The Foundation Review

Volume 9 | Issue 2 Article 14

6-30-2017

Staying the Course: How a Long-Term Strategic Donor Initiative to Conserve the Amazon Has Yielded Outcomes of Global Significance

Jared Hardner Hardner & Gullison Associates LLC

R.E. Gullison Hardner & Gullison Associates LLC

Elizabeth O'Neill Elizabeth O'Neill Impact Consulting

Follow this and additional works at: http://scholarworks.gvsu.edu/tfr

Recommended Citation

Hardner, Jared; Gullison, R.E.; and O'Neill, Elizabeth (2017) "Staying the Course: How a Long-Term Strategic Donor Initiative to Conserve the Amazon Has Yielded Outcomes of Global Significance," *The Foundation Review*: Vol. 9: Iss. 2, Article 14. DOI: https://doi.org/10.9707/1944-5660.1371

Available at: http://scholarworks.gvsu.edu/tfr/vol9/iss2/14

This Article is brought to you for free and open access by ScholarWorks@GVSU. It has been accepted for inclusion in The Foundation Review by an authorized editor of ScholarWorks@GVSU. For more information, please contact scholarworks@gvsu.edu.

Staying the Course: How a Long-Term Strategic Donor Initiative to Conserve the Amazon Has Yielded Outcomes of Global Significance

Jared Hardner, M.S., and R.E. Gullison, Ph.D., Hardner & Gullison Associates LLC, and Elizabeth O'Neill, M.S., Elizabeth O'Neill Impact Consulting

Keywords: Strategic philanthropy, Amazon, biodiversity conservation, protected areas

Key Points

- This article examines how the design principles of a major philanthropic initiative have influenced its performance, and provides a practical example of strategic philanthropy that can contribute to the current debate over the merits and flaws of this approach.
- The Gordon and Betty Moore Foundation's \$369 million Andes Amazon Initiative, one of the largest private environmental conservation initiatives ever, reflects the values of the Moore family by focusing on conserving important biodiversity and wilderness areas such as the Amazon. "Making a difference" in the context of the Andes-Amazon has required adherence to the foundation's founders' principles of investing at sufficient spatial and temporal scale, the development of an evidence-based theory of change, and a systematic means to measure and evaluate progress against a clearly articulated outcome.
- · Maintaining a commitment to these principles through multiple changes in foundation leadership and staffing has been an important challenge.
- The lessons learned are reinforced by the experience of the foundation across its other initiatives, spanning fields as diverse as scientific research and supporting advances in the field of health care. The relevance of the foundation's experience, therefore, extends beyond environmental conservation to other areas of philanthropy.

Introduction

Gordon and Betty Moore founded their eponymous foundation in 2001. The foundation supports scientific discovery, environmental conservation, patient-care improvements, and preservation of the special character of the San Francisco Bay Area. The foundation has made more than 2,100 grants, totaling \$3 billion; \$1.3 billion of this has been directed toward environmental conservation. The largest of the foundation's environmental initiatives is the Andes Amazon Initiative (AAI), which has invested nearly \$369 million over its first 15 years to protect the forest cover and biodiversity of the Amazon.

Deforestation has resulted in the loss of 13.3 percent of the Amazon's original forest cover (Red Amazónica de Información Socioambiental Georreferenciada, 2015). Scientists studying the hydrology and climate of the Amazon believe that deforestation can change the local or even regional climate and result in the drying of some areas, and in the worst-case scenario even trigger large-scale forest loss as these areas revert to drier grasslands and shrub lands (Lejeune, Davin, Guillod, & Seneviratne, 2014; Zhang et al., 2015). Furthermore, deforestation and other forms of human disturbance threaten the region's outstanding biodiversity values (Hubble et al., 2008; Wearn, Reuman, & Ewers, 2012; Barlow et al., 2015). Slowing, halting, or reversing the destruction of the Amazon is recognized as one of the greatest challenges facing the global environmental community today.

To address the need for large-scale conservation of the Amazon biome, the AAI began in 2001 with a goal of contributing to the protection of 70 percent of the Amazon's original forest cover. The target was chosen in consultation with the scientific community as a "best guess" of the amount of forest cover required to maintain the hydrology of the basin. It is complemented by subtargets to distribute conservation across areas of different ecological characteristics within the Amazon to protect representative biodiversity.

The initiative's core strategy for reaching its target for forest conservation has been the establishment and effective management of legally conserved areas — a term we will use broadly for any legislated land-use designation that prohibits deforestation, ranging from protected areas such as national parks to indigenous territories.

The AAI has successfully supported the legal designation of 250,000 square miles of conservation areas and indigenous territories since its inception. A total of 1.37 million square miles now fall within protected areas (672,000 square miles) and indigenous territories (845,000 square miles),1 covering 45.5 percent of the original forest cover of the Amazon Biome.2 If effectively managed, this 45.5 percent of conserved forest cover could be sufficient to achieve the AAI's overall goal when combined with those areas of the Amazon that are de facto conserved by virtue of complementary conservation measures, their remoteness, or poor conditions for economic land use.

The AAI has also supported the development of systems and processes to manage the conserved areas effectively for the long term — which we call consolidation. The initiative originally set out to consolidate 1.35 million square miles of conserved sites, but over the years the foundation reduced this goal to the more manageable figure of 540,000 square miles. At present, the AAI and its grantees have fully consolidated only [A]s evaluators in the field of conservation we have seen no comparable philanthropic effort to the AAI in terms of size, longevity, and level of impact.

a fraction of this amount, totaling about 14,300 square miles. Consolidation of the remaining areas remains the initiative's defining challenge.

Nevertheless, as evaluators in the field of conservation we have seen no comparable philanthropic effort to the AAI in terms of size, longevity, and level of impact. The success of the initiative on the ground is the product of the work of its grantees over these past 15 years. But important to making the grantees' work possible is the donor — and its approach to philanthropy.

The Founder's Intent

In 2015, Gordon and Betty Moore penned a "statement of founder's intent" to specify the purpose of the foundation and to provide guidance to trustees and management. In large part, the statement formalizes in writing the general guidance provided by the founders that has shaped their philanthropy to date. Building on this document, the foundation developed guiding principles that fall into four general categories: impact, integrity, disciplined approach, and collaboration. (See Figure 1.)

The foundation's approach is also consistent with a broader movement that has come to be known as strategic philanthropy, with its emphasis on clearly stated and measurable goals, a donor-driven theory of change, evidence-based strategies, performance measurement, and accountability (Porter & Kramer, 1999).

¹Protected areas and indigenous territories overlap on 147,000 square miles, which accounts for the difference between the sum of the two categories and the total conserved area.

²For a detailed map, see Red Amazónica de Información Socioambiental Georreferenciada, 2015.

FIGURE 1 Principles of the Gordon and Betty Moore Foundation

Impact - We strive to achieve large-scale, enduring impact.

- Investing on a sufficient scale to make a difference on important issues.
- Taking the long view, staying the course, and persisting.
- · Seeking to create durable, not temporary, change.
- · Taking calculated risks and supporting new ideas for significant change.
- · Focusing on root causes, not symptoms, to create systemic change.

Integrity - We hold ourselves accountable to our founders' ideals and aspirations.

- · Carrying out our work with uncompromising integrity and committing to the highest standards of conduct.
- · Communicating honestly, clearly, and in a timely manner.
- · Using the resources entrusted to us responsibly.
- · Holding ourselves to the same standards that we ask of others.

Disciplined Approach - We take a systematic, evidence-based approach.

- · Developing and implementing evidence-based, well-vetted theories of change.
- · Testing our assumptions and challenging our thinking; we adaptively manage to address changing conditions.
- · Evaluating our impact, learning and improving, we establish outcomes which we can measure using both quantitative and qualitative approaches.
- · Consistently implementing full cycles of planning, execution, evaluation, and improvement, we learn from both our successes and failures.
- · Staying well informed and making decisions on the basis of knowledge, analysis, external input, and objective due diligence.

Collaboration - We collaborate with respect and purpose.

- Recognizing that our impact is achieved through the efforts of our grantees and others.
- · Working with others; respecting their ideas, values, and time.
- Listening to varying points of view, including those that may differ from our own.
- Gathering and incorporating the best thinking into our work.
- · Respectfully challenging ourselves and our partners to strengthen our collective thinking.
- · Fostering collaboration when we can create a whole that is greater than the sum of its parts.

The AAI provides an important illustration of the Moores' guiding principles. Furthermore, it informs the broader discussion stimulated by the recent mea culpas of some of the most ardent proponents of strategic philanthropy who regret the effects of advocating donor-level planning (Kania, Kramer, & Russell, 2014) and the consequent disempowerment of grantees to make their own strategies (Harvey, 2016).

The AAI's Design Principles

Investing at Sufficient Scale and Taking the Long View

Ensuring that the AAI's design was commensurate to the challenge it sought to confront required that the initiative: (a) work at a spatial scale large enough that it would influence the status of forests and biodiversity across the basin, (b) commit enough financial resources to comprise an important source of funding for conservation in the Amazon, and (c) continue its funding long enough to complete the complex processes necessary to establish and consolidate conserved areas.

As discussed earlier, the AAI's target is to conserve 70 percent of the Amazon — an estimated theoretical threshold for sustaining the hydrologic function of the region. In the strictest interpretation of this theory, any effort to conserve the Amazon that falls short of that threshold would fail to preserve the ecology of the biome. For the initiative to "make a difference" in this context, it needs to work at a very large spatial scale across the Amazon. To achieve this, the AAI has made grants in seven of the nine countries in the Amazon: Brazil, Bolivia, Colombia, Ecuador, Suriname, Peru, and Venezuela, Over time, the AAI has prioritized and reprioritized its geographic focus in an effort to avoid spreading itself too thin as well as in response to evolving theories about where conservation is most needed and most effective. About 20 percent of the initiative's funding has gone to grants covering multiple countries in the Amazon. Forty percent of the funding went to efforts in Brazil specifically and 20 percent went to efforts in Peru. Colombia, Bolivia, and Ecuador each received about 4 percent. Less than 1 percent of total grantmaking went to Venezuela and to Suriname, neither of which has received funding in recent years.

According to Castro and Riega-Campos (2014), the foundation is a larger donor for conservation in the Amazon than the other largest private foundations combined: Fundo Vale, the blue moon fund, and the Ford, MacArthur, Skoll, and Avina foundations. The AAI typically funds nongovernmental organizations to provide technical support to governments or communities, or to implement directly the specific actions needed. However, at times the AAI funds governments directly. For example, it provided significant support to the government of the state of Amazonas in Brazil for the expansion and consolidation of a major, 69,500-square-mile, state protected-areas

The AAI typically funds nongovernmental organizations to provide technical support to governments or communities, or to implement directly the specific actions needed. However, at times the AAI funds governments directly.

system — an area equivalent to the size of Missouri. Well over half of the grantees are national or local organizations or South Americabased programs of international organizations. About half of grantees received \$1 million or less, 30 were given between \$1 million and \$5 million, 11 received \$5 million to \$10 million, and just two — the Wildlife Conservation Society and the World Wildlife Fund — received individual grants of more than \$20 million.

The AAI has been funding grantees in the Amazon for 15 years and is currently planning another multiyear phase of operation. The foundation's long-term commitment to the AAI has had three main effects:

1. The AAI has been able to cultivate a highly effective grantee portfolio. Its commitment to conservation in the region should not be conflated with unconditional long-term support for individual grantees, although some have been supported for the life of the initiative. Rather, a commitment to a theme and a geography over time allowed the AAI to work with multiple grantees via fixed-term grants and renew support to those that needed funding to complete an agreed plan of work with the foundation, continued to work on AAI's priorities, and have been effective. In addition, the initiative has helped increase the capacity of many organizations, which has been crucial for ensuring adequate capacity to

From the outset, the AAI worked within a practical and straightforward theory of change that sought to establish and consolidate conservation areas.

perform the specialized work necessary to achieve the AAI's goal. In the words of MacArthur Foundation Program Officer Amy Rosenthal, "The Moore Foundation made possible a flourishing of civil society organizations supporting conservation."

- 2. Grantees state that the long-term commitment of the AAI to achieve its goal and the potential to receive follow-up grants allowed them to make long-term plans with their grant funding. In the case of consolidating conserved areas in the Amazon, some tasks — such as the writing of a management plan for a national park - are discrete and readily accomplished in a short period of time. Others are long-term processes that require a patient and committed approach, such as formalizing a management plan of an indigenous territory, which involves a social process that may take many years and cannot be rushed to accommodate donor expectations or rigid timetables. In our evaluations, grantees pointed to the AAI's long time commitment as a major factor in the grantees' success.
- 3. The AAI's enduring presence has signaled to governments and donors the importance of protected areas and indigenous territories as an essential mechanism for conserving the Amazon. This has facilitated the initiative's collaboration with governments and donors in the establishment of trust funds for the long-term support of protected areas, as has been accomplished in Brazil and is currently in development in some Andean countries.

Development of an Evidence-Based Theory of Change Via Collaboration

From the outset, the AAI worked within a practical and straightforward theory of change that sought to establish and consolidate conservation areas. The initiative supported its grantees aggressively to make the most of an historic moment of political opportunity to establish numerous new conservation areas in Brazil, and to a lesser extent in Peru and Bolivia. During the period of 2002-2010, 320,000 square miles of the Amazon entered legally conserved status, much of it supported by the AAI. Although the establishment and expansion of conservation areas continues today — one example is Peru's 5,212-square-mile Sierra del Divisor National Park, in 2016 — the exceptional pace of the prior decade has moderated substantially.

When the initiative began, very little was known about how to consolidate new conservation areas in the Amazon. The AAI had a general understanding that major gaps in institutional capacity and long-term funding for protected-areas systems would need to be filled, but the theory of change for how to address these problems was vague, and completely undeveloped for indigenous territories. The priority was to seize opportunities for conservation-area establishment while they lasted, and to turn attention to consolidation later.

In 2005, the foundation commissioned the first external independent evaluation of the AAI. The evaluation identified a need to focus more attention on consolidation and the challenges it would present for successfully conserving the burgeoning expanse of conservation areas in the Amazon. As an interim measure of consolidation, the evaluators developed a list of "limiting factors" (Gullison & Hardner, 2009) that might impede the effective management of conservation areas. Limiting factors included stakeholder support for conservation, legal protection, public policy, scientific knowledge, institutional capacity, law enforcement, and funding. For example, the long-term funding of this very large portfolio of conservation areas would require resources many multiples of what was available at the time from government budgets and

international assistance. Strategies began to take shape to address those factors that were most limiting progress.

Over time, via collaboration with grantees that specialize in different geographies and thematic components (e.g., conservation law or indigenous issues), the AAI has refined the theory of change based on a growing base of experience among its grantees on how best to consolidate conserved areas. Today, the AAI supports its grantees in interventions at three levels:

- 1. National and subnational protected areas systems. The AAI funds the development of monitoring programs and supports the development of financial mechanisms to support protected-areas management for the long term.
- 2. Geographic mosaics of conserved areas. The AAI supports regional land-use planning and improved infrastructure planning.
- 3. Individual conserved areas. The AAI funds a suite of interventions to improve governance, ensure that sites are well-integrated into regional land-use plans, develop management plans, perform site-level monitoring, provide financial sustainability, and plan resource use for those categories of conserved areas that allow economic-resource management.

Measuring and Evaluating Progress

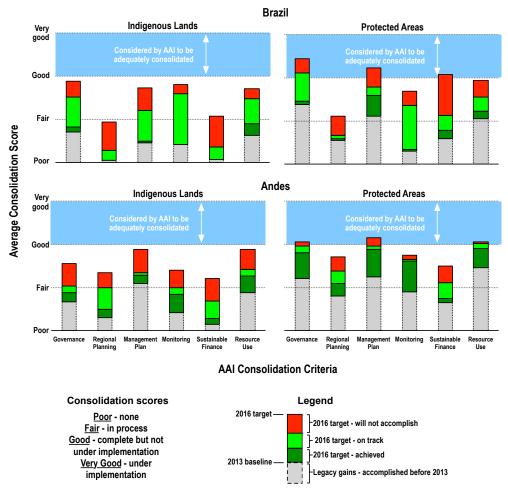
The foundation has been consistent in its use of external evaluations as part of its disciplined approach. The AAI has undergone three external evaluations — in 2005, 2010, and 2015. These evaluations have complemented internal processes of reporting to the foundation's trustees and have assessed progress on the ground via structured surveys covering all sites supported by the AAI, site visits, interviews with relevant experts and stakeholders, and reviews of other current and related studies and research.

Despite the founders' emphasis on a disciplined approach, however, the adoption of an internal performance-measurement system for the AAI

The AAI has undergone three external evaluations — in 2005, 2010, and 2015. These evaluations have complemented internal processes of reporting to the foundation's trustees and have assessed progress on the ground via structured surveys covering all sites supported by the AAI, site visits, interviews with relevant experts and stakeholders, and reviews of other current and related studies and research.

has developed very slowly. In its early years, the initiative measured its progress only in terms of the total area gaining legal conservation status — the establishment of a national park, for example — but did not monitor progress toward consolidation of the management of that site. As described above, the 2005 external evaluation used the limiting-factors framework as a proxy measure for the consolidation of site management. The 2010 external evaluation added the Rapid Assessment of Prioritization of Protected Area Management (RAPPAM), developed by the World Wildlife Fund (Ervin, 2003). The RAPPAM provides ordinal scoring of numerous operational criteria for protected-areas management. However, the AAI took up neither the limiting factors nor RAPPAM for internal monitoring. The lack of performance measurement created difficulties for the foundation, especially during internal discussions when it was questioned whether the initiative was progressing toward its goals. Little information was available to inform these discussions, and exit criteria

FIGURE 2 Progress by the AAI's Grantees Towards Consolidation of Legally Conserved Areas in the Last **Evaluation Period**



were lacking for site consolidation against which to compare progress.

It was not until 2013 that the AAI developed and implemented its own internal system of performance measurement. This in-house system has various components, including a risk assessment based on the limiting factors that is applied at the level of mosaics of conserved areas, and six criteria (some of which mirror RAPPAM) with semiquantitative ratings that are applied to individual conserved areas: governance, regional planning, management planning, monitoring, sustainable finance, and sustainable resource use. It also

provides a target for each criterion for determining when an area is adequately consolidated.

Such a straightforward performance-measurement system is instrumental in assessing progress. Most importantly, it is necessary for determining when the AAI has reached its goal. When this information is presented graphically, it allows a rapid and meaningful communication of important information required for decision-making by senior management and the board of trustees: How much progress has been made in the last time period? To what extent is the initiative likely to meet its stated goals over a specific time period? (See Figure 2.) It was based on this information that, in late 2015, the board decided to renew and expand its commitment to Amazonian conservation.

Despite the recent development and adoption of the AAI's own internal performance-monitoring system, significant challenges remain with respect to linking the establishment and consolidation of conserved areas to physical and biological outcomes. Recent technical advances in remote sensing have allowed the initiative and its grantees to monitor deforestation across the Amazon;³ however, standing forest cover is not by itself a sufficient indicator of biodiversity condition (Sasaki & Putz, 2009; Wilkie, Bennett, Peres, & Cunningham, 2011) and ground-level biological information currently collected by grantees is very localized. To address this gap, the AAI has increased its grantmaking to technically specialized grantees, but improvement will require time. Even drawing simple conclusions about deforestation is a challenge. It has been problematic determining the precise relationship between investments in management and effectiveness in preventing deforestation (Nolte, Agrawal, & Barreto, 2013; Coad, et al., 2015). The AAI does have data comparing deforestation in areas it funds versus those it does not, which appear to show AAI-funded areas performing better. But these data do not yet provide sufficient statistical power to control for the full range of variables that could affect this result. Thus, more work remains to complete the AAI's performance-monitoring framework.

Discussion, Lessons Learned, and **Future Challenges**

The overall impact of the Andes Amazon Initiative has been dramatically positive. The efforts of many have contributed to the massive expansion of conservation areas in the Andes-Amazon region since the inception of the AAI, but the initiative has played an important role. The overall outcome is arguably the largest expansion of legally conserved lands in history, which supports the agendas of countries in the

[P]erhaps most significant, in our opinion, has been the willingness to stay the course over the period of time necessary to actually achieve durable outcomes in a challenging context.

region to maintain important environmental functions such as hydrology and climate, sustainable livelihoods for forest-based communities, and the protection of biodiversity.

After conducting three consecutive external evaluations of the AAI, the authors believe that the initiative's impact is to a great extent attributable to the guiding principles of the founders. "Making a difference" in the context of the Andes-Amazon has required a large-scale commitment, geographically and financially; a theory of change that engaged and promoted the growth of high-performing grantees; and performance measurement and evaluation. But perhaps most significant, in our opinion, has been the willingness to stay the course over the period of time necessary to actually achieve durable outcomes in a challenging context.

The AAI's experience illustrates some of the benefits and risks of strategic philanthropy. The initiative's approach is donor driven, providing a high-level plan in which grantees collaborate in developing the specifics. On the positive side, this has allowed for a large-scale and relatively long-term coordinated and collaborative push among many grantees toward achieving a shared goal. The AAI has not over-specified its strategies, but instead has relied on grantees to develop geographically appropriate approaches within the initiative's broad strategies for the larger region. During evaluations, grantees often stated that the AAI was different from other donors in

³See, for example, Red Amazónica de Información Socioambiental Georreferenciada, 2015.

its willingness to allow grantees to develop plans appropriate to their context and to adapt those plans as needed over the life of a grant.

As the initiative progresses, it will continue to face major challenges:

- First, the scale of the AAI's commitment is very large and requires a careful allocation of resources to ensure that the vast portfolio of areas now legally conserved can actually be consolidated. The AAI took a calculated risk that legally conserved areas could eventually be consolidated, but there remain significant hurdles, such as low institutional capacity in the Amazon and a significant shortfall of long-term finance, not to mention uncertainties about the social complexity of supporting conservation in indigenous territories.
- Second, the foundation will continue to change leadership and staff over time, bringing in individuals with new and different ideas. It will be necessary to find the correct balance of enthusiasm for those ideas with the discipline required to stay the course while implementing the AAI's core theory of change. At times, there has been an internal struggle between the foundation's senior management and the board of trustees to maintain the commitment to the initiative. At various junctures, the foundation's senior management has either declared the AAI too slow to achieve its goals or, ironically, to have already achieved its goals, with an apparent eye to moving on to new philanthropic initiatives. But through this uncertainty, the board has stayed the course and maintained the foundation's commitment to the Moore family's philanthropic values, and has continued to re-authorize the AAI.

The experience of the foundation with the AAI has been similar in many respects across its other initiatives. Some examples in diverse fields include the Wild Salmon Ecosystem Initiative, which has operated since 2001 and made grants totaling more than \$264 million; the Marine

Microbiology Initiative, which began in 2004 and has made over \$220 million in grants; and the Betty Irene Moore Nursing Initiative, which ran from 2004-2014 and made \$181 million in grants. Mirroring the themes described here for the AAI, evaluators have commented positively on the scale and time frame of the foundation's initiatives and the foundation's ability to take risks to confront significant challenges. However, evaluations also identified the importance of ensuring the durability of outcomes and improving performance measurement at the level of the initiatives.

References

- BARLOW, J., LENNOX, G. D., FERREIRA, J., BERENGUER, E., Lees, A. C., Mac Nally, R., et al. (2016). Anthropogenic disturbance in tropical forests can double biodiversity loss from deforestation. Nature, 535, 144-147.
- CASTRO, G., & RIEGA-CAMPOS, S. (2014). An analysis of international conservation funding in the Amazon. Palo Alto, CA: Gordon and Betty Moore Foundation. Retrieved from http://www.vale.com/brasil/PT/ aboutvale/news/Documents/Amazon-Conservation-Funding-Analysis-Publication-2014.pdf
- COAD, L., LEVERINGTON, F., KNIGHTS, K., GELDMANN, J., EASSOM, A., KAPOS, V., ET AL. (2015). Measuring impact of protected area management interventions: current and future use of the Global Database of Protected Area Management Effectiveness. Royal Society of London. Philosophical Transactions B. Biological Sciences, 370.
- ERVIN, J. (2003). Rapid assessment and prioritization of protected area management methodology. Gland, Switzerland: World Wildlife Fund. Retrieved from http:// assets.panda.org/downloads/rappam.pdf
- GULLISON, R. E., & HARDNER, J. (2009, June). Using limiting factors analysis to overcome the problem of long time horizons when evaluating biodiversity conservation projects. New Directions in Evaluation, 122, 19-29.
- HARVEY, H. (2016, April 4). Why I regret pushing strategic philanthropy. Available at https://www.philanthropy. com/article/Opinion-Why-I-Regret-Pushing/235924
- Hubble, S. P., He, F., Condit, R., Borda-de-Água, L., Kellner, J., & Ter Steege, H. (2008, August). How many tree species are there in the Amazon and how many of them will go extinct? Proceedings of the National Academy of Sciences, 105, 11498-504.
- Kania, J., Kramer, M., & Russell, P. (2014, Summer). Strategic philanthropy for a complex world. Stanford Social Innovation Review. Retrieved from https://ssir. org/up_for_debate/article/strategic_philanthropy
- Lejeune, Q., Davin, E. L., Guillod, B. P., & Seneviratne, S. (2014, May). Influence of Amazonian deforestation on the future evolution of regional surface fluxes, circulation, surface temperature and precipitation. Climate Dynamics, 44, 2769-2786. doi: 10.1007/s00382-014-2203-8.
- Nolte, C., Agrawal, A., & Barreto, P. (2013, March). Setting priorities to avoid deforestation in Amazon protected areas: Are we choosing the right indicators? Environmental Research Letters, 8(1), 015039.
- PORTER, M. E., & KRAMER, M. R. (1999, November-December). Philanthropy's new agenda: Creating value. Retrieved from https://hbr.org/1999/11/philanthropys-new-agenda-creating-value

- RED AMAZÓNICA DE INFORMACIÓN SOCIOAMBIENTAL GEOR-REFERENCIADA. (2015). Amazonia 2015: Protected natural areas and indigenous territories. Retrieved from https://www.amazoniasocioambiental.org/en/mapas/
- SASAKI, N., & PUTZ, F. E. (2009, July). Critical need for new definitions of "forest" and "forest degradation" in global climate change agreements. Conservation Letters, 2, 226-232.
- Wearn, O. R., Reuman, D. R., & Ewers, R. M. (2012). Extinction debt and windows of conservation opportunity in the Brazilian Amazon. Science, 337(6091), 228-232.
- WILKIE, D. S., BENNETT, E. L., PERES, C. A., & CUNNINGнам, A.A. (2011). The empty forest revisited. Annals of the New York Academy of Sciences, 1223, 120–128.
- ZHANG, K., ALMEIDA CASTANHO, A. D., GALBRAITH, D. R., Moghim, S., Levine, N. M., Bras, R. L., et al. (2015). The fate of Amazonian ecosystems over the coming century arising from changes in climate, atmospheric CO2, and land use. Global Change Biology, 21, 2569-2587. doi: 10.1111/gcb.12903
- Jared Hardner, M.S., is managing partner at Hardner & Gullison Associates LLC. Correspondence concerning the article should be addressed to Jared Hardner, Hardner & Gullison Associates LLC, 15 Woodland Drive, Amherst, NH 03031 (email: jared@hg-llc.com).
- R.E. Gullison, Ph.D., is a partner at Hardner & Gullison Associates LLC. The firm has conducted five major program evaluations for the Gordon and Betty Moore Foundation.
- Elizabeth O'Neill, M.S., is an independent evaluator who has worked extensively with the Gordon and Betty Moore Foundation to improve internal monitoring and evaluation systems.