

California Academy of Sciences

# *bioGraphic*: a New Voice of Hope in Troubling Times





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## Introduction

We live in an era when it's all too easy to find distressing news about the health and future of our planet. Environmental protections are being stripped right and left; global carbon emission rates continue to grow at alarming rates; the ecosystems that support us are being degraded faster than ever before; and government-employed scientists are being asked not to discuss these trends. Bombarded by all of this bad news, many people have lost hope—and have withdrawn from important conversations about science and sustainability at a time when those dialogues are more important than ever.

It's time to change this trajectory. To ensure a more sustainable future, we must energize the natural world's enthusiasts, advocates, and change-makers with a more positive and exciting vision of a thriving, sustainable world—and equip them with the knowledge, inspiration, and tools to shape a healthy future.

To meet this critical need, the Academy has created *bioGraphic*—an innovative multimedia magazine that serves as a beacon of hope in troubling times, showcasing both the wonder of nature and the latest tools, breakthroughs, and ideas for sustaining life on Earth.

## The Need

Amidst this sea of bad news, we're seeing a troubling lack of accurate, solutions-focused science and environment reporting. Since 1989, the number of U.S. daily newspapers with science sections has dropped from 95 to just 19 today. Major cable networks that once funded the production of high-quality science and nature documentaries have increasingly turned to "reality" shows that are cheaper to produce. And most environmental media outlets operate on desperately small budgets, lack in-house science expertise, and don't have the resources to pursue new methods of digital engagement and storytelling.

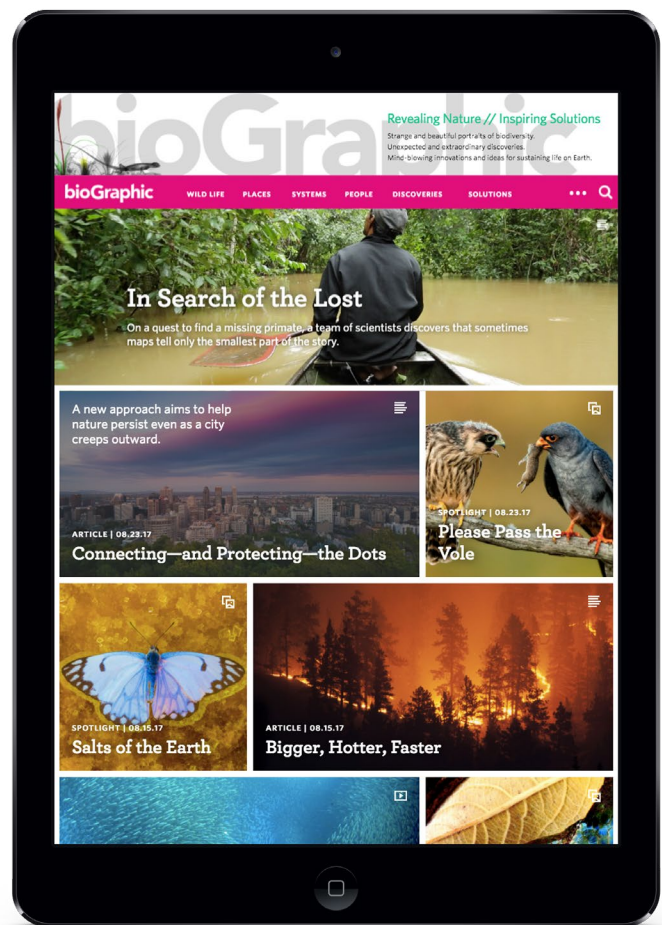
Sadly, most of what's left are polarizing stories that either ignore the science outright, are overwhelmingly "doom and gloom" in tone, or are woefully superficial. All the while, the public's lack of understanding of basic ecological and sustainability principles continues to stand in the way of efforts to address critical environmental issues.

## The Academy's Response

As a trusted institution with deep scientific and storytelling expertise, the Academy is stepping in to fill this void in the media landscape. In early 2016, we launched *bioGraphic*—a new multimedia magazine that energizes audiences around the world, offering both hope and solutions for a more sustainable future. The publication is rich in scientifically accurate, visually compelling stories that focus on positive sustainability solutions.

To find and craft compelling stories, we are leveraging the Academy's in-house scientists and collections; its global network of research and conservation partners; its world-class proficiency in storytelling, design, and visualization; and its relationships with top-tier journalists, photographers, and producers around the world. Together, we are revealing a world of spectacular places and creatures, great scientific minds and unsung heroes, and world-changing breakthroughs and technologies for sustaining life on Earth.

These stories don't just reside on our own site. To maximize reach and create exponentially greater impact, we also distribute many of them—free of charge—to nearly 50 popular media outlets around the world, including *The Atlantic*, *The Guardian*, *Forbes*, *BBC World News*, and *The Washington Post*. Collectively,



these outlets report circulation numbers that total nearly half a billion unique monthly visitors. We are also actively promoting our stories on social media, as are our partner outlets. All told, during our first year, *bioGraphic* published 120 stories that were collectively read or watched more than 16 million times—and were shared on social media more than a million times.

## I. Creating Awe-Inspiring Narratives About Nature and its Future

### Content Strategy

We are using a wide variety of tools and techniques to tell stories about some of the world's most spectacular places, most interesting people, strangest and most beautiful creatures, most pressing environmental issues, and most promising sustainability solutions. *bioGraphic* stories draw in audiences through both beauty and thought-provoking narratives, offering new perspectives on existing issues and innovative ways of framing, discussing, and visualizing unfamiliar topics.

In its first year, *bioGraphic* established a reputation for telling highly visual, scientifically rigorous stories

about the wonder of nature and the most promising solutions for sustaining life on Earth. As we enter our second year, *bioGraphic* will maintain this reputation—and hone its editorial focus by concentrating efforts around a few key themes, including climate change, biodiversity and human health, land use and agriculture, and marine resource management.

*bioGraphic* offers stories in a wide range of formats, including traditional articles, photo essays and slideshows, videos, opinion pieces, infographics, and data visualizations. Our signature stories are long-form, immersive features that transport readers to faraway places and enable them to feel what it's like to be there. These multimedia pieces are not only inspirational, they are memorable—and they have caught the attention of a growing group of influencers, from educators and media professionals to NGO leaders and celebrities.

The digital media landscape continues to change rapidly, so we are leveraging our location in the Bay Area and relationships with local technology and media companies to employ exciting new storytelling tools in these stories, ranging from drones, satellite technologies, and underwater submersibles to 3D, 360°, and ultra-high resolution imaging technologies.

### Content Creation

To meet the content needs for *bioGraphic*, we built a small in-house editorial team comprised of two full-time editors supported by a group of existing Academy staff members who lend their time and expertise to the project on an as-needed basis. This efficient team of writers, video producers, media and visualization experts, photographers, scientists, and designers collaborates with a network of expert freelance contributors from around the world to craft stories with a consistent voice (optimistic, clever, filled with awe) that meet our high editorial standards for quality (scientifically accurate, visually compelling, and engaging).

We have also assembled an advisory board comprised of scientists, influencers, and representatives from our technology and media partners to help surface story ideas, develop new partnerships, and facilitate the use of new storytelling tools.



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### Audience

*bioGraphic* stories are engaging and accessible for general, college-educated audiences, and smart and savvy enough to attract the attention of professional audiences as well, including influential decision makers in the fields of policy, business, academia, education, and philanthropy.

Based on demographic data for our site visitors and social media followers, we know that *bioGraphic* stories are reaching a broadly distributed international audience. We also know we're doing a better job than most science media sites of reaching a female audience. In fact, more than half of our audience is female, and young women between the ages of 18-24 are among our most highly engaged readers.

Additionally, we have learned that many of our stories—especially videos and infographics—have resonated with middle school and high school teachers, who are now using these resources in their classrooms. We are now working with the Academy's team of in-house educators to develop accompanying lesson plans and activities for many of these stories and proactively distribute them to science teachers across the country.

## II. Ensuring Wide Reach by Cultivating Distribution Partnerships

Our "cost per acquisition" on *bioGraphic* stories is incredibly low. Unlike for-profit media organizations that must work to actively to choke off unauthorized reprints of stories (and must invest sizeable marketing budgets to drive traffic and subscriptions), *bioGraphic* isn't beholden to advertisers, so there's nothing stopping us from sharing our stories as widely as

possible. By pursuing an aggressive distribution strategy and extensive media partnerships to disseminate our content, we are already reaching a larger global audience than established publications like *National Geographic* magazine. And we're doing so at a fraction of their cost. In our first year, we spent just \$0.06 to attract each person who read or watched a *bioGraphic* story—an extremely low cost to inspire hope and change minds about some of the most important issues and solutions of our time.

Our early success attracting distribution partners for *bioGraphic* stories has confirmed that many media outlets are eager for more high-quality science and environment reporting. Furthermore, they are extremely enthusiastic about receiving this type of content from the Academy—a trusted source and partner in their eyes. In order to accelerate our efforts to inspire more constructive and hopeful conversations about nature and sustainability, we are making our content freely available to our distribution partners and other interested outlets. This strategy allows us to deliver compelling content to our target audiences in the places where they are already spending time, vastly increasing our ability to reach large numbers of science enthusiasts and influencers around the world.



MARCUS WESTBERG

### III. Measuring our Impact

Every day, the Academy receives comments from readers who have been moved by *bioGraphic* stories—from nature lovers who feel a renewed sense of hope for the future and teachers who have discovered a new video to share with their classes to scientists who feel reinvigorated to dig back into their research and literature lovers who have discovered a new affinity for learning about science and the environment topics through our stories. We also hear from the scientists and organizations we feature in our stories about the impact our pieces have had on their ability to secure new funding, forge new partnerships, or expand their efforts.

We are quantifying this impact through an Awareness, Attitudes, and Usage study conducted every six months. The study compares attitudes among *bioGraphic* readers and non-readers and measures changes over time in awareness, attitudes, knowledge, and actions.

From our 2016 studies, we learned that 87% of our readers feel that *bioGraphic* stories deepen their connection to nature, and 82% of our readers say *bioGraphic* stories give them hope for a more sustainable future. In 2017, we will conduct pre- and post-reading assessments on some of our stories to evaluate how audience attitudes about and knowledge of important scientific and environmental concepts change after engaging with our content. These assessments will generate both quantitative and qualitative data about the impact of *bioGraphic* stories.

**Giants in the Face of Drought**  
 As millions of California's trees die, what will become of the largest tree there is, the giant sequoia?  
 THAYER HALLER / BIOGRAPHIC | NOV 27, 2016 | SCIENCE

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By the time John Muir and his trusty mule Brownie splashed across the Marble Fork of the Kaweah River in the fall of 1875, the Scottish-born naturalist had already seen his fair share of California grandiosity: Yosemite Valley; the high Sierra; Mariposa Grove. Muir had a thirst for exploration and a talent for storytelling. He founded the Sierra Club and dubbed its synonymous mountains the "Range of Light." When Muir sauntered upon a montane plateau in what is now known as Sequoia National Park on that autumn day, he found a very large stand of very large trees. Drawing his poetry from the obvious he named it, quite simply, the Giant Forest.

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 Backcountry Drug War  
 Counting Fish



ALEXANDER BADYAEV

## Summary

The California Academy of Sciences is seeking visionary donors to help us change the conversation about sustaining life on Earth. We are energizing the natural world's enthusiasts, advocates, and change-makers through innovative and compelling storytelling that reveals the wonder of nature and the ingenuity of humankind to help sustain it into the future. By launching *bioGraphic*—a new digital magazine that fills a critical gap in the current media landscape—and sharing our unique, high-quality content with a wide range of established media partners, the Academy is helping to create a more environmentally literate and engaged public. We are also inspiring hope for—and facilitating—a more positive future.



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The California Academy of Sciences is a renowned scientific and educational institution dedicated to exploring, explaining, and sustaining life on Earth. Based in San Francisco's Golden Gate Park, it is home to a world-class aquarium, planetarium, and natural history museum, as well as innovative programs in scientific research and education—all under one living roof. [www.calacademy.org](http://www.calacademy.org).

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