

Cloud Ridge Naturalists

FIELD DISCOVERY SEMINARS

2015

A WORD ABOUT US

Cloud Ridge Naturalists, one of the oldest and most respected nonprofit environmental education programs in North America, is celebrating its 35th anniversary this year. Over these many years, several thousand people have experienced the special blend of natural history education and exploration that Cloud Ridge offers. We are proud to provide learning opportunities that inspire and enable our participants to become better-informed stewards—not just “snapshot” sojourners of the natural world. Moving beyond the “last great place” model that drives traditional ecotourism remains a key component of our mission. Our educational vision embraces a multi-disciplinary perspective well grounded in state-of-the-art science. Just a glance through the biographies of our leaders and guest lecturers should convey the excellence and dedication they bring to everything we do—their expertise and passion for teaching is unsurpassed!

Our voyages take us to some of the world’s most beautiful wilderness areas—enjoying the wonder but always acknowledging the environmental challenges that transcend international and ecological boundaries. We minimize our travel footprint wherever we go—by small ship, boat, raft, sea kayak, or on foot—and work only with outfitters and guides whose operating principles and environmental ethics parallel our own. We select classic lodging, vintage boats, and expedition-style ships that have a strong sense of place and purpose. Your safety, comfort, and enjoyment are of utmost importance to us—even in the remotest of settings. Our groups are kept small and congenial, creating the best possible atmosphere for learning and discussion. More than 80% of our participants each year have traveled with us before. That matters to us. We look forward to welcoming new friends and old!

A SEA CHANGE ...

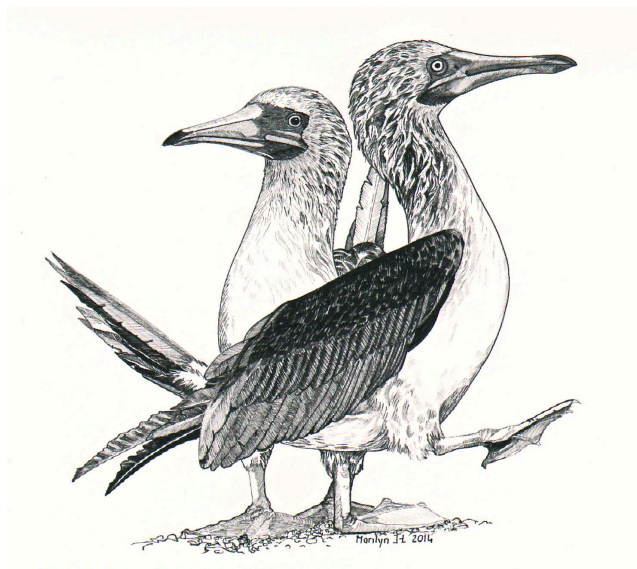
Our 2015 season begins in Mexico’s Sea of Cortez aboard the *M/V Westward* and continues with three voyages aboard the *M/V Catalyst* to our favorite destinations in Southeast Alaska and the Salish Sea. I often use the phrase *sea change* to describe Cloud Ridge’s shift in focus to the conservation challenges facing the global ocean realm. But what does the term “global ocean” mean—and why should we care? The world’s five ocean basins are interconnected by major surface and deep-water currents in a circulation system that creates a global ocean covering more than 70% of the earth’s surface. The global ocean is the world’s largest wilderness, with a lineage of life 3 billion years older than anything above sea level. Marine scientists estimate that 90% of the world’s biodiversity once resided in the global ocean—and that human actions have degraded ocean ecosystems more in the past fifty years than in all of human history. Cloud Ridge participants have seen dramatic examples of these changes first-hand on our Arctic and Antarctic voyages. Researchers are revealing—thread by thread—the intricately woven connections that exist between global climate, the oceans, and all terrestrial ecosystems. The consequences of ignoring the environmental challenges facing the global ocean are truly profound. Conserving life in the sea and on land requires that we view the world through a vastly different lens—and that we inspire the next generation of ocean stewards to do the same.



Diving humpback whale
(MH)

CONSERVATION IN FOCUS

The marine world, at least beyond the surf zone, is out of sight and out of mind for many people. Our **Conservation in Focus** voyages—Cloud Ridge’s “classroom afloat”—embody the true spirit of expeditionary discovery. Wherever we travel, we explore the extraordinary beauty and complexity of the natural world, but also learn how global warming and other environmental challenges are impacting the places we all care about. Whether you are interested in conservation issues close to home or in the most remote corners of our changing world, making a difference requires a knowledge of natural history and an understanding of what is at risk. Our trip leaders have dedicated their careers toward portraying the inherent beauty of the natural world as well as the environmental dramas that threaten the fragile fabric of life. If you wish to tell a powerful and compelling story with your images, our staff includes internationally renowned photographers to help you master or refine those skills. Long before cameras became standard field gear, expedition naturalists kept illustrated field journals in which to record their discoveries and observations. Nature photographers and artists continue to play crucial roles in creating a constituency for conservation. Following each voyage, we’ll create a book together—a visual memoir that portrays the essence of place by weaving together the group’s best images as well as our shared experiences exploring the global ocean realm.



Blue-footed boobies (MH)

CONSERVATION IN FOCUS (1) A VOYAGE TO BAJA CALIFORNIA AND THE SEA OF CORTEZ IN THE SPIRIT OF ED RICKETTS AND JOHN STEINBECK

January 24-February 2, 2015 (10 Days/9 Nights)

**Audrey Benedict, Dr. Geoff Hammerson,
Wendy Shattil & Bob Rozinski, Marilyn
Hailbronner and the *M/V Westwards* Crew**

Standing on the *Westward*’s foredeck, we see a cloudless arc of sky and a jagged spine of cactus-clad mountains towering above turquoise-hued water fringed by a beach of white sand. Rising miragelike out of the Pacific Ocean, Mexico’s Baja California Peninsula stretches south as a slender, 800-mile-long cul-de-sac of the Sonoran Desert. Along Baja California’s austere eastern shoreline, the Sea of Cortez (Gulf of California), a marine mirror-image of the peninsula, separates it from the rest of the Mexican mainland. From the peninsula’s western shores, the Pacific stretches across one third of the globe’s circumference before reaching the shores of another continent.

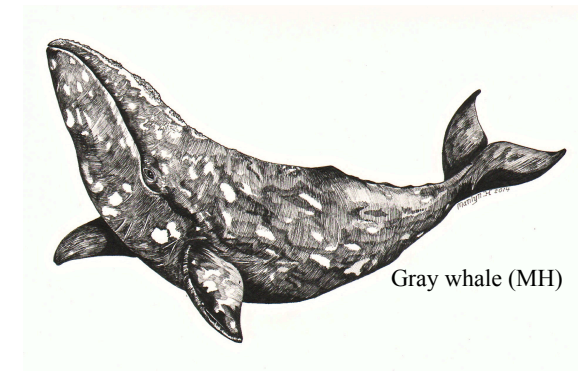
The sense that Baja California seems a world apart reflects its remarkable plate tectonic history and its biological setting. Baja California sits atop the oceanic Pacific Plate while mainland Mexico is part of the North American Plate. Deep-seated plate movements along the southern trajectory of the great San Andreas Fault caused the peninsula to begin rifting northwest in relation to mainland Mexico about 25 million years ago. By at least 5 million years ago, the Pacific Ocean had begun flowing into the gulflike breach between the plates, ultimately creating the Sea of Cortez. Episodes of intense volcanism along the peninsula’s mountainous spine and the resulting uplift of its eastern flanks produced the spectacular scenery we see today and triggered the region’s climatic transformation.

Baja California defies the popular perception that deserts are lifeless places. Tethered to the North American mainland by a relatively narrow land bridge and surrounded by Pacific waters on three sides, Baja California is a remarkable treasure trove of biodiversity. With the evolutionary stage set by a million years of virtual isolation, the Sea of Cortez’s 44 major islands and 900 smaller islands host the largest number of endemic plant

and animal species in North America. Of the 695 species of island-dwelling vascular plants, 20 genera are endemic. These islands are also among the world's richest in terms of reptile diversity, with at least 50 endemic species. Of the 891 species of fish that occur in these waters, 90 are endemic species. Equally exceptional is the fact that the region contains 39% of the world's total number of marine mammal species and one-third of the world's cetacean species. In fact, many biologists refer to the Sea of Cortez and its islands as the "Mexican Galapagos." Ocean explorer and renowned conservationist Jacques Cousteau described the Sea of Cortez as "the aquarium of the world." In 2005, with tourist developments, overfishing, and other environmental threats taking a drastic toll, UNESCO and the Mexican government designated much of the Sea of Cortez and nearly 50% of Baja California Sur, one of Mexico's 31 states, as a World Heritage Site.

Legendary marine biologist Dr. Ed Ricketts is best known for his pioneering studies of marine ecology along the Pacific coastline of North America. His book *Between Pacific Tides* first published in 1939 and now in its fifth edition, remains the classic introduction to the Pacific intertidal zone for students and scientists alike. In the spring of 1940, Ed Ricketts and his ocean-loving friend, novelist John Steinbeck, embarked on a 4,000-mile expedition aboard the *Western Flyer*, a sturdy 76-foot purse seiner, that took them from California's Monterey Bay south around Baja California to the Sea of Cortez. Both men shared a profound curiosity and passion for understanding the marine world. They also believed that their 6-week collecting trip in the Sea of Cortez would open a window as wide and horizonless as that of Charles Darwin. Their expedition resulted in two books—*Sea of Cortez: A Leisurely Journal of Travel and Research* (1941), the original coauthored version which included Ricketts' annotated collection catalog, and *The Log from the Sea of Cortez* (1951), the shorter narrative version that Steinbeck published following Ricketts' tragic death in 1948. To explain their mutual fascination with the infinite complexity of the marine world, Steinbeck often described the visionary philosophy that guided their expedition as "bright with sun and wet with sea water." We follow in their wake ...

Our expedition to Baja California begins in Loreto, a picturesque town located on Baja's eastern shore. We'll travel by van along this stark but beautiful coastline and then across the peninsula's jagged spine to Laguna San Ignacio, one of the three lagoons on Baja's west coast where gray whales gather in large numbers to give birth and breed. From our shoreside tented camp, our Mexican guides will take us in small open pangas to spend an unforgettable morning and afternoon drifting quietly in the lagoon in the midst of gray whale mothers and their calves. The experience is truly magical because the whales seem to be as curious about us as we are of them and may bring their calves right up to the panga. As night falls, you will go to sleep listening to the breath sounds of hundreds of sleeping whales echoing across the star-lit water.



Gray whale (MH)

With memories of these whales tucked away in our hearts, we'll return to Loreto to begin our voyage in the Sea of Cortez. Pacific Catalyst's vintage 8-passenger cruising yacht, the 86-foot long-*M/V Westward*, built in 1924 and a world traveler in her own right, sets the stage for this spectacular adventure. We'll be welcomed aboard by Capt. Bill Bailey and the *Westward's* crew. Our elegant and supremely seaworthy vessel is equipped with a full complement of sea kayaks, a motorized skiff, and snorkeling gear for exploring near and far. Getting underway for Isla Danzante, we'll watch for red-billed tropicbirds and elegant terns swooping over the water and brown pelicans fishing the shallows. Traveling south, with *The Log from the Sea of Cortez* in hand, we'll visit several of the island and peninsula collection sites made famous by the pioneering Ricketts-Steinbeck expedition 75 years ago. On trips ashore, we'll explore the Sonoran desert world and search for some of the endemic plant and animal species that inhabit these islands. On some

islands, giant cardón cacti tower over a prickly understory of shrubs, providing welcome shade for a giant chuckwalla or a delicate gecko. Desert birding should treat us to good looks at pyrrhuloxia, white-winged doves, Gila woodpeckers, or the endemic Xantu's hummingbird. Back aboard, drifting quietly through the nutrient-rich waters of the "Blue Triangle," we'll hope to spot blue and sperm whales as they congregate to feed on the bounty of plankton and squid. We'll learn how El Niño and La Niña cycles in the Pacific influence the abundance of marine life as well as the storm systems that deliver nurturing moisture to the peninsula and to the islands. Continuing south toward Isla San Jose, we'll watch for black and least storm-petrels skimming over the waves, foraging pairs of Craveri's murrelet, the tiniest of all murrelets, and noisy colonies of both blue-footed and brown boobies, Heermann's gulls, and magnificent frigatebirds. We'll use sea kayaks to explore the labyrinth of mangroves in San Jose's expansive lagoon, ever-watchful for yellow-crowned night herons, white ibis, and mangrove warblers. From our anchorage just offshore from Isla San Francisco, we'll get an early start for the national park islands of Isla Partida and Espiritu Santo, located about 20 miles north of La Paz. With luck, our ocean passages will have provided opportunities to see both Bryde's and humpback whales, dolphin species such as the long-beaked, Pacific white-sided, spotted, or bottlenose, giant manta rays, and both hammerhead and whale sharks. The crystalline waters of our final night's anchorage may invite a sea kayak trip or a sunset beach walk. We return to the *Westward* for a fabulous dinner and an evening spent savoring highlights of our trip.

Price: \$5,600. (includes a \$500 deposit)

Group Size: 8 Trip Rating: 2-3

Price Includes: 3 nights hotel accommodations (including the night of the 24th at a hotel near the LA airport) and 1 night in a tented camp, all van transportation ashore, all meals ashore, 6 nights and 6 days aboard *Westward*, 5 naturalist leaders, the services of *Westward*'s 4-person crew, sea kayak outfitting and instruction, gratuities to the crew, and a copy of the photo book of the voyage. The price quoted is *per person* based on double occupancy. No single accommodations are available. **Does not** include roundtrip airfare from your departure point to Loreto or return from Los Cabos. This trip requires an overnight in LA (on the 24th) before we travel to Loreto (25th).



Sea otters (MH)

CONSERVATION IN FOCUS (2) GLACIER BAY NATIONAL PARK

May 6-17, 2015 12 Days/11Nights

**Dr. Geoff Hammerson, Audrey Benedict,
Bob Rozinski & Wendy Shattil, and the
M/V Catalyst Crew**

*Glaciers move in tides. So do mountains,
so do all things.* (John Muir)

Imagine Glacier Bay as John Muir saw it in 1899 as a member of the legendary Harriman Expedition—without the cruise ships, the guide-books, and interpretive signs that define the modern visitor's experience. Glacier Bay is a deepwater fjord system with two arms, Muir Inlet and the West Arm, each more than 65 miles long. Traveling aboard the *M/V Catalyst*, a 76-foot vintage wooden boat built in 1932, we'll have the chance to see this spectacular landscape of glaciers and fjords in much the same way that Harriman's scientists did. We'll trace the evidence of climatic change left behind by the advance and retreat of these immense glaciers—just as Muir did—and ponder the impacts and environmental changes that loom on the horizon.

Unlike big cruise ships, *Catalyst* is trim enough to explore the narrowest of fjords and shallow coastal waters. She hosts twelve passengers and a crew of four in superb comfort—the perfect size for a voyage such as ours. The *Catalyst* carries a full complement of sea kayaks and a motorized inflatable to enable exploration both far and wide. For those who take paddle in hand, the use of sea kayaks allows a more intimate view of the tidewater glaciers, inlets, islets, and rushing streams that make this coastal wilderness one of North America's most biologically diverse areas. Few people know this ice-bound wilderness park as well as our

leaders. Sarah Drummond, naturalist artist and *Catalyst* crew member, will also share her techniques for using drawing and watercolor to enhance your natural history observations—a joy for those wishing to follow the centuries-old tradition of keeping an expedition journal.

May is a magical time to be in Glacier Bay, largely because the weather is at its best and we have these spectacular fjords to ourselves—with only the bears, the first humpback whales, and the thousands of migrating shorebirds and seabirds traveling the Pacific Flyway. Against a backdrop of some of the most magnificent mountains on earth, rivers of glacial ice tumble into the sea and aquamarine-colored icebergs drift by on the tides. Responding to the boom and crash of ice at the glacier front, kittiwakes and Arctic terns swirl over the churning, welling waters in search of food. Western sandpipers and other shorebirds skitter along the shorelines, poking their bills into the food-rich mud and gravels of the intertidal zone. Brown and black bears, recently emerged from hibernation dens, relish sweetly resinous cottonwood buds, graze on sedges, or scrape succulent barnacles and mussels from the rocks. For the wildlife of Glacier Bay and the outer islands, this is truly a time of plenty. Don't miss this rare opportunity to explore Glacier Bay!

Price: \$4,995 (includes a \$500 deposit)

Group Size: 12 Trip Rating: 2-3

Price Includes: 10 nights/11 days aboard the *Catalyst*, all meals and beverages aboard, 2 nights' lodging in Juneau (May 6 and 16), 2 group dinners ashore, the services of a 4-person crew and 4 naturalist leaders, all boat and hotel transfers, sea kayak outfitting and instruction, and gratuities to the *Catalyst's* crew. **Does not include** round-trip airfare to Juneau, Alaska from your point of departure.

Need more information about the *Westward* or the *Catalyst*? Visit Pacific Catalyst online at www.pacificcatalyst.com for pictures of both boats, their cabins and layouts, amenities, and the biographies of all crew members.



Pigeon guillemots (SD)



Brown bear (MH)

CONSERVATION IN FOCUS (3) A NATURALIST'S VOYAGE OF DISCOVERY TO SOUTHEAST ALASKA

July 24-August 2, 2015 10 Days/9 Nights

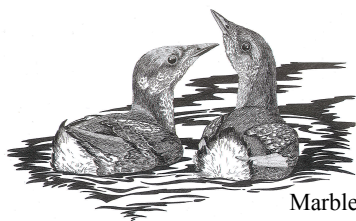
**Dr. Geoff Hammerson, Audrey Benedict,
Bob Rozinski & Wendy Shattil, and the
M/V Catalyst Crew**

Few places in North America rival the scenic beauty and wildlife richness of Southeast Alaska's Inside Passage. Join us aboard our "classroom afloat"—the *M/V Catalyst*—as we explore the remote islands, spectacular fjords, tidewater glaciers, and old-growth forests of this remarkable coastal wilderness. The *Catalyst*, a 76-foot-long classic wooden boat built in 1932 as the floating laboratory for the University of Washington, provides the perfect setting for our **Conservation in Focus** voyages. I've often wondered if it might be the heartbeat of the *Catalyst's* 17,000-pound iron engine that generates the mysterious bond that passengers feel at the end of a voyage. Whatever her secret, this historic treasure has been lovingly restored and carries 12 passengers in sublime comfort. She is equipped with a full complement of double sea kayaks and a motorized inflatable to enable explorations both near and far to cascading waterfalls and glaciers and on hikes through pristine temperate rainforests. The use of sea kayaks allows us a special seal's-eye view of the marine world. Beginning sea kayakers will find this an ideal setting in which to learn. Unlike big cruise ships, the *Catalyst* is trim enough to explore the narrowest of fjords, slipping quietly past electric blue icebergs. Each

evening, as we feast on yet another superb dinner of sustainably harvested seafood and share the day's discoveries, there is little doubt that there is no better way to experience Southeast Alaska.

This year's voyage begins in Petersburg, Alaska, and will include Thomas Bay and a visit to the Baird Glacier, Frederick Sound, the Brothers Islands, Endicott Arm, the fjord magic of Ford's Terror, and Dawes Glacier, one of the southernmost of the tidewater glaciers. As is typical of the myriad photographic and natural history opportunities that await you on any of our *Catalyst* voyages in Southeast Alaska, we should see both brown and black bears visiting salmon spawning streams, Steller sea lions at their haul-outs, harbor seals and their pups, bald eagles, post-breeding aggregations of harlequin ducks, and fascinating seabirds, such as the marbled murrelet and pigeon guillemot. Timing for this year's trip places special emphasis on humpback whale biology and behavioral ecology and coincides with the beginning of intensified humpback whale foraging activities in Frederick Sound. If we are lucky, we may see the spectacular bouts of synchronized lunge-feeding behavior that occurs when groups of humpbacks work cooperatively to entrap schools of small fish or krill through the creation of a near-surface "bubble net," which serves to disorient their prey. With the "net" in place, the humpbacks lunge upward, mouths hugely agape, engulfing hundreds of small prey fish.

In addition to exploring the natural history of Southeast Alaska, we'll discuss the impact that global warming is having on the region's glaciers and how changes in prevailing ocean currents may affect the populations of small fish that marine mammals and seabirds depend on for food. We'll also offer mini-workshops that help you hone your skills in portraying the world around you in a more compelling way—either through photography or art. Our goal is to create a book based on our shared experiences and observations that truly captures the essence of Southeast Alaska—as well as the environmental challenges looming on the horizon.



Marbled murrelets (MH)

Price: \$4,500 (includes a \$500 deposit)

Group Size: 12 Trip Rating: 2-3

Price Includes: 6 nights/7 days aboard the *M/V Catalyst*, all meals and beverages (including wine and beer), 2 nights' lodging in Petersburg (July 24-25), and 1 night's lodging in Juneau (Aug. 1), 3 group dinners ashore, the services of our 4 leaders (naturalists and photographers), the *Catalyst's* 4-person crew, full sea kayak outfitting and expert instruction, gratuities to the *Catalyst's* crew, boat/hotel transfers, and a copy of the photo book. Please note that the *Catalyst* has only one single-berth cabin. The price quoted is *per person* based on double occupancy; a single supplement of \$450 is required of participants preferring non-shared hotel accommodations. **Does not include** roundtrip airfare from your point of departure to Petersburg, Alaska, on July 24 or your return flight from Juneau on August 2.



Common raven (MH)

CONSERVATION IN FOCUS (4) THE SALISH SEA & SAN JUAN ISLANDS

September 27-October 4, 2015 8 Days/7 Nights

Dr. Geoff Hammerson, Jenny Hahn, Audrey Benedict, Bob Rozinski & Wendy Shattil, and the *M/V Catalyst* Crew

Thousands of years before the first Europeans arrived in the Pacific Northwest, the Coast Salish people flourished along the shores of one of the most biologically rich inland seas in the world—now known as the Salish Sea. Named in honor of those first inhabitants, the Salish Sea straddles the Canadian border and includes the marine waters of Washington's Strait of Juan de Fuca, Puget Sound, the San Juan Islands, and British Columbia's Gulf Islands and the Strait of Georgia.

Connected to the Pacific Ocean primarily via the Strait of Juan de Fuca, the Salish Sea receives an almost constant influx of nutrient-rich freshwater from British Columbia's Fraser River, the Skagit, and the many smaller rivers of Washington's mainland—all of which provide essential building blocks for the region's extraordinary biodiversity. The strong currents and extreme tidal exchanges that typify the Salish Sea create optimal conditions for nutrient upwelling and for the proliferation of the photosynthetic plankton that forms the basis of the marine food chain.

Life in the San Juan Archipelago is governed by the sea's rhythms—its extraordinary biological richness attributed to the rain shadow cast by the Olympic Mountains and the greater diversity of habitats available to plants and animals in these islands than occurs along the wetter mainland coast. Not surprisingly, the marine waters surrounding the San Juan Islands provide critical habitat for marine mammals such as migrating gray whales, both resident and “transient” populations of killer whales, harbor seals, Steller and California sea lions, and river otters. More than 165 species of birds depend on the Salish Sea and adjacent terrestrial habitats for their survival. Many of the overwintering seabirds and sea ducks we'll see—the murrelets, guillemots, murres, rhinoceros auklets, scoters, and harlequin ducks—will have recently arrived from their breeding areas. All seven species of Pacific salmon, including rainbow/steelhead and coastal cutthroat, occur in the Salish Sea. Both near-shore and deep-water habitats are also home to several “giants” of the marine world, including the Pacific giant octopus, plumose anemone, giant red sea urchin, and the geoduck, largest of the burrowing clams.

Today, nearly 8 million people live on the islands and in the mainland watersheds that nourish the Salish Sea on both sides of the international border. The impacts of a burgeoning population, global warming, ocean acidification, as well as pressures related to commercial fisheries, fish and shellfish farming, and the looming threat of a major coal shipping port at Cherry Point pose significant environmental challenges for the future. Many scientists and citizen groups are doing all they can to secure the environmental health of the Salish Sea and to ensure that sea-based livelihoods are able to adapt to change with practices that promote future sustainability.

Once again, our “classroom afloat” is the superbly comfortable *M/V Catalyst*, a 76-foot lovingly restored wooden boat built in 1932 as the floating laboratory for the University of Washington. Jenny Hahn, one of the Northwest's foremost naturalists and an award-winning author, joins our team of naturalists and photographers at the helm. She'll share her knowledge of the Coast Salish and the edible delights to be found at the sea's edge. Guest scientists for this voyage include Russel Barsh and Madrona Murphy, founders of Kwiáht, the Center for the Historical Ecology of the Salish Sea, and Dr. Joe Gaydos, the Chief Scientist for the Orcas Island-based SeaDoc Society's marine research and conservation program. Moving beyond the familiar intertidal zone, Joe and his dive team will conduct their third “virtual dive” for us—transmitting live coverage of the deep-sea world to a big-screen TV aboard the *Catalyst* for us all to enjoy—no wet suit required!

Working together, we'll create a book of images and drawings that truly captures the magical essence of the Salish Sea and all that we've seen—sharing our observations and as well as a better understanding of the marine world and the environmental challenges that loom on the horizon. Be inspired and learn how you can make a difference!

Price: \$2,550 (includes a \$500 deposit)

Group Size: 12 Trip Rating: 2-3

Price Includes: 5 nights/6 days aboard the *Catalyst*, all meals and beverages, 2 nights' lodging (September 27 and October 3) in Friday Harbor on San Juan Island, 2 group dinners ashore, all instruction by our leaders and guest lecturers, sea kayak outfitting, the *Catalyst*'s 4-person crew, gratuities to the crew, a copy of our group-produced photo book, and a copy of Jenny's *Pacific Feast*. The price quoted is *per person* based on double occupancy. Please note that the *Catalyst* has only one single-berth cabin. A single supplement of \$350 is required of any participant preferring non-shared hotel accommodations. **Does not include** round-trip airfare or travel from your point of departure on September 27 to Friday Harbor, San Juan Island. This seminar begins with dinner and lodging in Friday Harbor on September 27 and concludes with dinner and lodging in Friday Harbor on October 3. Travel home or to other destinations may be scheduled for the morning of October 4.

River otters (MH)



CLOUD RIDGE STAFF & GUEST LEADERS

Audrey Benedict is the Founder and Director of Cloud Ridge Naturalists and the Founder and Publisher of Cloud Ridge Publishing. Her training in geology and biology inspired a 45-year love affair with high mountains and the global ocean realm that has taken her from the Arctic to the Antarctic, as well as up and down the North and South American Cordillera. Audrey is the author of the definitive *The Naturalist's Guide to the Southern Rockies: Southern Wyoming, Colorado, and Northern New Mexico*; *Valley of the Dunes: Great Sand Dunes National Park and Preserve*, the latter book in collaboration with photographers Bob Rozinski and Wendy Shattil, and co-author with Joe Gaydos of *The Salish Sea: Jewel of the Pacific Northwest*. Audrey serves on the SeaDoc Society's Board of Directors. She divides her time between her Colorado mountain home near the Indian Peaks Wilderness Area and her tiny off-grid retreat on Frost Island in Washington's San Juan Islands.

Dr. Geoff Hammerson is Senior Research Zoologist for NatureServe and lives in Port Townsend, Washington. Geoff is the lead biologist on Cloud Ridge's naturalist team, helping design and guide our field discovery program around the world. He is the author of the definitive field guide *Amphibians and Reptiles in Colorado*, as well as *Connecticut Wildlife*. A superb zoologist, Geoff is always adding new dimensions to his natural history expertise. He's a popular instructor wherever he goes, teaching field biology and ecology at Wesleyan University and other institutions. Geoff is best known for his talent for coaxing the most reluctant animal to share its secrets with an appreciative audience.

Bob Rozinski & Wendy Shattil are the rarest of species—full-time professional nature photographers. They've worked individually and as a team for more than 30 years and are known world-wide for their award-winning images and reputations as environmental photographers of endangered species and at-risk ecosystems throughout North America. Fellows of the International League of Conservation Photographers, Bob and Wendy have produced twelve books, and their images have appeared in *National Wildlife*, *Audubon*, *Nature Conservancy*, *BBC Wildlife*, *Nature's Best*, *National Geographic* publications, and many others. Dedicated to developing new ways of illuminating key conservation issues, Bob and Wendy are superb teachers and generous in sharing their expertise. To see more of their photographic work, visit their website: www.dancingpelican.com

Jennifer Hahn, a naturalist, writer, illustrator, teacher, wild harvester, and coastal traveler, has 30 years of wilderness travel experience, including guiding natural history trips by sea kayak in the San Juan Islands for 22 years and many seasons guiding in Southeast Alaska. She is the author of two books: the award-winning *Spirited Waters: Soloing South Through the Inside Passage*, based on her solo-kayak from Southeast Alaska to Washington, and *Pacific Feast: A Cook's Guide to West Coast Foraging and Cuisine*. Jenny teaches courses in wild foraging, indigenous plant uses, and seaweed biology as an adjunct professor at Western Washington University's Fairhaven College and other institutions. The expertise, poetic voice, and infectious enthusiasm Jenny brings to her natural history teaching is a rare gift. To learn more about Jenny's books and wild harvesting, visit: www.pacificfeast.com

Sarah Drummond is a naturalist and an artist who grew up traveling with Cloud Ridge and is now a member of our naturalist staff. She received her B.A. from Maine's College of the Atlantic, where her studies emphasized ecology, island ecosystems and art; her M.A. is from Arizona's Prescott College. Research for her thesis on the role and impact of artists who accompanied major exploring expeditions prior to the invention of photography began during a Watson Foundation fellowship and is the focus of a forthcoming book. Sarah also creates books for children, most recently *Raven and the Red Ball*,

from Pomegranate Books. Sarah is an adjunct faculty member at College of the Atlantic and teaches art and natural history. She spends her summers as a naturalist/kayak guide in Southeast Alaska aboard the *M/V Catalyst*. Sarah's artwork celebrates the beauty and diversity of the natural world and she prides herself on working directly from life, in the field, whenever possible. To see more of her artwork, visit her website:

www.sarahdrummondart.com

Marilyn Hailbronner's drawings—rendered in pen and ink, scratchboard technique, and color wash—grace Cloud Ridge's brochure and website. She serves as a member of Cloud Ridge's naturalist staff and is also our advisor on wilderness travel and medical issues. Her work as a naturalist artist is a reflection of her love for the natural world and her passion for conservation, which takes her to wilderness areas around the world. Among many projects, she is currently working on a children's book on the Magellanic penguins of Argentina's Peninsula Valdés. To see more of Marilyn's artwork, visit her website:

www.wildinkwell.com

Dr. Joe Gaydos lives on Orcas Island with his family and is a wildlife veterinarian and Chief Scientist for the SeaDoc Society, a nonprofit science-based marine conservation program of the UC Davis Veterinary Medicine/Wildlife Health Center. For more than a decade, Joe has focused SeaDoc's research efforts on the ecosystem-level challenges facing the Salish Sea and has worked to improve management and policy decisions regarding the stewardship of those resources. He's coauthor of *The Salish Sea: Jewel of the Pacific Northwest* and has published extensively on shared human and marine wildlife health issues for such species as harbor seals, river otters, and killer whales. Joe's passion for connecting people to the magic and vulnerability of the marine world is legendary, whether through his keynote addresses, lectures, field teaching, or the gift of one of his infamous "virtual dives."

Russel Barsh spent his boyhood on Long Island Sound as a devoted beachcomber and fossil-hunter. As a doctoral student in paleontology at Harvard, Russel was privileged to study under the late Dr. Loren Eiseley and Dr. Stephen Jay Gould—each a role model in multidisciplinary science. His friendships with Native Americans opened his eyes to new science challenges,

convincing him to get a law degree and to defend the environmental integrity of traditional cultures. Russel taught at the University of Washington and helped develop its American Indian Studies Center. He then served as an advisor to United Nations agencies on indigenous and tribal peoples living in sensitive ecosystems, establishing the UN's Permanent Forum on Indigenous Issues. Russel co-founded Kwiáht (Center for the Historical Ecology of the Salish Sea) at the urging of his longtime friend and Samish Tribal leader, the late Ken Hanson. *Kwiáht* means "a clean place" in the Native American language of the Central Sound—a one-word mission statement embracing the use of science to inform and promote good stewardship of cultural and biological resources in the San Juan Archipelago. Now based on Lopez Island, Russel and staff scientists, student interns, and dedicated volunteers manage the San Juan Islands Marine Health Monitoring Network and school programs meant to inspire young stewards.

Madrona Murphy is a native Lopezian, whose love for the San Juan Islands eventually brought her back to Lopez Island after earning a degree in botany and political science from Oregon's Reed College. With a special interest in plant genetics, she worked as a technician at the University of Washington's Center for Cell Dynamics at Friday Harbor Laboratories before establishing and managing Kwiáht's genotyping laboratory. Madrona uses her knowledge of how indigenous peoples used the land and shaped the ecosystems that we see today to inform her botanical surveys and her design of restoration projects. Her genetic population studies include work on local salmon, coastal cutthroat trout, camas, small mammals, and the rare Island Marble butterfly.

GLOBAL OCEAN CONSERVATION SUPPORT

To support organizations involved in global ocean conservation, we can recommend the following:

❖ **Natural Resources Defense Council (NRDC)**

www.nrdc.org and www.onearth.org

❖ **The SeaDoc Society** (nonprofit program/UC Davis Veterinary Medicine/Wildlife Health Center)

www.seadocsociety.org

❖ **Kwiáht: Center for the Historical Ecology of the Salish Sea** www.kwiaht.org

NEED MORE INFORMATION ABOUT CLOUD RIDGE NATURALISTS?

Visit our website at www.CloudRidge.org for photos of our 2015 destinations, our annual Field Notes post, archived descriptions and images from previous trips, slideshows and video clips from our adventures afield, and the latest offerings from Cloud Ridge Publishing. Email us directly at: clouderidgeadb@earthlink.net

A WORD ABOUT EXPEDITION TRAVEL

Our expeditions are rated to assist you in choosing the trip that's right for you. Because of the moderate agility required on most expeditionary-class ships, on the *Catalyst* or *Westward*, in using sea kayaks, skiffs or Zodiacs, or on raft-based trips, participants with significant medical issues—physical disabilities, wheelchair-confinement, chronic heart disease and/or severe respiratory illnesses requiring supplemental oxygen, or any other known and potentially debilitating medical conditions—are advised **NOT** to register for these trips. By forwarding the registration form and your deposit, you are certifying that you are in good physical health and capable of performing all normal activities without assistance.

(1) EASY: Hotel, lodge, ship, or small boat-based trips, no camping, hikes of up to 2 miles, and minimal exposure to high elevations.

(2) EASY TO MODERATE: Lodge, ship, or camping based, hikes of 2-4 miles, sea kayaking, small plane travel, and moderate elevation gains.

(3) MODERATE TO STRENUOUS: Expedition ship, small plane, small boat or raft-based, remote wilderness localities, possible primitive camping, and trail or off-trail hikes of up to 6-8 miles.

(4) STRENUOUS: Expeditionary and rugged in nature, primitive camping, full-day hikes in steep mountainous terrain, as well as possible sea kayaking or whitewater rafting.

REGISTRATION & PAYMENT

To register for one of Cloud Ridge's seminars, fill out the registration form and send it to us, along with your **nonrefundable** deposit. In the event a trip is full, we'll add your name to a wait-list and promptly return your deposit. The balance of all tour fees is due **90 days** prior to the trip departure date, unless otherwise noted or unless other arrangements have been made. Registrations received **within 90 days** of departure must include payment in full.

TRIP CANCELLATION & TRAVEL INSURANCE

To protect your travel investment in the event of illness or injury to you or to a family member prior to or during a trip, we **strongly advise** that all participants purchase trip insurance, including a **trip cancellation/interruption policy** and/or **emergency medical evacuation coverage**. All international expedition outfitters **require** medical emergency/evacuation coverage. Emergency evacuation from remote wilderness areas is expensive and not included in standard medical insurance policies. Participants covered by Medicare are advised that Medicare does not provide coverage for individuals traveling outside the U.S. ***Don't leave home without it!***

OUR CANCELLATION POLICY

All cancellations must be made in writing. Because we must send payments to our travel suppliers well in advance of our departures, we cannot offer refunds beyond those described below. We appreciate your understanding! Cancellation refunds are made according to the following schedule:

- ◆ Cancellation received **90 days or more** prior to a trip's departure, all trip costs, less the deposit, will be refunded. The deposit will also be refunded if we are able to fill your space from a wait-list.
- ◆ Cancellation received **less than 90 days** prior to departure, no refund is possible unless we can fill your space from a wait-list.

CONTRIBUTIONS

Cloud Ridge Naturalists is a nonprofit, tax-exempt 501(c) 3 organization providing educational opportunities in the natural sciences and financial support to entities and individuals conducting research in critical areas of conservation concern. You can become a Supporter (\$25) or a Sponsor (\$50 or more). We welcome your donations with gratitude. All contributions help support our conservation mission!

BROCHURE CREDITS: Brochure design and text by **Audrey Benedict**. Editing by **Alice Levine**. Brochure and website artwork by **Marilyn Hailbronner (MH)** and **Sarah Drummond (SD)**. Cloud Ridge's sage grouse logo is by **Barbara Bash**. Website photography by **Audrey Benedict**, **Bob Rozinski** & **Wendy Shattil**, or **Geoff Hammerson**.

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