COMMUNITY

# FIRST STEPS TOWARD ADVENTURE

## GIRLS' ORGANIZATION FOSTERS KNOWLEDGE, SKILLS, AND SELF-CONFIDENCE

**by Michael Engelhard**

**MOST OF THEM HAVE NEVER WORN CRAMPONS** or plastic boots, lugged a 50-pound backpack, or geared up in a dry suit for rescue drills. Neither have they experienced not having a bathroom. They come from this state, from British Columbia, Yukon, or California, and sometimes from rural India or Manhattan, to probe wild Alaska terrains. In the process, many discover new worlds, if not crucial things about themselves.

"Our society continues to underestimate the ability of girls," says Erin Pettit, the glaciologist who founded Inspiring Girls Expeditions. This tuition-free science and wilderness program conducts 12-day journeys in Washington, Alaska, Canada, Colorado, and Switzerland, trying to spark interest in the geosciences, which traditionally attract few women and people of color. The instructors mentoring eight to nine teenage girls per trip include mountaineering and sea kayaking guides, ecologists, an oceanographer, and a marine biologist, as well as glaciologists.

Jaelyn from Tucson says she was "used to low-income, heavy Hispanic, STEM-based thinking," but that paddling Resurrection Bay in 2017 introduced her

**Above:** A rope team of young women ascends Gulkana Glacier for their "summit day" attempt on Cony Mountain.

This page: Courtesy Joanna Young; Opposite page: top, Courtesy Erin Pettit; bottom, Courtesy Mia Tucholke

**Top:** Girls paddle on Kenai Fjords' Bear Glacier Lagoon.
**Left:** Team participants use a Gulkana Glacier weather station to study practical applications of field science.

to "outdoorsy people, artsy people, linguists, athletes."

Courses are designed to foster critical thinking and explore connections between science and the arts through forces that shaped alpine and coastal landscapes and that keep shaping them: snowfall, avalanches, albedo effects of rocks and dirt on glacial melt, discharge from glacier streams, tides, estuaries' salinities, etc.

Take-home lessons can be immense, as they were for Ashwini. "My generation is starting to wake up to the seriousness of climate change," she says.

The 16- to 18-year-olds function as teams, planning experiments based on observations and resulting hypotheses. Painting sessions at scenic points hone their perception. They absorb "hard skills" such as knot tying, glacier travel, ice climbing, and self-rescue from crevasses, realizing the usefulness of exotic equipment. During their immersion, they camp on moraines, study weather patterns, dig snow pits to examine stratification, and identify plants. Behavioral studies of ravens have sprung from the birds' obsession with a trip's food caches. The confidence building, single-sex learning environment is gender-exclusive on purpose. Some studies show that all-female classrooms benefit middle school girls, especially their mathematics and science performance. Her "really caring and loving little community" on slow-moving ice gave Bernadette courage to leave her hometown, Ketchikan, for a math BA. Having grown up mostly with boys and men in a fishing family, she likely would not have gone to college otherwise.

Joanna Young, a co-founder and lead instructor of the program's Alaska branch—run through UAF, where she teaches glaciology—sees her mission as "providing young women with encouragement and support in learning how powerful they can be...They all work to bolster each other," she proudly says.

Evening discussions at her Gulkana Glacier camps in the eastern Alaska Range have centered on the role of women in traditionally male-dominated disciplines and on how emotional intelligence affects leadership styles.

Passionate about environmental education, Young wants her charges to work with, not against, the elements. Gulkana Glacier, a U.S. Geological Survey benchmark monitored since 1967 and now shrinking due to climate disruption, is the perfect setting. The approach, according to Young, has "this Indiana Jones [suspension] bridge, and it's safe. There are no huge crevasses."

After a pre-trip meeting and packing at Fairbanks' Wild Rose Farm followed by nine backcountry days, participants sample UAF campus life and finish their science projects. Sea kayaking courses visit Kachemak Bay or Kenai Fjords' Bear Glacier and Seward's Alaska SeaLife Center.

Course alumnae testify to "super-empowering" changes their expeditions have wrought. Kjerstan's launch day, which she described as a "pure culture shock," burst her comfort zones "at the seams." Chloe's 2012 experience opened her mind to geology. "Before Girls on Ice [the program's previous name], mountains were just mountains. Valleys were just valleys. Now, when I see them, they're full of questions and stories." Stark surroundings revealed new inner dimensions to her: "Carefully stepping over crevasse after crevasse as you were engulfed in wind, rain, and fog. Listening to the thunder and distant rockslides from inside our three small tents...You can do this. Even if it's scary, you know you can."

Her icy fjords stay transformed Betye, an upstate New York junior, physically. "When my mom first saw me [afterward], she was crying because she thought how beautiful I looked, because I looked so confident in myself."

The outings' focus, however, lies not solely on personal or academic growth. Girls will be girls after all, and cohesion matters, the bonding of strangers who

**Right:** An Inspiring Girls Expeditions team takes a snack break while traveling on the Gulkana Glacier.

Courtesy Brita Irving

**Left:** Students practice art as a form of inquiry and observation while learning about field science.

often remain BFFs. In one of Chloe's fondest memories, a fellow youth returned to camp with a tube of greenish glacier mud. That evening, students and instructors wore sediment facials, laughing and snapping photos.

Through Alpine Club presentations and campus advertising, the program is recruiting girls to be inspired not necessarily based on athletic or academic prowess. It rather prefers applicants who otherwise might not have such an opportunity, who ideally teach each other and contribute to a group in unique ways.

Joanna Young thinks organizing these courses has furthered her own development, as it requires "the same skills you need to design, fund, and run a safe expedition for scientific studies." She well remembers Girls' 2012 inaugural Alaska jaunt. The group, descending, crossed Gulkana Glacier's runoff after a storm had grounded them an extra night at a higher camp. With more than 36 hours of nonstop drenching, the glacier and streams had become treacherous, difficult to negotiate. A student from another course recalls how she and an instructor pumped water from a trench they'd dug around their tent against flooding, because rain filled it faster than it would drain.

Despite the occasional hardship or scare, almost 100 girls have successfully passed through the Alaska program since its inception. Each one tasted practical science and reveled in nature's wonders while testing her mettle. Neither they nor their older role models know where time spent together alfresco will lead them. As Chanel, a Fairbanks alumna, reminds us, "Putting on your pack seems so outrageous at first, but that's the first step to new adventures."

---

***Michael Engelhard worked for years in youth outdoor education programs. On his favorite trip, a two-week, almost all-female Outward Bound course, the girls painted the only boy's toenails and ran Class IV rapids with instructors merely watching.***