focus groups and previous years' experience of setting up a market for grassland bird habitat protection (Swallow et al. 2012). This relevant range turned out to be a quantity between one to twenty fields (a total of 200 acres of hayfield) for Vermont. We then divided the total range into three intervals in order to examine how individual decisions to donate might be affected by the range of quantity that the individual was asked to consider. Here, a contributor was asked to make decisions either on up to five fields, or up to ten fields, or up to twenty fields; these intervals defined three endpoint scenarios. Finally each contributor made decisions on different field intervals within each endpoint scenario. For example, the endpoint ten scenario can be divided into four intervals of 1 to 2 fields, 3 to 5 fields, 6 to 8 fields and 9 to 10 fields or it could be divided into five intervals of 1 to 2 fields, 3 fields, 4 to 5 fields, 6 to 8 fields and 9 to 10 fields.

After all the contributors completed their offer schedule over the relevant range of fields, we evaluated their aggregate bids over each field. If the aggregate contributions can provide for the

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first field, its provision is assured, but not yet paid for, and we move on to evaluate offers for the second field. The evaluation continued until we could achieve the provision point based on the offers made for the next field. Each contributor pays his or her bid on the final unit that is provided, minus any rebate of excess funds.

On the supply side, we made contacts with farms with potential bobolink habitat and used a uniform-price reverse procurement auction to obtain each farmer's bid to enroll fields in bird-friendly hayfield management. Winning bidders were all paid the same price and the winning price was determined by the lowest rejected offer price. The opportunity cost curve identified through the reverse auction for cooperating farmers served as the provision point for each unit during the evaluation of bids (offers to donate) from consumers.

#### **Treatments and Solicitation Process**

The respondents were asked to contribute to protect up to 20 fields (200 acres) of farmland in Vermont. We divided this field range into three endpoints and within each endpoint we created field intervals. The field interval treatment variable had two levels; each respondent could make decisions on 4 or 5 field intervals. For example, some participants were asked to state how much they would contribute for up to two fields; then how much for up to five fields, then up to 10 fields, and finally for up to 20 fields. These intervals were designed to be overlapping (e.g. up to 10 fields covers up to 5 fields, but allows bidders to make a lower offer at the high quantity). The respondents made decisions to protect 1, 2, 3, 4, 5, 8, 10 and 20 fields. All contributors were given an opportunity to protect at least five fields and some contributors received an option to protect up to ten or twenty fields. Eventually we used six different versions of tables after

combining different field intervals and end points. Examples of different field intervals used in the solicitation process are presented in Appendix A.

Other treatment variables included a suggested donation amount (high or low), information on farmer availability/ enthusiasm from the supply side and options to contribute (per field provided or a total amount for all the fields provided). The treatment variable "information on farmer availability/ enthusiasm" had two levels: one of them mentioned that "we have farmers interested in participating" and the other one mentioned "we have 10 farmers interested in participating" to test if knowing a certain number of farmers interested in providing their fields for habitat conservation leads to higher contributions from the respondents. Table 1 presents the treatment variables that we used in our solicitation process. Finally we had 48 versions of payment cards (6 x 2 x 2 x 2). Examples of payment cards used for solicitation are presented in appendix B.

We followed the "Dillman Process" (Dillman 1978) for the mailed survey. The solicitation process involved repeated mailings to keep the study fresh in participants' minds, but not to become an irritation. We did an initial mailing, letting the participants know they have been selected to participate in a study, and to watch their mail. Then, a package containing a cover letter, a payment card, an information sheet (or marketing brochure), and a business reply envelope was mailed to participants. If participants did not respond within a pre-specified period they received a second package with the same documents as the first mailing. The payment cards noted instructions on rules of refund and rebate. All participants received information on a "money-back" guarantee if non-provision occurs, i.e, if we do not receive enough pledges to fund a field the participants have contributed for, the entire contribution will be refunded. On the other hand, if we receive pledges for more than enough money per field, then the amount above what is needed will be refunded proportionally to the participants.

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The solicitations were mailed to 4999 randomly selected residents in Addison and Chittenden counties in Vermont. We also maintained an online portal where anyone could pledge using our website. Prior to the mailings, we conducted advertising campaigns in the Burlington Free Press (both print media and digital), a local newspaper in Vermont and in VPR (Vermont Public Radio).

#### Hypotheses

Null Hypothesis one: Contributions are equal across different suggested donation amounts.

<u>Alternative Hypothesis one:</u> A higher suggested donation amount generates higher contributions from respondents.

Here we want to test whether the final contributions from respondents are influenced by the magnitude of the suggested donation amount. In contingent valuation methods, this phenomena is known as the "Starting Point Bias" which arises when the initial bid influences a respondent's final bid.

<u>Null Hypothesis two</u>: Respondents' contributions are equal across different outcomes or different endpoint scenarios (i.e., different field intervals).

<u>Alternative Hypothesis two</u>: Respondents' contributions are unequal across different outcomes, and specifically contributions are higher at higher field intervals.

Literature on private provision of public goods suggests that contributors receive utility not only from increased supply of the good, but also from the feeling of "warm glow" (Andreoni, 1990). In our experimental market providing more fields would increase the survival rate of fledglings

and more participation would ensure a reduced per unit cost, to the donor, of providing the public good, i.e, safe bird habitat. We test the hypothesis that our contributors are influenced by the actual quantity of the good provided.

#### Results

Our results show that people voluntarily contribute to provide public goods that affect a community's quality of life. Contributions from respondents were used to develop an average revenue curve and farmers' bids were used to develop a marginal cost curve (Figure 1). We compared the aggregate contribution from respondents with the provision point (as identified by the marginal cost curve) for each field and provided all the fields until we exhausted the revenue at each field. After examining the optimal arrangement for supply and demand, seven farms in Addison and Chittenden Counties received \$1,600 for each 10-acre parcel. Our experimental market raised over \$31,000 during summer of 2013 to protect the grassland bird nesting habitat on 200 acres of hayfields in Vermont<sup>1</sup>. 254 individuals responded back to us of which 210 pledged to contribute. The respondents were able to contribute enough money so that all of the 20 fields were finally protected, making our experimental market a success pilot program.

Contributions from respondents ranged from \$5 to \$ 2500 with an average contribution of \$145 per respondent. Figure 2 presents average contributions for all the fields over which the respondents made their decisions and it shows that the average contribution per field declines with increasing number of fields. About 75% of our respondents donated online and Figure 3

<sup>&</sup>lt;sup>1</sup> An arithmetic error by one donor came to light after the billing process. The market cleared at \$32,000 for 20 fields of 10-acre size. However, one donor became agitated upon learning her bill was \$1000, when they had intended \$100. This error was central to settling the market at \$1600 per field, despite falling short of the \$32,000 needed t0 make all payments; the research grant therefore subsidized the deficit.

shows that people tend to contribute a higher amount on average when they use online donation approach than their non-web counterparts. A paired t-test concludes that the difference of means of contributions between these two groups is significantly different from zero. This observation could reflect the fact that those who contributed online are more motivated about birds as they contributed to protect bird habitats without any direct contact from us<sup>2</sup> and therefore they donated a higher amount. Figure 4 shows that people tend to lower their contributions as they are asked to contribute over a higher number of field intervals. A paired t-test confirms that the difference of mean contributions between those who made decisions on five field intervals and those who made decisions on four field intervals is significantly different from zero. This is indicative of a higher cognitive burden with increased number of decision making tasks and therefore respondent fatigue.

We find an interesting contribution behavior of respondents in this regard. Even if they were asked to make a contribution at different field intervals (for up to five intervals) with a notion that they would be willing to pay more if we could provide more bird habitat, almost 15% of contributors pledged a flat donation amount across all field intervals. Also if we include people who only pledged at one field interval and left the rest of the intervals blank in the payment card, then only 33% of the respondents did <u>not</u> do a flat donation. A paired t-test shows that the difference of mean contributions between those who contributed a flat donation and those who contributed different amounts based on the quantity of fields is not statistically different from zero.

<sup>&</sup>lt;sup>2</sup> Other than direct mailings, we used radio blurbs, digital ads and television interviews to reach potential contributors.

#### Econometric model

We use two stages in our econometric analysis: in the first stage we analyze the binary choice to respond to our solicitation and in the second stage we analyze the contribution decision of the respondents.

The response equation is of interest as it helps us identify potential contributors and what aspects of our treatments are more likely to lead people to respond. We model the response behavior using the treatment variables and demographic variables. The treatment variables include (i) the suggested donation amount (Sughigh, where 1 indicates if a respondent received a payment card with high suggested donation amount and 0 otherwise), (ii) availability of farmers (Farm10, where 1 indicates if a respondent received a payment card with the information "we have ten farmers available with us" and 0 otherwise), (iii) whether the respondents were asked to donate a per field amount for each field provided or asked to donate a total amount for all the fields provided within an interval (Perfield, where 1 indicates "yes" and 0 indicates "no"), (iv) whether they were asked to donate for up to 10 fields (Max10, where 1 indicates "yes" and 0 indicates "no"), (v) whether they were asked to donate up to 20 fields after they pledged for 10 fields (Max20, where 1 indicates "yes" and 0 indicates "no") and (vi) whether they were asked to made a decision on 5 field intervals (15, where 1 indicates "yes" and 0 indicates "no"). Demographic variables include the natural log of purchasing power (*lnPPower*), Age in years, a dummy variable Anydonor (equals 1 for any individual with past donations to any cause, 0 otherwise), a dummy variable Envdonor (equals 1 for those who donated for any environmental cause in the past and 0 otherwise), and the number of household members (*hhdmember*). We were unable to record the demographic information for those who contributed online using our website. So the response equation was estimated for only those who received our solicitation by mail.

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Table 2 provides the estimation results from the response model which we estimated using a probit model to predict the probability that someone decided to contribute by sending us a pledge. The model is overall statistically significant (with LR  $\chi^2$ = 41.34, 11 df and a *p*-value of 0.0001), however most of its components are not. The results show that older individuals with a past record of donating to environmental causes are more likely to respond to our marketing efforts. It also shows that people are less likely to participate if they are asked to make decisions on additional fields over five fields. Overall the response equation suggests that most of the treatment aspects did not affect an individual's participation decision, suggesting minimal selection bias related to the treatment variables.

Next we estimate the contribution equation to test our hypotheses. We did a pooled OLS of individual contributions on each field the contributors made a decision. Table 3 presents the estimated contribution equation. We model individual contributions using the treatment variables described before and include a new dummy variable to identify contributors who donated online (*Webdonation*, where 1 indicates "yes" and 0 indicates "no"). Our results show that a higher suggested donation amount generates a higher contribution from the donors. This also reflects the presence of Starting Point Bias in case of real donations. A positive significant coefficient on *Webdonation* indicates that people who pledged online tend to donate more than their non-web counterparts. This could be an indication that those who pledged online are more conservation minded and care more about birds. The model with interaction effects shows that people tend to increase their contribution as they get an opportunity to protect more fields.

We run a multiple comparison test to determine if the average contributions are influenced by the endpoints and an ANOVA test confirmed a significant difference in average contributions per field across different endpoint scenarios (F-statistic 2.88 with p < 0.0001). Table 4 presents the

average contributions per field for the three different endpoint scenario based on the maximum number of fields on which a respondent made decisions. Table 5 reports Scheffe multiple comparison test. It shows that the average contribution differs significantly (borderline) between endpoint ten scenario (if respondents contributed for a maximum of ten fields) and endpoint twenty (if respondents contributed for a maximum of 20 fields).

#### Conclusion

Marketing ecosystem services to private individuals is challenging. Our paper draws insight from lab experiments on public good provision and implements it in real life using different provision mechanism. The main challenge is to develop mechanisms so that entrepreneurs can influence consumer values to ultimately develop the potential for market approaches which will lead to valuable impacts for ecosystem services. The private action through the experimental market can complement or improve upon the philanthropic actions that are already being taken to provide ecosystem services.

Our conjecture is that the participants of our ecosystem service market in Vermont supported the overall concept of the project, but they were reluctant to incur the mental/ time cost of understanding the Lindahl mechanism which is unfamiliar to them as opposed to a flat donation approach used by the fundraising organizations. Therefore, even if a Lindahl mechanism enables fundraisers to capture consumer benefits by incentivizing contributors to name a price based on their own valuation of the good, it may reduce participation because of the complexity of the mechanism. So, for fundraisers, the main challenge that remains is to design mechanisms to capture the full willingness to pay of the contributors but at the same time make it simple enough so as not to lose revenue from less participation.

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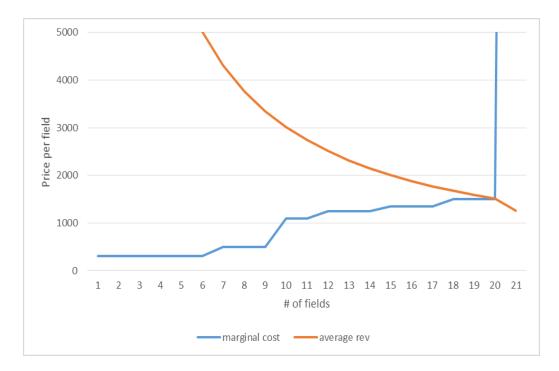


Figure 1: Equilibrium price

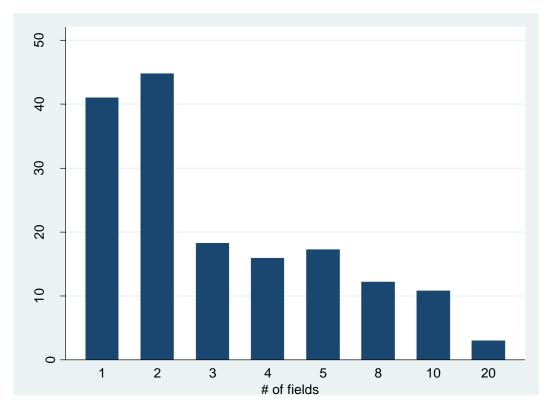


Figure 2: Average contribution per field

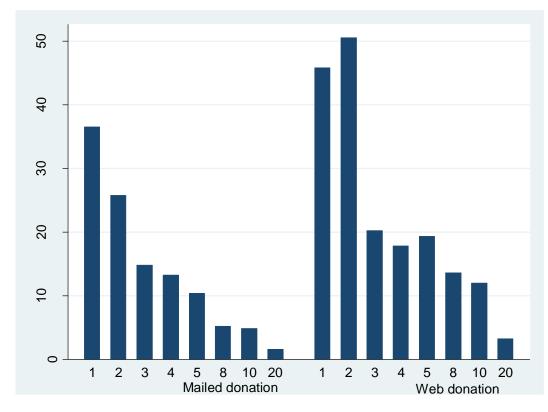


Figure 3: Average contribution for different field units across donation options

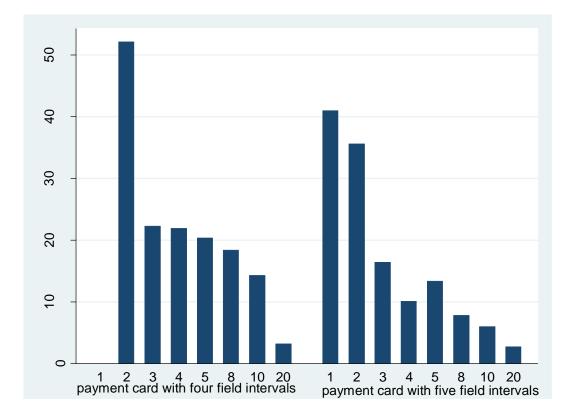




Table 1: treatment variables used in the solicitation process

End points	# of field intervals	Suggested donation amount	Information on farmer availability	Contribution option
5 fields	4	High	Some farmer	Per field
10 fields	5	Low	10 farmer	Total
20 fields				

Table 2: Response model

	(1)
0 1 1	response
Sughigh	-0.106
	(0.0972)
perfield	-0.00549
	(0.0968)
farm10	0.0749
	(0.0969)
15	0.0578
	(0.0970)
InPPower	0.189
	(0.114)
age	0.0138**
8-	(0.00475)
anydonor	-0.0219
	(0.142)
envdonor	0.453***
cirvaonor	(0.120)
hhdmember	-0.0237
mamember	(0.0392)
max10	-0.273*
maxio	(0.123)
max20	-0.115
Παλέυ	(0.113)
00 <b>0</b> 0	5 205***
_cons	-5.295 <sup>***</sup> (1.378)
N	4999

p < 0.05, p < 0.01, p < 0.001

	(1)	(2)
	Log(contribution)	Log(contribution)
Log (field)	0.281***	0.550***
	(0.0403)	(0.133)
Sughigh	$0.388^{**}$	$0.408^{**}$
	(0.122)	(0.142)
Perfield	0.129	0.197
	(0.122)	(0.155)
Farm10	0.0159	0.240
	(0.113)	(0.136)
Max20	0.0725	$0.508^{***}$
	(0.134)	(0.135)
Max10	0.177	$0.402^{**}$
	(0.159)	(0.151)
15	-0.137	-0.167
	(0.115)	(0.148)
Webdonation	0.517***	0.361
	(0.137)	(0.189)
Constant	3.471***	3.159***
	(0.172)	(0.184)
Log(field) * max10		-0.226
		(0.148)
Log(field) * max20		-0.359***
		(0.127)
Log(field) * sughigh		-0.0105
		(0.0928)
Log(field) * perfield		-0.0513
		(0.0952)
Log(field) * farm10		-0.148
		(0.0833)
Log(field) * 15		0.0328
		(0.0847)
Log(field) * webdonation		0.118
		(0.115)
Ν	529	529
$R^2$	0.975	0.976
AIC	1177.9	1181.8
BIC	1216.3	1250.1

Table 3: Contribution model

Summary of Average Contribution		
	Mean	Std. Dev.
Endpoints		
5	22.49	28.76
10	25.82	82.08
20	16.17	25.41
Endpoint	5 = respondent contributed for a maximum of 5 fields	
	10= respondent contributed for a maximum of 10 fields	
	20 = respondent contributed for a maximum of 20 fields	

Table 4: Summary of average contribution based on outcome

Table 5: Scheffe multiple comparison test of average contributions based on outcome

Row mean –		
Col mean	5	10
10	3.32436	
	(0.776)	
20	-6.32531	-9.64968
	(0.38)	(0.063)
(0 1 (0 1)	1 • • • • •	C (1 1°CC

(Scheffe-adjusted significance of the difference in parentheses)

#### Appendix A: Example of outcome based solicitation method

Table I:

If the Bobolink Project can provide:	I pledge to contribute:	for a potential total of:	
1 field	\$ per field	x 1 field = \$	
2 fields	\$ per field	x 2 fields = \$	
3 fields	\$ per field	x 3 fields = \$	
4 fields	\$ per field	x 4 fields = \$	
5 fields	\$ per field	x 5 fields = \$	

Table II:

If the Bobolink Project can provide:	I pledge to contribute:	for a potential total of:
1-2 fields	\$ per field	x 2 fields = \$
3 fields	\$ per field	x 3 fields = \$
4 fields	\$ per field	x 4 fields = \$
5 fields	\$ per field	x 5 fields = \$

Table III:

If the Bobolink Project can provide:	I pledge to contribute:	for a potential total of:
1-2 fields	\$ per field	x 2 fields = \$
3-5 fields	\$ per field	x 5 fields = \$
6-8 fields	\$ per field	x 8 fields = \$
9-10 fields	\$ per field	x 10 fields = \$

Table IV:

If the Bobolink Project can provide:	I pledge a total of:
1-2 fields	\$
3-5 fields	\$
6-8 fields	\$
9-10 fields	\$

Appendix B: Example of a payment card

#### **Bobolink Project Pledge Agreement:**



Making your money fly farther

• The Bobolink Project aims to protect 10-acre hayfields for bobolinks in Chittenden and Addison counties this summer. Currently, we have farmers interested in participating, and now we need your pledges!

• Please fill out each line in the pledge card below, letting us know how much you can contribute depending on the level of success we have. After we receive everybody's pledges, we determine how many fields we can protect this summer, by starting at one field and going as far as pledges allow.

• You will only be charged for the highest number of 10-acre hayfields that everyone's pledges will support.

## -For example, if total pledges let farmers protect 7 fields at most, we will only bill you for the pledge you made on the "6-8 fields" line, and no other line will be used.

• You will be charged only the proportion of your pledge needed to provide fields.

-For example: Let's say we receive enough money to fund 8 fields, but we only need

95% of the money we raised in pledges to do so. In this case, we would only bill you 95% of your total pledge on the "6-8 fields" line.

**Please mail this card back before April 29**. We will mail you a final bill about May 3, for the amount of your pledge needed to protect bobolink-nesting habitat. Please keep in mind that this process is not cheap for farmers. This year, we estimate farmers may require as much as \$2,000 to \$5,000 to protect just 1 field.

«Title» «First» «MidInit» «Last» «Suffix» «Street\_Address» «City», «State» «ZIP»

ID NUMBER

(Use this ID number to pledge online!!) www.bobolinkproject.com

#### YOUR PLEDGE CARD

Any amount helps, but please consider pledging at least **\$60** for the first two fields. **FOR EXAMPLE:** If the project can provide **3-5 fields** I pledge a total of: \_**\$75**.

Please fill out all lines in the table below (a blank line means a zero pledge for those fields):

	If the Bobolink Project can provide:	I pledge a total of:
	1-2 fields	\$
	3-5 fields	\$
	6-8 fields	\$
	9-10 fields	\$
Ph	one #: Email Address:	

Please note: We will not share personal information with anyone, and will use it only in managing the Bobolink Project and your pledge.