Near Grand Rapids, Minnesota, state and private landholders have conserved more than 4,000 square miles of uninterrupted forest habitat. Their foresight preserves wildlife habitat, timber-related jobs and public access for outdoor recreation and also protects the drinking water for millions of people, including residents of Minneapolis and St. Paul.

Richard Hamilton Smith
Wild Baja Stays Wild

A sleepy fishing community at the end of a dusty dirt road was slated to become a tourist development larger than 8,500 football fields. Just offshore whales, dolphins, orcas, sharks, sea lions and endangered sea turtles in Cabo Pulmo National Marine Park would be affected. “What impresses me most from the air is how vast and wild Baja California still is,” remarked photographer Ralph Lee Hopkins. A series of LightHawk donated flights in 2010 helped focus attention on the project using Ralph’s photographs of the remote area. And this year, the Mexican government put an end to plans for a massive resort complex that would have imperiled marine life and those that rely upon eco-tourism for survival.

This publication serves as LightHawk’s 2011 annual report and provides a highlight of our 2012 activities.

C. Rudy Engholm, Executive Director
Cumberland Foreside, ME

Left to right: Cabo Pulmo: Ralph Lee Hopkins, Lee Pagni/LightHawk, NOAA; Expeditions: Christi Cooper-Kuhn, Paul Colangelo, Jim Wilcox/NWSSCS

LightHawk Expeditions Answer Urgent Need

In 2012, LightHawk Expeditions were created to provide a nimble response to important conservation issues outside our core areas and to leverage our network of over 200 volunteer pilots for flight requests which could not afford to go unanswered. For conservation groups, these Expeditions redraw the map and expand the view. For volunteer pilots, they present opportunities for once-in-a-lifetime flying and memorable journeys. For supporters, they ensure flight is utilized to address the most pressing conservation issues of the day.

2012 HIGHLIGHTS

 Illuminate, Empower, Protect

Twenty-three years ago, a thoughtless act of environmental destruction changed my life forever. While living in Ann Arbor, Michigan, I often walked in the woods behind my home after work. My favorite spot to unwind was under a broad oak tree that I called my “thinking tree.”

One summer, I returned home from vacation to find the entire woods cleared for a new housing development. My thinking tree had been cut down and all that remained was a huge stump scarred with chain marks where someone had tried to tear it from the earth. I sat by the stump and wept for the thoughtless way this special tree had been destroyed. Any new homeowner would have paid a premium to own such a tree, but it was cut down because a thoughtless subdivision planner could not bother to relocate a road around this magnificent tree, which had survived 150 summers and winters.

For me, this incident symbolizes the way some of our most treasured natural places and cultural systems are being lost. The immediate costs are borne by land, water and wildlife, but humans ultimately pay with adverse health consequences and diminished well-being. As a pilot, I know that the aerial view is often the only way for people to understand complex environmental issues. That is why I serve among LightHawk’s volunteer pilots who, hand-in-hand with LightHawk’s supporters, use flight to protect the most special places in our world.

Thank you for flying with us. Together, we are part of some incredible successes like protecting an irreplaceable coral reef off Cabo Pulmo on Mexico’s Baja Peninsula. When a massive beachfront development was proposed, aerial images of nearby construction helped build public opposition and the permits were revoked. Thanks to your involvement, LightHawk flights are making a difference to conservation every day.
Our Mission

environmental protection

What we do
champion environmental protection through the unique perspective of flight.

We do this by
mobilizing highly qualified volunteer pilots and donating flights to selected leaders in conservation.

Our flights protect
• Wildlands
• Wildlife
• Oceans, Reefs & Coastlines
• Freshwater & Wetlands

Volunteer pilot Jim Cameron (AB) flies a mission over eastern British Columbia.

Opposite: LightHawk has helped to bring back images of the Sacred Headwaters, where three great salmon rivers converge. The Headwaters are home to thriving populations of grizzlies, wolves, moose, caribou, mountain goats and stone sheep. The Tahltan First Nation in the remote corner of British Columbia oppose proposals to mine the area saying the risks to the land, which is interwoven with their culture, sustenance and survival, far outweigh the benefits.
Flight Missions
Donated in 2011

Where We Fly

333

369

Endangered Aplomado Falcons
Transported for Release into the Wild

Endangered Wolves
Flown to New Homes

Orange-breasted Falcons
Carried to Strengthen the Belize Wild Population

Influential Passengers
Flown

Conservation Partners
Served

Volunteer Pilots
Donating their Aircraft & Skill

2011 Missions

Christine Steele
Pacific Program Manager
(Portland, OR)

Lee Pagni
Program Specialist
(Sonora, CA)

Sama Blackwell
Director of Programs
(Boulder, CO)

Shannon Rochelle
Rockies Program Manager
(Lander, WY)

Kelley Tucker
Eastern Region Program Manager
(Lexington, KY)

Armando Ubeda
Mesoamerica & Gulf of Mexico Program Manager
(Sarasota, FL)

Lee Pagni (Independent Contractor)

Chris Boyer

Chris Linder

Chris Boyer

Bill Heinrich

TPF

Smithsonian National Zoo

Bob Berry

966

254

194

69

7

6

Volunteer Pilots
Donating their Aircraft & Skill

Endangered Aplomado Falcons
Transported for Release into the Wild

Endangered Wolves
Flown to New Homes

Orange-breasted Falcons
Carried to Strengthen the Belize Wild Population

Influential Passengers
Flown

Conservation Partners
Served
As a labyrinth of oil and gas wells surrounded the campers’ approach into Canyonlands National Park, they questioned their surroundings. This was not the trip they had envisioned. Many visitors are unaware that the borders of Arches and Canyonlands National Parks in Utah are currently threatened. Oil and gas exploration is increasing, irreplaceable archaeological resources are being vandalized and looted, and irresponsible off-highway vehicles are disrupting fragile desert ecosystems. Although just as magnificent and striking as the protected parks they surround, these lands are being treated as sacrifice zones for industrial and extractive uses, rather than national treasures. Local groups are trying to bring attention to these unprotected landscapes before it is too late.

“Are you sure we’re going the right way?”

"The aerial view of this landscape will give the most impact in telling our story... about the critical need to protect these lands," said GCT’s Laura Kamala after the flights. The stunning images from these flights are being used to create a video urging expansion of the park’s borders. Across the U.S., in Canada, Mexico and Central America, flights donated through LightHawk are helping people protect the wildlands that not only give us clean water and air, but also define and enrich our communities.
With three crocs secured in the bottom of their boat, Cherie and Vince Rose got a call that broke their hearts. The home and sanctuary they built by hand for ill-kept, injured and problematic crocodiles in Belize had burned to the ground. And like a scene from “Frankenstein”, the endangered crocodiles living there were killed by a misguided mob bent on revenge. Although often misunderstood and feared in Belize, American crocodiles (Crocodylus acutus) play an important role as an apex predator, an animal at the top of the food chain. Crocs keep Belize’s wetland ecosystems in balance, and without them populations of raccoons and other disease-carrying animals would explode, threatening human health. But crocodiles that have been fed illegally often lose their natural fear of humans and become nuisance beggars and scavengers. Cherie and Vince have made it their life’s work to relocate crocs that have become problematic and to educate the community about coexisting safely with the prehistoric-looking creatures. As they began to recover from the tragedy, Cherie and Vince contacted LightHawk. They needed to rebuild a new crocodile sanctuary quickly. Their new site looked good, but LightHawk enabled Cherie and Vince’s non-profit ACES (American Crocodile Education Sanctuary) to find the best way to start construction while causing minimal impact on the property’s endangered red mangroves. The flight collected vital information about the dense wetlands in minutes as opposed to spending days or weeks surveying on foot and by boat. ACES also identified critical wetland habitat and potential croc nesting grounds during their flight. In addition to helping crocs, LightHawk is often able to transport endangered animals like aplomado falcons, orange-breasted falcons or Mexican wolves, for relocation or release in the wild. Flights also help scientists study animals, track their movements and protect the land they need to survive. Helping people like Cherie and Vince – the croc wranglers of Belize – recover from tragedy is especially rewarding.
Sea life thrives in a marine protected area established just offshore from Point Arena in Mendocino County, CA.

California fishermen had to admit this was more than just a string of bad fishing seasons. Divers, surfers, and families repeatedly turned away from their favorite beaches knew it too. The state’s coastline and waters were largely unhealthy and in decline; something had to be done.

Conservationists knew that marine protected areas (MPAs) along the coast could shelter marine life and give the depleted fisheries a chance to rebound. However, with a coastline stretching for 1,100 miles, scientists were hard-pressed to effectively survey the area, until they took to the skies with LightHawk.

The process to define where MPAs would be located was met with resistance, but LightHawk volunteer pilot and advisory council member Mike Sutton was confident that flights could help overcome that hurdle. These flights gathered objective data to show where the sanctuaries would have the least impact on commercial and recreational boaters, and aerial photographs inspired support within communities for protecting their iconic coastline. For those tasked with drawing the boundaries of the marine sanctuaries, flights also transformed static lines on a map into living expanses of blue water. LightHawk ensured that information collected in flight would provide an objective, unbiased view of the coastline to satisfy MPA backers and doubters alike.

In 2012, after six years and hundreds of hours of flights, LightHawk saw the network of marine protected areas finally stretch from Mexico all the way to the border with Oregon.

It may seem strange to meet at the airport to study the ocean, but from 1,000 feet up, blue water yields its secrets. It shows kelp beds and reefs that offer safe haven for juvenile fish ensuring a future for fishermen, and the special areas where freshwater meets with salinity creating a rich soup to nourish marine life. Along the Pacific, Atlantic, Gulf of Mexico and Caribbean coastlines, flights donated through LightHawk are helping reveal how healthy oceans are key to the survival of both humans and marine life.
The impact of a fracking well extends far beyond the nine-inch hole in the ground.

The answer becomes clear when viewed from a thousand feet up. When New York State considered opening their public lands to hydraulic fracturing or “fracking,” the Adirondack Mountain Club called on LightHawk to capture the aboveground footprint of this controversial practice. They didn’t need to look any further than their next-door neighbor, Pennsylvania, where fracking is prevalent.

Aerial images made during the flight over Pennsylvania with volunteer pilot Bob Keller (NY) showed that instead of rolling forests, the rural landscape was populated by well heads and pads, toxic settling ponds, big rig parking lots, storage yards for heavy equipment, and new roads cutting across habitat and vital wildlife corridors. More than just poor use of public lands, critics say fracking has polluted drinking water and compromised air quality.

When Neil Woodworth of Adirondack Mountain Club shared these images with New York’s Department of Environmental Conservation and staff from the Governor’s office, they were dismayed by the scale of industrialization taking place in Pennsylvania. The images taken during that flight served as the catalyst for New York State’s decision to protect its irreplaceable freshwater resources by banning oil exploration and fracking on state lands.

Donated flights benefit freshwater and wetlands across each of our regions. They alert us to activities upstream, over the hill or far below ground, and empower us to address issues at the water’s edge and activities elsewhere that imperil our precious freshwater resources.
Partners Flying With LightHawk in 2011

United States and Canada

Mexico

Adirondack Council
Adirondack Explore
American Museum of Rock and Ice
Animals, Rivers, Northwest Office
Art Photo
Arizona Public Media
Association of Predators and the Media
Asociación de Salmones del Río
Aviva, A.C.

Bangladesh

Atlantic Salmon Federation
Audubon Society of Maine
Audubon of Alaska
Audubon Nature Institute
Auklet Conservation
Autumn Watch

Australia

Aussie Bird & Beyond

Austria

Austria Kulturverwaltung

Belgium

Aboriginal Cultural Institute
Aboriginal Wildlife Society

Belize

Adirondack Council
Adirondack Explore
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Aboriginal Cultural Institute
Aboriginal Wildlife Society
a special place in Jay Noyes of Hailey, Idaho. He and his wife Louise have included a bequest to LightHawk in their estate planning. "It has been my flying career," Noyes says, "it has been the greatest part of my flying career." Noyes added, "I wish all my fellow pilots the greatest part of their flying careers, too, and I hope they find it to be as rewarding as it was for me."
Volunteer Pilot Corps

“Out our pilot volunteer numbers have been declining, with 24 pilots joining us in 2011, and 18 new pilots so far in 2012. More pilots allow us to fly more missions for conservation.”

Greg Bedinger, Pilot Outreach Manager,
Over the Mesoamerican Barrier Reef, Belize.

Pilot Outreach Manager, Tony Rath with aerial support from LightHawk

Volunteer Pilot Roster as of July 12th, 2012

Volunteer Pilot Roster as of July 12th, 2012

In Memoriam

Over the Mesoamerican Barrier Reef, Belize.
## Financial Statements

### Activities

**Year Ended December 31, 2011**

**Support and Revenue**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual Contributions</td>
<td>$738,875</td>
</tr>
<tr>
<td>Foundation Contributions</td>
<td>$148,896</td>
</tr>
<tr>
<td>Donated Services and Materials (in-kind)</td>
<td>$791,445</td>
</tr>
<tr>
<td>Other Contributions</td>
<td>$5,419</td>
</tr>
<tr>
<td>Other Revenue, Interest, and Dividends</td>
<td>$3,700</td>
</tr>
<tr>
<td>Realized and Unrealized Gain (Loss) on Investments</td>
<td>$(11,376)</td>
</tr>
</tbody>
</table>

**Total Support and Revenue**

$1,876,960

### Expenses

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programs - LightHawks Costs</td>
<td>$946,242</td>
</tr>
<tr>
<td>Program - Volunteer Pilot Donated Flights (in-kind)</td>
<td>$588,312</td>
</tr>
<tr>
<td>Program - Volunteer Pilot Donated Fuel (in-kind)</td>
<td>$145,345</td>
</tr>
<tr>
<td>Fundraising and Membership</td>
<td>$107,508</td>
</tr>
<tr>
<td>Fundraising and Membership - Donated Services</td>
<td>$5,410</td>
</tr>
<tr>
<td>General and Administration</td>
<td>$9,443</td>
</tr>
</tbody>
</table>

**Total Expenses**

$1,804,958

**Change in Net Assets**

$(107,099)

**Net Assets (deficit), beginning of year**

$2,663,640

**Net Assets (deficit), end of year**

$2,556,541

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**Expert Oversight**

Jeff Hamilton, Chairman (Spokane, WA)
John Marriott, Vice Chair (Yarmouth, ME)
Truck Kolby, Treasurer (Sarasota, FL)
C. Rudy Engelnfield, Executive Director (Camarillo Forkside, ME)
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Bev Gabe (Gorham, ME)
Norissa Giangola (Washington, DC)

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**For a copy of our audited financial statements and form 990, please visit our website and click the About Us tab.**
Who is LightHawk?

Supporters

Wild steelhead must dodge hungry bears, enticing lures and countless other obstacles to get to their spring spawning grounds. When fisheries biologists in Washington State weren’t able to locate some radio-tagged fish from the ground, LightHawk and Wyncote Foundation NW of Seattle came to the rescue.

Pilots

“For this large-scale study, 500 steelhead were tagged with radio transmitters,” said Volunteer Pilot Bill Nicolai (shown above). “We went out and essentially took a comprehensive snapshot of where all these fish were located in the several hundred square miles of areas that are not accessible from roads. We flew all the watersheds used by steelhead in Yakima basin and the donated antenna system was critical to the success of this effort.”

Partners

“The radio-tracking equipment (antennas and mounts) was very effective in identifying locations of radio-tagged spawning wild steelhead in tributary streams that are otherwise inaccessible… LightHawk allowed me to locate steelhead in areas that are inaccessible by road, boat, or foot,” said Shane Keep (shown above), Fisheries Biologist for Yakima/Klickitat Fisheries Project. Knowing where the steelhead go gives biologists the ability to design stream restoration and protection projects where they’re most effective.

LightHawk donates flights in the United States, Canada, Mexico and Central America to ensure the success of our conservation partners. LightHawk is supported by individuals, organizations and foundations who believe the aerial perspective is a powerful tool to protect and preserve habitat and wildlife.

We invite your support and involvement. Please visit the Donate page on our website to learn how including our planned giving program and our Wings of LightHawk recurring donation club.