

Cloud Ridge Naturalists

FIELD DISCOVERY SEMINARS

2017

A WORD ABOUT US

Cloud Ridge Naturalists is one of the oldest and most respected nonprofit environmental education programs in North America. Over the past 38 years, several thousand people have experienced the special blend of natural history education and exploration that Cloud Ridge offers. We are proud to provide educational 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, 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 conveys the excellence and dedication they bring to everything we do—their expertise and passion for teaching is unsurpassed!

Our voyages of discovery take us to some of the world's most beautiful places—always celebrating the wonder but acknowledging the environmental challenges that transcend international and ecological boundaries. We minimize our travel footprint wherever we go and work only with outfitters and guides whose operating principles and environmental ethics parallel our own. We select vintage boats, expedition-style ships, and classic lodgings that have a strong sense of place and purpose. Your safety, comfort, and enjoyment are of upmost importance to us—even in the remotest of settings. Groups are kept small to create the best possible atmosphere for discovery and learning. More than 80% of trip participants each year have traveled with us before. We look forward to welcoming new friends and old!

OUR FOCUS ON THE GLOBAL OCEAN

Cloud Ridge's focus on global ocean conservation embraces the extraordinary role that oceans play in our lives. 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 at least 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 50 years than in all of human history. Cloud Ridge participants have witnessed dramatic examples of these changes during our Arctic and Antarctic voyages.

Thread by thread, the interconnections that exist between global climate, the oceans, and terrestrial ecosystems are being revealed. 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 all work together to inspire the next generation of ocean stewards.

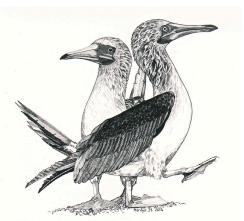


CONSERVATION IN FOCUS

Cloud Ridge's **Conservation in Focus** voyages embody the true spirit of expeditionary discovery. Our naturalists have dedicated their professional work to portraying the inherent beauty and complexity of the natural world as well as the 22 environmental dramas that threaten the fragile fabric of life. If you wish to share your trip experiences with images, our photographic leader can help you master or refine those skills. After each of our trips we create a book—a visual memoir that weaves together the group's best images of our shared explorations.

COME ABOARD THE M/V WESTWARD

Pacific Catalyst's M/V Westward serves as our "classroom afloat" for our voyages in the North Pacific and in the Sea of Cortez. This Ted Gearydesigned, 86-foot cruising yacht is a wooden work of art with a history to match! She was launched in 1924 as the flagship for the Alaska Coast Hunting and Cruising Co. For 20 years, Westward pioneered Alaska adventure travel and is listed on the National Register of Historic Places for her maritime contributions. In her earliest years, she hosted a note-worthy clientele of celebrities that included George Eastman, founder of Eastman Kodak, and Walt Disney, the legendary film producer. The men's shared travel experiences aboard Westward are thought to have provided the inspiration for Disney's launch into nature programming. Westward is also an accomplished world traveler, having logged a 47,000mile circumnavigation of the globe in the 1970s and an equally impressive circumnavigation of the Pacific in 2007-2008. Elegant and supremely seaworthy, Westward is still powered by her original 1923 Atlas Imperial diesel engine and is equipped with stabilizers for rough seas. She recently underwent a major restoration and the period-perfect transformation of her 4 staterooms (with en suite heads) by a master craftsman. Westward accommodates 8-12 passengers and a 4-person crew, which includes her owner/captain, Bill Bailey, an engineer, a chef, and a naturalist/ kayak guide. Although the heart of this historic vessel is her venerable engine, her soul is revealed in the magical alchemy of flavors that emerges from the galley thanks to Chef Traci Triolo. Westward has a full complement of sea kayaks, a motorized skiff and a passion for exploring.



Blue-footed boobies (MH)

IN THE SPIRIT OF ED RICKETTS AND JOHN STEINBECK: VOYAGES TO THE SEA OF CORTEZ & BAJA CALIFORNIA

#1: February 16-28, 2017 (13 Days/12 Nights) Carlos Gajon Bermúdez, Geoff Hammerson, Wendy Shattil and *M/V Westward*'s Crew [Southbound Itinerary: Loreto to La Paz]

#2: Feb. 28-March 10, 2017 (11 days/10 Nights) Carlos Gajon Bermúdez, Audrey Benedict, Wendy Shattil, and *M/V Westward*'s Crew [Northbound Itinerary: Chartered]

Standing on Westward's foredeck, we see an arc of cloudless sky and a jagged spine of cactus-clad mountains towering above turquoise-hued water. Rising mirage-like 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 its austere eastern shoreline, the Sea of Cortez (Gulf of California) separates the Baja peninsula from the rest of mainland Mexico. From Baja's western coast, the Pacific Ocean 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 situated on the continental 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 5 million years ago, the Pacific

Ocean had flowed into the gulf-like 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.

Tethered to the North American mainland by a narrow land bridge and surrounded by Pacific waters on three sides, Baja California is a 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.

The late Jacques Cousteau, ocean explorer and renowned conservationist, described the Sea of Cortez as "the aquarium of the world." Of the 891 species of fish that occur in these waters, 90 are endemics. The region also 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." In 2005, with tourism pressures, overfishing, and other environmental threats taking a drastic toll, UNESCO and the Mexican government protected much of the Sea of Cortez and nearly 50% of Baja California Sur as a World Heritage Site.

Southbound & Northbound Itineraries

Southbound expeditions to Baja California begin in Loreto, a picturesque town located on Baja's eastern shore, and end in the city of La Paz. Northbound voyages begin in La Paz and end at Loreto. Sea conditions permitting, both voyages essentially visit the same places but in reverse order. The expeditions begin with a trip by van across the peninsula's jagged spine to either Magdalena Bay or Laguna San Ignacio, the sheltered lagoons on Baja's west coast where migratory gray whales gather in large numbers each winter to give birth and breed. Whether our base is a delightful small hotel or a safari-style tented camp, our whale watch guides will take us in small open boats (pangas) to spend several hours both in the morning and the afternoon

drifting quietly in the lagoon in the midst of gray whale mothers and their calves. The experience is magical because the whales seem to be as curious about us as we are of them. Some whale mothers may even bring their calves right up to the boats. With memories of gray whales tucked away in our hearts and minds, we return to the *Westward* and begin our voyage in the Sea of Cortez.

Why voyage "In the Spirit of Ed Ricketts and John Steinbeck?" Legendary marine biologist Ed Ricketts is known for his pioneering studies of marine ecology along the Pacific coastline of North America. His famous book *Between Pacific Tides*, first published in 1939, remains the classic reference for the Pacific intertidal zone. 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. Their voyage would take them from California's Monterey Bay south around Baja California and into the Sea of Cortez.

Ricketts and Steinbeck shared a profound curiosity and passion for understanding the marine world. They believed that their 6-week collecting trip in the Sea of Cortez would open a window on this little known region as wide and horizonless as Charles Darwin's explorations had aboard the *Beagle*. Their expedition resulted in two books—*Sea of Cortez: A Leisurely Journal of Travel and Research* (1941), which included Ricketts' collection catalog, and *The Log from the Sea of Cortez* (1951), Steinbeck's shorter version published following Ricketts' tragic death in 1948. John Steinbeck often described their expedition as "bright with sun and wet with sea water." We follow happily in their wake ...



Westward's naturalist, sea kayak and snorkeling guide, Carlos Gajon, is a La Paz native and leads our naturalist team in exploring this desert and marine wilderness. Once aboard Westward, we'll be watching for red-billed tropicbirds and elegant terns swooping over the water and brown pelicans fishing the turquoise shallows. Trips ashore introduce us to the Sonoran desert biome and the plants and animals adapted for life here. You'll see giant cardón cacti towering over a prickly understory of shrubs and desert-adapted wildflowers. Desert birds include white-winged doves, pyrrhuloxias, Gila woodpeckers, and the endemic Xantu's hummingbird. 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. At sea, we'll hope to see foraging pairs of Craveri's murrelet, the tiniest of murrelets, both blue-footed and brown boobies, Heermann's gulls, and magnificent frigatebirds.

Island hopping, we'll drift quietly through the nutrient-rich waters of the "blue triangle," where we hope to spot both blue and sperm whales as they congregate to feed on the bounty of plankton and squid. We'll learn how the infamous El Niño and La Niña cycles in the Pacific influence the abundance of marine life and drive the storm systems that deliver nurturing moisture to the Baja peninsula and the islands of the Sea of Cortez. The aerial displays of mobula rays never fail to amaze and, if we are lucky, long-beaked common dolphins may converge at our bow wave.

At Los Islotes we'll observe the raucous action at a haulout of California sea lions. Anchoring off Isla Partida and Caleta Cardonal, we'll wander the island's mangrove-fringed shore and enjoy a cross-island hike. At Isla Espiritu Santo, we'll kayak the crystalline waters and spend time photographing a spectacular colony of magnificent frigatebirds—a treat for all the senses. But wherever our final anchorage finds us, we'll celebrate and savor the highlights of our trip over another fabulous dinner, raising our glasses to yet another Baja sunset and shared adventures in a desert paradise.



Price: \$6,895. (includes a \$1,000 deposit) Group Size: 8 (+ 2 leaders) Trip Rating: 2-3 Trip #1 includes: 3 nights' hotel accommodations (including 2/16 at the Westin Airport Hotel near LAX), and the Alaska Airlines flight from LAX to Loreto on 2/17.

Trip #2 includes: 3 nights' hotel accommodations (La Paz, Magdalena Bay, and Loreto).

All trips include: van transportation on the peninsula, all meals ashore, a week's nights and all meals aboard Westward, all wine and beer, 2 Cloud Ridge naturalist leaders, Westward's 4-person crew, complete sea kayak outfitting and instruction, gratuities throughout, and a copy of the photo book of our voyage. The price quoted is per person based on double occupancy. Single accommodations are unavailable for this trip.

Does not include roundtrip airfare to Baja from your home airport (except where air segments are noted in the trip description) or travel insurance.

A NATURALIST'S VOYAGE TO SOUTHEAST ALASKA'S WILD COAST July 20-July 29, 2017 10 Days/9 Nights Audrey Benedict, Geoff Hammerson, Wendy Shattil and the *M/V Westward* Crew (Cruise Itinerary: Sitka to Juneau)

Few places in North America rival the scenic beauty and wildlife diversity of Southeast Alaska. Join us for an all-new voyage between Sitka and Juneau aboard the *M/V Westward*—our "classroom afloat." We've been exploring these waters with Pacific Catalyst since 1996 and we know you'll agree that there is no finer way to experience Southeast Alaska. Unlike big cruise ships, *Westward* is trim enough to explore the narrowest of fjords, slipping quietly past electric blue icebergs, and to wander amidst the rocky islands on the outer coast. 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.

We begin our adventure in Sitka, which sits in the shadow of Mount Edgecumbe, a volcano named by Captain Cook in 1778. Sitka would eventually become the political and cultural hub of Russian adventurism in Alaska and the North Pacific during the 19th century. First settled by pre-Tlingit people about 10,000 years ago, Sitka offers a unique window into Tlingit history and their struggle to preserve cultural identity in the face of a burgeoning European and American

presence. Visits to the Totem Trail National Historical Park and the Sheldon Jackson Museum reveal the powerful cultural and artistic influences that shaped the indigenous lifeway.

The siren call of the wild Pacific edge beckons and we board Westward, casting off for Krestof Sound. This will be the first of several anchorages as we island-hop our way northeast to Sergius Narrows and into Peril Strait. In Peril Strait, anchoring in Hanus Bay, we'll hike to Lake Eva and then enjoy a paddle in our quiet cove. The junction of Peril Strait and Chatham Strait is especially rich in forage fish, attracting a diversity of marine mammals and seabirds. 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 by creating a nearsurface "bubble net." With this bubble net in place, the humpbacks lunge upwards with their baleen-rimmed mouths agape, engulfing hundreds of small prey fish in one fluid motion.

Our Southeast Alaska voyages offer myriad photographic and natural history opportunities. Although wildlife sightings are unpredictable, we should see both brown and black bears visiting their traditional salmon spawning streams, raucous groups of Steller sea lions at their haul-outs, harbor seals and their pups, bald eagles, and fascinating seabirds, such as the marbled murrelet, pigeon guillemot, and tufted puffin. Bear watching is always a highlight of any trip and we'll anchor in an estuary system that supports a large population of brown bears, spending several hours ashore following paths created by generations of bears. We'll learn to identify their day beds, scratching trees, lookouts, and then hike to a fish ladder that allows returning salmon access to their natal streams and where we'll hope to see large numbers of feasting bears.

Are there really salmon in the trees? The answer is a coevolutionary story—and bears and many other salmon-loving species play a crucial role in the rich cycle of life that links the forest with the sea. To see thousands of spawning salmon, tail to tail in the swaying current and making their final journey is a soul-stirring experience. We'll "talk salmon," and learn why the Alaska wild salmon fishery has earned a reputation as one of the most carefully managed and environmentally conscientious fisheries in the world.



Brown bear (MH)

Several cultural opportunities on this voyage offer glimpses of how people have adapted to the challenges of life in a coastal wilderness. We'll visit the village of Tenakee Springs, a unique community of homesteaders and artists drawn to this remote spot by its beauty and mineral hot springs. Crossing Chatham Strait to Admiralty Island, we'll visit the Tlingit village of Angoon. There a Tlingit elder will welcome us and introduce us to local carvers who'll show us their current projects. The traditional Tlingit stories our host shares provides a window into the many ways that their lives are shaped by forest and sea. Listening to the Tlingit language you can hear the music of water and ice—and the ever-present spirit voice of Raven.

Rounding the southern tip of Admiralty Island, we head up Stephens Passage and our much anticipated rendezvous with the Dawes Glacier, a magnificent tidewater glacier. En route, crossing the terminal moraine that guards the entrance to Endicott Arm, we are quickly immersed in the magical world of a glacial fjord. At our Ford's Terror anchorage, the glacially-etched bedrock walls of the fjord resemble a flooded Yosemite. To kayak here is to be christened into a world of indescribable beauty. Arriving at the towering face of the Dawes Glacier is a breathtaking experience but also brings into sharp focus the realities of what is at risk as we stand at the threshold of global warming. We'll discuss how changes in prevailing ocean currents and water temperature are affecting the populations of small forage fish that marine mammals and seabirds depend on for food. We'll create a photo book based on our shared experiences that captures the essence of Southeast Alaska—as well as the environmental challenges looming on the horizon. Price: \$6,550 (includes a \$1,000 deposit) Group Size: 12 Trip Rating: 2-3

Price includes: 1 night's lodging in Sitka (7/20) and 1 night's lodging in Juneau (7/28), 8 days/7 nights aboard the *M/V Westward*, all meals and beverages (wine/beer included) aboard and onshore, the services of our 3 naturalist leaders, the *Westward*'s 4-person crew, full sea kayak outfitting and instruction, gratuities to the crew, boat/hotel transfers, and a copy of the trip's photo book. The price quoted is *per person* based on double occupancy; single accommodations are unavailable on this trip. **Does not include** round-trip airfare from your point of departure to Sitka on 7/20 or your return from Juneau on 7/29.

CONSERVATION IN FOCUS: THE SALISH SEA & SAN JUAN ISLANDS September 17-24, 2017 8 Days/7 Nights Geoff Hammerson, Wendy Shattil, Audrey Benedict and the *M/V Westward* 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 worldnow known as the Salish Sea. Named in honor of those first inhabitants, the Salish Sea straddles the Canadian border and includes the marine waters encompassing 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 nutrientrich 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 in 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. The overwintering seabirds and ducks will just have begun arriving—the murrelets, guillemots, murres, rhinoceros auklets, scoters, and harlequin ducks. 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 global warming, ocean acidification, and pressures related to commercial fisheries, shellfish farming, and the looming threats of naval training activities and a major coal shipping port pose significant challenges. Scientists and citizen groups are working together to ensure that sea-based livelihoods are able to adapt with practices that promote sustainability.

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 conduct a "virtual dive" for us—transmitting live coverage of the deeper marine world to the big screen aboard Westward for us all to enjoy—no dry suit required! We'll create a photo book that truly captures the magical essence of the Salish Sea and all that we've seen and learned.

Price: \$2,750 (includes a \$500 deposit) Group Size: 10 Trip Rating: 2-3

Price includes: 5 nights/6 days aboard the *Westward*, all meals and beverages, 2 nights' lodging (9/17 and 9/23) in Friday Harbor on San Juan Island, 2 group dinners ashore, all instruction by our leaders and guest lecturers, sea kayak outfitting, the *Westward*'s 4-person crew, gratuities to the crew, and a copy of our photo book. The price quoted is *per person* based on double occupancy. Single accommodations are

unavailable aboard *Westward*. **Does not include** round-trip airfare or travel from your point of departure on 9/17 to Friday Harbor or your return on 9/24. This seminar begins with dinner and lodging in Friday Harbor on 9/17 and concludes with dinner and lodging in Friday Harbor on 9/23.

CLOUD RIDGE LEADERS

Audrey Benedict is the Founder and Director of Cloud Ridge Naturalists and Cloud Ridge Publishing. Her passion for 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 several books, including The Naturalist's Guide to the Southern Rockies: Southern Wyoming, Colorado, and Northern New Mexico and Valley of the Dunes: Great Sand Dunes National Park and Preserve, the latter a collaborative effort with photographers Wendy Shattil and the late Bob Rozinski. Her most recent book, with coauthor Joe Gaydos, is *The Salish* Sea: Jewel of the Pacific Northwest, a Nautilus Gold Award-winning conservation book designed, produced and financially supported by Cloud Ridge's publishing team and private donations. Audrey serves on the Board of Directors for the SeaDoc Society. 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 lives in Port Townsend, Washington and this California native admits that he has lost his heart to the Pacific Northwest. He recently retired after a multi-decade career as Senior Research Zoologist for NatureServe. Geoff is the lead biologist on Cloud Ridge's naturalist team and has helped guide our field discovery programs since the early 1980's. He is the author of the field guide Amphibians and Reptiles in Colorado, as well as Connecticut Wildlife. With co-author Audrey Benedict, Geoff is currently at work on a book about the Pacific Flyway, the migratory bird "highway" that extends from Arctic North America to Tierra del Fuego. He is an extraordinary observer of the natural world and is always adding new dimensions to his natural history expertise. Geoff is a great instructor and teaches field courses in biology and ecology at Wesleyan University and other institutions.

Wendy Shattil is a rare species indeed—a full time professional nature photographer. She and her late husband and partner, Bob Rozinski, worked individually and as a team for more than 30 years until Bob's death in 2016. They are known world-wide for their award-winning images and for the breadth of their work as environmental photographers of endangered species and at-risk ecosystems throughout North America. Fellows of the International League of Conservation Photographers, Bob and Wendy produced twelve books together, and their images have appeared in National Wildlife, Audubon, Nature Conservancy, BBC Wildlife, Nature's Best, National Geographic, and many other publications. Wendy serves as the Project and Image Director for Cloud Ridge Publishing and brings her expertise and critical eye to everything we do. Dedicated to developing new ways of illustrating key conservation issues, Wendy is a superb teacher and generous in sharing her expertise. To see more of their joint photographic work, visit her website: www.dancingpelican.com

Dr. Joe Gaydos lives on Orcas Island 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. 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, with Audrey Benedict, of the award-winning book The Salish Sea: Jewel of the Pacific Northwest and is currently working on a children's version of the book. Joe has published extensively on marine wildlife health issues emphasizing species as harbor seals, river otters, and killer whales. His profound passion for connecting people to the magic and vulnerability of the marine world is legendary!

Russel Barsh spent his Long Island boyhood beach combing and fossil hunting. As a doctoral student in paleontology at Harvard, he was mentored in multidisciplinary studies by the late Loren Eiseley and Stephen Jay Gould. His friendships with Native Americans opened his eyes to new science challenges, convincing him to get a law degree and defend the environmental integrity of traditional cultures. Russel taught at the University of Washington and helped develop its American Indian Studies Center. He served as an

advisor to United Nations agencies on indigenous and peoples living in sensitive ecosystems, eventually establishing the UN's 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 stewardship of cultural and biological resources in the San Juan Archipelago.

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 at Reed College. With a special interest in plant genetics, she worked initially 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 in designing restoration work. Her genetic population studies include work on local salmon, coastal cutthroat trout, camas, and the rare Island Marble butterfly.

Marilyn Hailbronner's drawings—rendered in pen and ink, scratchboard technique, and color wash—grace Cloud Ridge's brochure and website. Her work as a naturalist artist is a reflection of her love for natural history and conservation. To see Marilyn's artwork visit: www.wildinkwell.com

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 *Westward*, in using sea kayaks, skiffs or Zodiacs, 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.

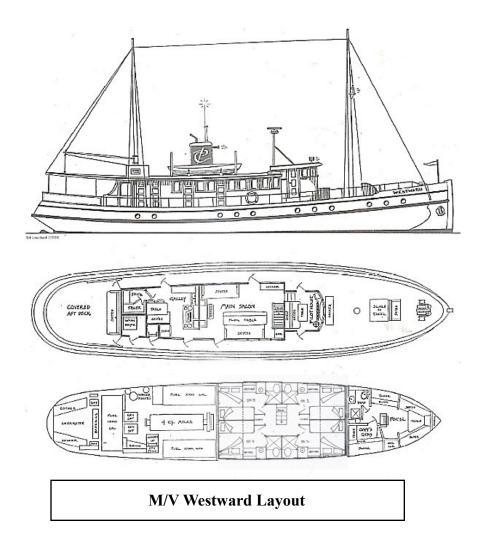
TRIP CANCELLATION & TRAVEL INSURANCE

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. Medicare does not provide coverage for individuals traveling outside the U.S. *Please don't leave home without trip insurance!*

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!

GLOBAL OCEAN CONSERVATION SUPPORT

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

- 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?

Visit our website at www.CloudRidge.org for our 2017 trips, Field Notes, archived descriptions and images from previous trips, slideshows and video clips, and the latest offerings and books from Cloud Ridge Publishing.

Cloud Ridge Naturalists

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