

Enhancing the Engagement of U.S. Private Foundations with Conservation Science

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Abstract: *Funding for conservation is limited, and its investment for maximum conservation gain can likely be enhanced through the application of relevant science. Many donor institutions support and use science to pursue conservation goals, but their activities remain relatively unfamiliar to the conservation-science community. We examined the priorities and practices of U.S.-based private foundations that support biodiversity conservation. We surveyed 50 donor members of the Consultative Group on Biological Diversity (CGBD) to address three questions: (1) What support do CGBD members provide for conservation science? (2) How do CGBD members use conservation science in their grant making and strategic thinking? (3) How do CGBD members obtain information about conservation science? The 38 donor institutions that responded to the survey made \$340 million in grants for conservation in 2005, including \$62 million for conservation science. Individual foundations varied substantially in the proportion of conservation funds allocated to science. Foundations also varied in the ways and degree to which they used conservation science to guide their grant making. Respondents found it "somewhat difficult" to stay informed about conservation science relevant to their work, reporting that they accessed conservation science information mainly through their grantees. Many funders reported concerns about the strategic utility of funding conservation science to achieve conservation gains. To increase investment by private foundations in conservation science, funders, researchers, and conservation practitioners need to jointly identify when and how new scientific knowledge will lower barriers to conservation gains. We envision an evolving relationship between funders and conservation scientists that emphasizes primary research and synthesis motivated by (1) applicability, (2) human-ecosystem interactions, (3) active engagement among scientists and decision makers, and (4) broader communication of relevant scientific information.*

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Paper submitted October 17, 2007; revised manuscript accepted April 28, 2008.

Keywords: conservation donor, conservation finance, conservation funding, conservation investment, conservation science, philanthropy

Incremento del Compromiso de las Fundaciones Privadas de E.U.A. con la Ciencia de la Conservación

Resumen: *El financiamiento de la conservación es limitado, y su inversión para una ganancia máxima de conservación puede ser incrementada por medio de la aplicación de ciencia relevante. Muchas instituciones donadoras financian y utilizan ciencia para alcanzar metas de conservación, pero sus actividades permanecen relativamente desconocidas para la comunidad científica. Examinamos las prioridades y prácticas de fundaciones privadas basadas en E. U. A. que financian conservación de la biodiversidad. Encuestamos 50 miembros donadores del Grupo Consultivo de Diversidad Biológica (GCDB) para abordar tres preguntas: (1) ¿Cuál es el soporte que proporcionan a la ciencia de la conservación los miembros de GCDB? (2) ¿Cómo utilizan la ciencia de la conservación los miembros de GCDB en la designación de donaciones y el pensamiento estratégico? (3) ¿Cómo obtienen información sobre ciencia de la conservación los miembros de GCDB? Las 38 instituciones donadoras que respondieron la encuesta donaron \$340 millones para la conservación en 2005, incluyendo \$62 millones para ciencia de la conservación. Las fundaciones individuales variaron sustancialmente en la proporción de recursos asignados para ciencia. Las fundaciones también variaron en las formas y nivel en que utilizaron la ciencia de la conservación para guiar sus donaciones. Los encuestados reconocieron que es "algo difícil" mantenerse informados sobre la ciencia de la conservación relevante para su trabajo, reportando que obtuvieron información sobre ciencia de la conservación principalmente de sus beneficiados. Muchos financiadores se preocuparon por la utilidad estratégica del financiamiento de la ciencia de la conservación para el logro de ganancias de conservación. Para incrementar la inversión de fundaciones privadas en ciencia de la conservación, los financiadores, investigadores y practicantes de la conservación conjuntamente necesitan identificar donde y cuando las barreras a las ganancias de conservación serán reducidas por conocimiento científico nuevo. Visualizamos la evolución de una relación entre financiadores y científicos de la conservación que enfatiza (1) la investigación y síntesis primaria motivada por la aplicabilidad, (2) las interacciones humanos - ecosistemas, (3) un compromiso activo entre científicos y tomadores de decisión y (4) una mayor comunicación de información científica relevante.*

Palabras Clave: ciencia de la conservación, donador de conservación, filantropía, financiamiento de la conservación, inversión en conservación

Introduction

The need for conservation funding always exceeds available resources (Bruner et al. 2004). It is also seldom clear whether limited funds are directed at the greatest needs or invested to maximize conservation gains (Halpern et al. 2006). As conservation practice grows more complex, identification of sound conservation investments relies increasingly on scientific information. Several recent publications have explored and debated how science has or should inform conservation planning, policy, and management (e.g., Lawler et al. 2006; Lackey 2007). Nevertheless, this literature does not include examinations of the role of donor institutions as supporters and consumers of scientific information.

Donors are entrusted with effectively managing and disbursing public funds for the public good. In the case of private foundations in the United States, funds are sheltered from taxes provided that a minimum percentage of an endowment is spent on charitable purposes each year. Many private foundations dedicated to conserving biological diversity use and support conservation science to enhance conservation outcomes. To improve collaboration and realize shared conservation goals, we sought

to clarify conservation science funding and use by private foundations based in the United States. We report results from a survey on how the approximately 50 donor members of the Consultative Group on Biological Diversity (CGBD) fund and use science. The survey was designed to address 3 main sets of questions: (1) What support do the CGBD members provide for conservation science? How do they perceive their roles in supporting conservation science relative to other funding sources and relative to supporting conservation action? (2) How do the CGBD members use conservation science in their grant making and strategic thinking? (3) How do the CGBD members obtain information about conservation science? How can scientists make their work more useful to donors, and what do donors need from scientists that they are not currently receiving?

The Conservation-Funding Landscape

Conservation is supported by an array of institutions, all with their own goals and missions. These institutions include government agencies, bilateral donors, multi-lateral banks, nongovernmental organizations, for-profit business enterprises, and private foundations. Tracking

the total amount of funding available for conservation of global biological diversity from these various sources poses a considerable challenge. Efforts to date have focused on a geographic region (e.g., Castro & Locker 2000); a particular issue, such as protected areas (e.g., Bruner et al. 2004); or particular segments of the donor community, typically bilateral and multilateral agencies (e.g., Lapham & Livermore 2003; CBD 2007). Although an exact accounting of total funds available for conservation remains elusive, one can posit reasonable estimates. Although contributions from private foundations, individual donors, corporations, and markets for ecosystem services are growing in importance, governments continue to be the primary source of financial support for biodiversity conservation. The European Commission and the bilateral initiatives of 21 industrialized nations provide the bulk of international conservation assistance. Between 1998 and 2005, annual conservation-related funding from these sources varied from about US\$900 million (in 2000) to nearly US\$2 billion, with a recent trend toward lower values (CBD 2007; Hicks et al. 2008). By comparison, the private foundations in the United States included in this study provided US\$340 million in 2005 or the most recent year for which data were available. Much of this amount was directed to projects and organizations within the United States.

A Working Definition of *Conservation Science*

A nontrivial component of our study was development of a working definition of the term *conservation science*. We consulted the categories by which the Society for Conservation Biology grouped presentations at its 2006 annual meeting, published statements of priorities for research in conservation biology (Soulé & Kohm 1989; Soulé & Orians 2001), and publications providing overviews or frameworks for conservation research (Sutherland 2000; Salafsky et al. 2002). On the basis of these sources and discussion with CGBD leadership, we developed a broad definition of *conservation science* as “the body of knowledge necessary to conserve biological diversity at all levels, from genes to ecosystems.” Examples of areas from which such knowledge is derived include but are not limited to basic research and its applications in or on

- biological and other natural sciences (e.g., population biology, ecology, parasitology, hydrology, climatology);
- social sciences (e.g., anthropology, economics, political science, psychology, sociology);
- development and application of technological tools (e.g., GIS, remote sensing, camera trapping);
- development and application of analytical tools (e.g., reserve-selection algorithms, predictive-modeling approaches, threat-rating approaches);
- research on the effects of natural or anthropogenic stressors and threats to ecosystems (e.g., climate change; changes in fire regime, fishing or logging; pollutants); and
- research on the effectiveness of different conservation strategies and actions for minimizing or mitigating stressors and threats and for conserving biological diversity (e.g., use of prescribed fire, policies to improve conservation on private lands, establishment of marine protected areas, regulation of flood waters).

Under our definition, conservation science does not include direct conservation actions such as buying land, removing non-native invasive species, conducting an educational program, or working to change policies (IUCN-CMP 2006). Research about the effectiveness of these actions, however, does qualify as conservation science under our definition.

Methods

We developed and implemented a Web-based survey that was sent to representatives of all member organizations of the CGBD. Established in 1987, it comprises more than 50 private foundations and the U.S. Agency for International Development (USAID). A list of CGBD members is available from <http://www.cgbd.org/visitors/memberlist/>. The CGBD is a forum for grant makers that seeks to focus attention on issues and program opportunities related to the conservation and restoration of biological resources. The CGBD is funded by grants from its members. In April 2006 when the survey was conducted, the CGBD had 51 members, all of whom were asked to complete the survey. Of these 51 members, 38 (75%) returned surveys. The number of responses received for each question in the survey varied slightly because not all respondents answered every question. In addition, although we received one set of quantitative responses from any given foundation, in some cases we received more than one opinion or qualitative response from any given foundation because they often collated responses from more than one staff member working on conservation and conservation science.

Foundation Support for Conservation Science

Our first set of questions addressed how conservation science is funded by U.S. private foundations and other sources of support. We asked respondents to report the dollar amount their organization awarded for conservation science activities in 2005 (or the most recent year for which data were available) relative to their total grant budgets and their total conservation-grant budgets. To better understand how foundation representatives view the value of conservation science, we asked respondents to provide qualitative ratings for a number of statements

included in the survey (1, not important; 2, somewhat important; 3, important, 4, very important). We asked the funders to rate their perceptions of the importance of various funding sources for conservation science. Finally, we queried respondents about which aspects of conservation science were most in need of support.

Foundation Use of Conservation Science

The second set of survey questions was designed to shed light on the extent to which CGBD members use conservation science to inform their grant-making strategies and decisions. Although conservation science can be a powerful tool informing decisions about where and how to direct limited funds, other factors such as the values, culture, or history of a given foundation or perceived political opportunities also guide funding priorities. We did not attempt to assess the roles that these other factors played in guiding funding decisions. Although it is important to recognize the role of these other variables in priority setting, many foundations employ conservation science to develop their grant-making programs and strategies, with the underlying assumption that science will increase effectiveness. We asked CGBD members to indicate the degree to which they used conservation science to guide 5 types of decisions they make: (1) developing broad program strategies (e.g., selection of themes or topics for funding programs or packages of grants), (2) developing geographic priorities (e.g., selection of locations in which to fund conservation work), (3) evaluating the success of broad programs or portfolios, (4) selecting specific grants for funding, and (5) evaluating the success of specific grants. Responses were provided on a qualitative scale (1, not a criterion; 2, minor criterion; 3, major criterion; 4, sole criterion).

Foundation Access to Conservation Science

The third set of questions focused on how CGBD member foundations access conservation-relevant scientific information. We asked CGBD members to rate their ability to stay informed about the latest advances in conservation science on a scale from 1 to 4 (1, very difficult; 2, somewhat difficult; 3, somewhat easy; 4, very easy). We also asked how conservation scientists might make their work more useful or accessible to foundation staff.

Missing Survey Responses

We conducted a brief analysis of the 13 CGBD member organizations that did not complete the survey; we used a categorization of organization size—small, medium, and large number of staff rather than budget. This information was provided by CGBD staff. Roughly half the foundations with the largest endowments completed the survey. A relatively low proportion of foundations with smaller endowments and a relatively high proportion of intermediate-sized foundations completed the survey.

Thus, we cannot necessarily extrapolate our results to the full CGBD membership. We used 2-tailed *t* tests to compare qualitative ratings reported in the survey (e.g., evaluation of statements on a scale from 1, not important, to 4, very important). Responses were not weighted by the size of a foundation's endowment.

Results

Foundation Support for Conservation Science

The sum of foundation grant budgets across this sample was \$1.28 billion. Nevertheless, because several smaller foundations and a few large foundations did not provide data, this sum underestimates total expenditures by all CGBD members. Funders in our sample reported spending a total of \$340 million (about 27% of their total grant-making budgets) on all conservation activities (Table 1). Of this amount, funders reported spending a total of \$62 million (18% of the total spent on conservation) on conservation science.

On average, funding organizations dedicated 53% (SD 35) of their total budget to conservation (Table 2). Of this conservation budget, funders reported spending an average of 11% (SD 9) on conservation science and 89% (SD 11) on other conservation work. Funders reported spending an average of 70% (SD 36) of their conservation-science budgets within the United States and 30% (SD 36) elsewhere in the world. The percentage of the funds devoted to conservation science varied greatly among smaller foundations, whereas larger foundations reported spending 15–25% of their budgets on conservation science (Fig. 1).

About half (48%, $n = 31$ respondents) reported that their conservation budgets increased between 2002 and 2005. Nevertheless, only 28% ($n = 29$ respondents) reported an increase in support for conservation science. Among foundations reporting increases in funding for either conservation ($n = 16$) or conservation science ($n = 8$), conservation-science budgets increased an average of 32% (SD 10), whereas overall conservation budgets

Table 1. The 2005 budgets for conservation grant making reported by participating Consultative Group on Biological Diversity member foundations ($n = 34$).

Grant type	Sum across respondents (US\$millions)	Mean, SD (US\$)	Range (US\$ millions)
Total grant budget	1276	37.5, 63.1	0.4–225
All conservation grants	340 (27% of \$1276)	10.0, 20.5	0.3–113
Conservation science	62 (18% of \$340)	1.8, 5.3	0.0–29
Other conservation work	278 (82% of \$340)	8.2, 15.3	0.3–84

Table 2. Allocations of funds in 2005 to conservation, conservation science, and geographic region by member foundations of the Consultative Group on Biological Diversity.

	n ^a	Mean, SD	Range
Overall grant budget (%) for all conservation grants ^b	34	53, 35	5–100
Conservation grant budget (%) for conservation science	34	11, 9	0–35
Conservation science grant budget (%) for work in the United States	27	70, 36	0–100

^aNumber of respondents.

^bAverage percentage of total grant budget spent on conservation. This value is higher than the 27% of the total spent on conservation (\$340 million/\$1276 million) because many smaller foundations spent 100% of their money on conservation, whereas many larger foundations spent proportionately less.

increased 36% (SD 50). Two foundations, however, drastically reduced or eliminated conservation funding during this period.

Respondents reported that they funded several kinds of conservation-science projects. A number of grants supported either species-level research or spatially explicit conservation-prioritization exercises in areas of interest to the foundation. Grants included support for surveys, for instance, grants to the California Academy of Sciences to examine species distributions in the Gaoligong Mountains in China and to the Raincoast Conservation Society to survey the marine mammal fauna of the British Columbia coast. Grants also supported research on the biology of focal species, such as wolverines (*Gulo gulo*) in Yellowstone National Park and grouper (Epinephelinae) larvae in Belize. A second category of grants supported the application of existing research to inform management and policy decisions. For example, a grant to World Wildlife Fund supported exploration of mea-

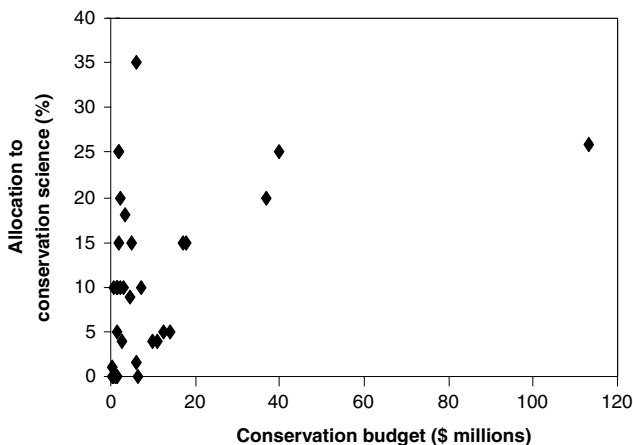


Figure 1. Proportion of individual foundations' total conservation budgets allocated to conservation science.

asures of the effectiveness of the conservation community in addressing the social dimensions of conservation. In addition, several grants supported the development of new research programs at universities or scientific partnerships. These included, for example, creation of the Center for Environmental Research and Conservation at Columbia University, development of the Union of Concerned Scientists' Green Chemistry Institute, and support for the Partnership for Interdisciplinary Science for Coastal Oceans (PISCO), which researches the California Current and its linkage to policy processes on the West Coast of the United States.

Respondents reported that funding conservation science was important to them as individuals and to their organizations. Nevertheless, they reported that funding conservation science was less important to their organizations (mean [SD] = 2.3 [0.9]) than it was to them as individuals (3.1 [0.7]; $t = 5.39$, $p < 0.001$). In written responses many foundation employees indicated their organizations fund conservation science because the organization believes it is the basis for effective conservation action. For example, a respondent wrote, "Action based on ignorance is eventually, if not immediately, ineffective. Knowledge is essential." Another offered, "There has been a dramatic and deliberate effort to undermine science and this needs to be reversed."

Nevertheless, not all CGBD members funded conservation science. Reasons foundations did not support conservation science included the perception that conservation science is not a relative priority or is not the best use of limited foundation resources. For example, a respondent wrote, "We have limited dollars which [we have to focus on] on-the-ground action." Funding for conservation science is taken care of by other sources." Other respondents articulated the perception that science does not impede conservation progress. For example, a respondent said, "We are applying so little of what we already know that both my organization's view and my view is that there are higher priorities for funding right now."

Most respondents indicated that federal funding agencies, such as the U.S. National Science Foundation, were the most important sources of support for conservation science. Additional sources of support perceived to be important included universities and nongovernmental organizations. By contrast, most respondents rated other sources, including private foundations, state and local governments, and bilateral and multilateral aid agencies, as either "important" or "somewhat important." These ratings were to some degree reflected in the grant-making strategies of some private foundations. For example, a respondent wrote, "In general, I think foundation money is better spent on influencing the research agenda of publicly funded institutions. We get much more leverage that way."

Nearly all respondents thought all aspects of conservation science require at least some additional knowledge.

Nevertheless, most believed that “a lot of additional knowledge” was needed in a few key areas. These key areas included the social sciences, the effects of stressors and threats on ecosystems, and the effectiveness of different conservation interventions for minimizing or mitigating stressors and threats to biological diversity. By contrast, most respondents thought only “some additional knowledge” was needed in biological and other natural sciences and in the development of technical and analytical tools.

Foundation Use of Conservation Science

Conservation science was a relatively important criterion for developing geographic priorities and strategies and a slightly less important criterion for selecting specific grants and for evaluating the success of specific grants (Fig. 2). With a single exception, conservation science was not reported as a sole criterion for guiding decisions. In all 5 decision areas, 10–20% of respondents reported that conservation science was “not a criterion.”

On the basis of examples respondents provided, conservation science most often influenced the geographic distribution of conservation grant making. Several foundations have begun to focus on climate change in response to emerging science. Few respondents answered whether knowledge about conservation science has challenged their conservation strategies or goals. Two exam-

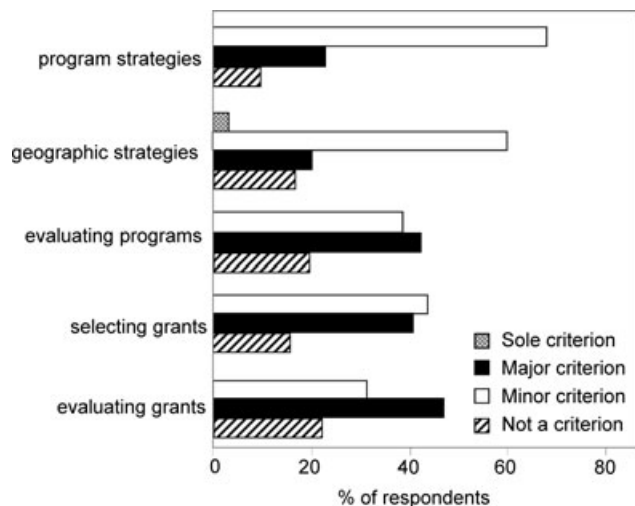


Figure 2. Use of conservation science to guide funding decisions made by participating Consultative Group on Biological Diversity member foundations in 5 grant-making areas. Programs involve multiple grants made over time to advance a thematic or geographic goal. Geographic strategies represent funder identification of priority areas for grant making. Evaluation of programs and individual grants refers to assessment of their effectiveness at meeting specified foundation goals.

ples illustrate the range of responses to this question and indicate the variety of fields and disciplines that can shape funding decisions:

First, the immediacy of climate change’s impact on natural systems may raise questions about our focal areas and whether we are funding the right interventions. Second, technological advances in genetics, speciation, and taxonomy may cause us to question our geographic priorities. Finally, expanding knowledge of species interactions and on the relative degree of resilience to environmental change may raise the importance of targeting areas for their value in preserving evolutionary options rather than based on the absolute numbers of species.

Broadly speaking, new knowledge about the social science of conservation—with more attention to strategic approaches to build long-term buy-in on the ground, to the linkages between ecological and cultural integrity, and to the ways in which global environmental changes connect with other kinds of global changes to affect both ecological and social systems—underlie[s] major changes in our overall strategy and goals that occurred about four years ago.”

Many responses did not highlight direct changes to existing organizational priorities in response to new scientific information; rather, they described reallocation of resources or expansion of grant-making efforts. For example, a respondent wrote, “The recognition that the Gulf of Maine is composed of a large number of small ecosystems—that it is not one system—challenged us to design a conservation strategy that respects the range of variation and the geography of these sub-ecosystems.”

Foundation Access to Conservation Science

The most important source of information for most respondents was the expertise of their own grantees (Table 3). Other important sources included the popular media and peer-reviewed journals. *Nature*, *Science*, and *Conservation Biology* were reported as the most widely read journals; a number of other journals were read by 1 or 2 respondents. Few foundations reported that they lack (and therefore cannot obtain information from) scientists on their staff or science-advisory boards. Most respondents indicated they obtained little information from Web sites, email lists, or scientific meetings.

Eighteen of 34 (53%) respondents reported that it was somewhat difficult to stay informed, whereas 3 (9%) said it was very difficult to stay informed (mean [SD] 2.4 [0.8]). Reasons for this difficulty included a lack of time and incentives, uncertain relevance to real-world problems, organizational values (“science only takes us so far,” “others are better positioned to fund it,” “action is our priority”), information overload, and staff turnover or loss of institutional memory.

Table 3. Degree of importance of different sources of conservation science information as reported by participating Consultative Group on Biological Diversity member foundations.

Source of information	Very important	Important	Somewhat important	Not important	Not applicable	Mean, SD	N
Scientists on our staff	2	2	3	2	24	2.4, 1.1	33
Grantee expertise	14	12	6	0	3	3.3, 0.8	35
Foundation board	0	1	10	11	11	1.6, 0.6	33
Science advisory boards	1	5	3	7	18	2.0, 1.0	34
Paid consultants	2	8	8	5	10	2.3, 0.9	33
My academic training	5	5	8	7	7	2.3, 1.1	32
Peer-reviewed journals	9	8	9	4	4	2.7, 1.1	34
Trade magazines	4	4	7	13	5	2.0, 1.1	33
Popular media	3	12	17	0	2	2.6, 0.7	34
Web sites	2	6	9	13	3	1.9, 1.0	33
Email lists	2	5	8	14	5	1.8, 1.0	34
Scientific meetings	2	5	7	12	8	1.9, 1.0	34

Many respondents suggested that conservation scientists make a greater effort to interpret their work in light of potential conservation practice and that scientists provide summaries of their research results. Several respondents also asked conservation scientists to channel their products more directly to foundations—for example, by “translat[ing] their journal article findings into plain English and do[ing] media/outreach on their findings.” Other respondents pointed to the perceived problem that much science is irrelevant: “Relevance is the only barrier;” “a lot of science is pretty wonky, and not always good at bridging to real world problems in more than an opening abstract kind of way.” Respondents suggested that scientists increase their awareness of foundation goals and priorities and be more forthcoming about their knowledge. Respondents commented that funders could make better use of their access to expert opinion, and that dedication of more resources to translation and communication of scientific results could enhance application of those results.

Discussion

Our survey results highlight several general tendencies in funding of conservation science by CGBD member foundations. First, private foundations in CGBD fund a substantial amount of conservation science, although their support comprises a relatively small fraction of their total conservation spending and is spent primarily in the United States. Second, the CGBD foundations generally believe conservation science can play an important role in informing decision making. Respondents highlighted the need for additional information from studies focused on social sciences, the effects of environmental stressors, and the measurement of conservation effectiveness. Third, foundations use conservation science mainly to inform foundation strategies and less often to evaluate the outcomes of funding decisions. Fourth, funders rely heavily on grantees rather than primary literature to keep

abreast of advances in conservation science, and funders have some difficulty in tracking those advances. Finally, funders have persistent concerns about the strategic utility of funding conservation science to achieve conservation gains. All these tendencies show that foundations have a fundamentally different rationale for funding scientific studies than alternative funding sources, such as the U.S. National Science Foundation.

We suggest that the distinction between private foundations and other agencies that fund conservation science primarily reflects different motivations or goals. The motivation for most scientific research efforts, including conservation science efforts, falls along a gradient from a quest for fundamental understanding to a desire to apply scientific understanding to specific management and policy issues. The National Science Foundation largely funds research that falls toward the fundamental end of the gradient, whereas other public agencies (e.g., U.S. Environmental Protection Agency, Fish and Wildlife Service, Forest Service, NASA) fund along the spectrum, with some more focused on applicability. Private conservation foundations are much more likely to emphasize research motivated primarily by immediate potential for application to conservation action. Toward the middle of the gradient, there is considerable overlap in goals and intent between private foundations and public funding agencies. Nevertheless, on the basis of our survey results, many private foundations appear to hesitate to fund conservation science without tangible, near-term bearing on practice, often because they regard such research as more appropriate for public funding.

An overarching emphasis on application of research by private foundations focusing on conservation likely stems from internal organizational mandates to achieve on-the-ground conservation outcomes. From this perspective, funding conservation science is just one of a host of potential strategies used to realize conservation gains. Many survey respondents emphasized factors other than a shortage of scientific information as the primary impediment to such gains. In practice, this means that some foundations are less likely to fund science in favor of

alternative tactics. To increase investment by private foundations in conservation science, it will be critical for funders, researchers, and conservation practitioners to jointly identify when and how new scientific knowledge will lower barriers to conservation gains.

Foundations focusing on conservation have a vested interest in supporting and using high-quality science because decisions based on poor information could ultimately fail to meet conservation objectives (Cleary 2006; Higgins et al. 2006). We hope through this paper to encourage a more transparent dialogue between conservation scientists and private foundations about how to advance the common interests of these 2 communities in conservation science and the overall goal of enduring conservation. We envision an evolving relationship between funders and conservation scientists that emphasizes (1) primary research and synthesis motivated by application, (2) an increased focus on interactions between humans and other aspects of ecosystems rather than function of systems with limited human use (e.g., Palmer et al. 2004), and (3) broader communication of relevant scientific information. Achieving this vision will require continued effort on the part of funders and conservation scientists. The donors reported struggling to access scientific information, even when they are strongly motivated to do so, signaling a need for conservation scientists to be more strategic about how they conceive and communicate the relevance of their work. For their part, donors could benefit from expanded education in conservation science that draws on sources other than their grantees. Finally, funders could be more explicit about their strategies and make their needs known to conservation scientists. We hope this paper is a first step toward accomplishing our vision and to launching a dialogue about funder-science partnerships that can advance conservation goals.

Acknowledgments

We thank L. Lohr, W. Hull, and their staff at the CGBD for sponsoring this project. We thank K. Wilson for moderating the symposium at the 2006 annual meeting of the Society for Conservation Biology, where these results were first presented, and audience members from that session for their comments and questions. The views expressed here are the authors' and do not necessarily represent those of their home institutions. Finally, we thank our survey respondents from the following foundations: Agua Fund, Jenifer Altman Foundation, Bullitt Foundation, The Christensen Fund, Compton Foundation, Doris Duke Charitable Foundation, Edgerton Foundation, Environment Now, Flintridge Foundation, Garfield Foundation, George Gund Foundation,

Harder Foundation, Heinz Endowments, Hewlett Foundation, Ivey Foundation, Lyndhurst Foundation, John D. and Catherine T. MacArthur Foundation, Marisla Foundation, Kendall Foundation, John Merck Fund, The Gordon and Betty Moore Foundation, C. S. Mott Foundation, Curtis and Edith Munson Foundation, Oak Foundation, The David and Lucile Packard Foundation, Pew Charitable Trusts, V. Kann Rasmussen Foundation, Rockefeller Brothers Fund, The Summit Foundation, Surdna Foundation, Tides Foundation, Town Creek Foundation, Emily Hall Tremain Foundation, Turner Foundation, Wallace Global Fund, Wilburforce Foundation, Winslow Foundation, 444S Foundation.

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