The Brothers Wild

Frank and John Craighead’s groundbreaking study of grizzly bears helped save the carnivores from extinction. For the twins from Chevy Chase, it was just another chapter in a lifetime of adventure.

By VICKI CONSTANTINE CROKE

Twin brothers, twin passions: John Craighead, left, with a perched falcon; Frank with a wolfhead, circa 1939.

John Craighead at his home in Missoula, Mont., earlier this year.
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cliff along the Poomac and sent for help. Not usually a nervous climber, John began to feel a little spooked by the sight of the waiting emergency vehicle. Frank reassured him: "To heck with them. If we fall, a broom is what they need, not an ambulance." They learned from an old National Geographic article and from the birds themselves the ancient skill of falconry. They would capture young hawks from nests and feed them startled, sparrows, mice and lean beef. With gloved hands, they carried the birds around the house to habituate them. Holding out bits of meat, they would patiently teach the birds to fly to their gloved hands, increasing the distance little by little, until the birds could be taken outside.

They hunted the raptos outdoors, setting them off after pigeons or crows. The results were beyond expectation. "We do not worry whether they will return to our outstretched hands," they wrote. "We know they will." And, without exception, the Craigheads gave the birds their freedom, usually after a single season, though several elected to stay. The twins tended the tails of birds who had lost or broken feathers by painlessly reconstructing, or imping in, new ones. They used needles and glue for the task, and often borrowed the replacements feathers from other birds (startlingly enough, a crow's tail substituting for the missing one of a Cooper's hawk, for instance).

Their intimacy with the bird world would yield information found nowhere else. They determined distinguishing character traits among birds of prey — unlike other hawks, for instance, Cooper's hawks are reluctant to visit their nests if humans are nearby. So sure and pioneering were their observations that the Craigheads would impress the editors at National Geographic Magazine when they were only 19, writing the article "Adventures With Birds of Prey," which would eventually be published in the July 1939 issue. That would be the start of a long association with National Geographic, with many more articles and TV documentaries to come.

They would spend a lifetime crafting love poems — but poems in the form of field reports, population graphs and behavior analyses.

Their passion for animals was expressed in methodical, meticulous study — practical, but also sometimes sentimental.

John wrote of sitting quietly in a blind and looking deep into the eyes of a mother peregrine falcon: "Those eyes revealed her nature, and in them I could see her life. I could see love of freedom, of wild unconfined spaces. I could see the spirit of adventure, the desire for thrills, an appetite for daring." He could also have been writing about his own life.

Their world opened up because of the birds. Driving an old Chevy through Wyoming in pursuit of hawks the summer after graduating from Western High School, they fell in love with the American West and vowed to return someday for good. They longed for the spectacular and rugged landscape, the incredible wildlife. And their taciturn nature and distance for formality were at home there.

But back East and throughout the country, they were also exposed to some tough realities. Not everyone saw what they saw in the animals they loved. Several times, the twins ran into hunters or farmers who delighted in killing birds of prey — beating the young to death, setting steel traps, shooting them. The Craigheads worked hard to combat the prevailing wisdom that hawks were depriving humans of game, but they knew what they were up against. When they discovered that one of their own kestrels, who had come to trust humans, had been killed by a boy with a BB gun, Frank wrote: "I hope he never realized what killed him; I hope he kept his faith and love in humans to the end."

By the time both brothers graduated from Pennsylvania State University with matching science degrees in 1939, they were already corresponding with R.S. Bhattacharjorishri, who requested that they call him Bapa, which they were told meant "Little One." Bapa was the youngest of three royal brothers in the small princely Indian state of Bhavnagar, on the Gulf of Khambhat. His eldest brother was the maharaja, and Bapa led a privileged life focused mainly on falconry, hunting and swimming, later writing books about Indian wildlife.

Bapa had read the Craigheads' 1937 article in National Geographic and had written to them, one falconry-addicted youth contacting two others. The letters were followed up in September of 1939 with a two-week visit from the prince, whose family boasted an ancestry that could be traced back to Kublai Khan. Hosting such a royal visitor was unnerving for this very modest American household: The twins were forced to wear their best suit jackets in the sweltering Washington heat to meet him at the airport; their anxious mother splurged on hiring a maid to serve dinner; and, the Craigheads reported, "Dad even wore his coat to the table, a thing we had never seen before." All anxiety soon vanished. For Bapa, the twins later noted in National Geographic, "was in any language a regular guy!" He swilled Coca-Cola and milkshakes. He swam and canoed. He danced to jazz music with American girls and fielded fly balls at pickup baseball games.

In 1943, the twins went to visit the prince in India for several months. Bapa had gotten married by that time, so instead of staying at his palace, the Craigheads were given a suite of four rooms at the state guesthouse (along with a personal driver and "touring car"). Bapa's home, a deck, modern structure with an in-ground swimming pool and several tiered diving platforms, was nearby. The twins were presented with their own peregrine falcons, which they kept at the hotel, and every day they went out with Bapa and his expert staff to fly the birds.

The twins did their best to fit in, they wrote in their National Geographic article and a book also called Life With an Indian Prince. As a gift, Bapa had traditional Indian outfits made up for them, complete with turbans. They are exotic foods, which Frank reported "burned the devil out of my gun." They drank more than they were accustomed to — though they had tried to "condition" themselves for a party by drinking "lemon gins" in the previous weeks. And, at a royal wedding, in which too elephants — some pulling silver carriages —
riages — took part in the processional, they were propositioned by “dancing girls.” The women, who were hired to do more than just sing and dance to entertain the men, sereaded the twins: “I love you. Just pinch me and you’ll know the greatest happiness. Come and sleep with me tonight.” (National Geographic chose to leave the last sentiment out of its pages.) The twins weren’t interested, but the lusty maharajas were. Looking back on it, John told me, “We were pretty late in finding out about girls.”

But these quintessential Americans lost their bearings a bit in the faraway land. Bapa and his brothers were enthusiastic hunters, and the conservation-minded Craighead boys jumped in with both barrels. After one day of hunting, John wrote that providing meat for the men, reducing the numbers of abundant animals and learning about exotic creatures, “helped me rationalize the killing . . . in the excitement of it all, I forgot all sentimental ideas I had against needlessly taking life and shot for the mark with keen enjoyment.”

They aimed their guns at a dizzying list of victims, including quail, jackal, “jungle cat,” civet, imperial eagle, tawny eagle, the endangered great Indian bustard, cobra, wild boar, cranes, the now-endangered chinkara (a shy, buff-colored gazelle), dogs, goral and Nilgai (a big, thick-necked antelope). They never got the chance to hunt a tiger, but they did watch bears drive an Asiatic lion (rare even by that point, critically endangered today) toward the princes, who blasted the animal from ratten perches set up on a platform. The Craigheads always defended the sometimes wanton hunting practices of the royal brothers, but they had some trouble accepting the lion kill. In their journal, they graphically describe the scene as the magnificent animal is skinned. They note, it “seemed a great shame that such a perfect animal should be the victim of a young prince who had no real interest in a lion, dead or alive.” By the end of their trip, they seemed to have had enough. One journal entry states, “I don’t care to shoot animals merely for the sport of shooting, even for control purposes.”

BACK AT HOME, THE CRAIGHEDS EARNED THEIR MASTER’S DEGREES in ecology and wildlife management from the University of Michigan. They both were married to athletic and adventurous women—Frank to Esther Stevens, from Illinois, and John to Margaret Smith, from Wyoming, whose father was a Park Service ranger in the Grand Tetons. And the couples bought 14 acres of land near Moose, Wyo., just where the twins always said they would settle, building identical cabins next to each other. At the start of the war, the brothers were off to Chapel Hill, N.C., where the U.S. Navy had commissioned them as lieutenants so they could set up a survival training program, as they had for the ROTC on the Michigan campus. They wrote the manual How to Survive on Land and Sea. After the war, they continued their survival training work for the Navy in the Marshall Islands, the Philippines and Japan.

The brothers got their PhDs in vertebrate ecology from Michigan in 1950. And their dissertation was published as “Hawks, Owls, and Wildlife: Ecology of Raptor Predation,” which, the Wildlife Conservation Society’s carnivore conservation biologist John Weaver says, “set a standard for the study of raptors.” John Craighead took a position as professor of zoology and forestry with the University of Montana and as leader of the Montana Cooperative Wildlife Research Unit. Frank worked in the 1950s for the U.S. Fish and Wildlife Service in Nevada and then the Forest Service in Washington.

For the first time in their lives, they were working and living far apart, and except for summers in Moose, it would last for nearly a decade. But John, who was immersed in Western wildlife issues and intrigued by the mysteries of grizzlies, started considering a long-term study. Both brothers saw it as a way to work together again — a shared, but largely unspoken desire.

GRIZZLIES CAN WEIGH UP TO 1,000 POUNDS, RUN AS FAST AS A HORSE, crush a moose’s skull with one powerful blow and, after biting a 700-pound rival’s thigh, shake him, in the words of the Craigheads, as a “terrier shakes a rat.” The bears’ tread may be silent, their mood unpredictable and their bite powerful enough to puncture thick metal. These are hardly typical attributes of an underdog, yet in 1959, when Frank and John began their new project, that is precisely what the humpbacked bears were. With their massive bulk and menace, grizzlies, who are the very image of wild America, were considered at best nuisances and at worst threats to human life. In the lower 48 states, they were vanishing.

How much trouble the bears were in, no one really knew. What was known, the Craigheads wrote at the time, was that “the usual ‘communication’ between man and grizzly is through a rifle bullet.” With funding from several sources, including the National Geographic Society and the National Science Foundation, the Craigheads began what the society called “Operation Grizzly Bear” in Yellowstone and surrounding forest areas. It was the largest grizzly population in the country outside of Alaska, but one that was under increasing pressure from human use. The study was meant, often, the Craigheads had to race into a stream to prevent a bear they’d shot with a tranquilizer dart from drowning — unsure whether the animal was still awake enough to attack.
“We had great respect for No. 75 as she was the epitome of grizzly nature... She had attacked us on several occasions.

“We all felt depressed at losing this old friend.”

straw piles of wind-felled trees” and along miles of rough terrain in extreme weather. In order not to lose a bear they were following, they might not sleep except for a few carnaps, for 40 hours straight; continue hiking in sweltering heat for 24 hours after their canteens ran out; or strip naked to ford the waist-high water of an icy stream at night, leaving their extremities so numb that they would stumble for the next quarter-mile of the hike.

They were always on guard not to “jump,” or startled, a shortsighted bear. And the twins. masters of the one-arm pull-up, according to the family, insisted that any student on their project work on their calisthenics so they could get up a tree — fast — if need be. Sometimes as a prank, the brothers claimed that a bear was coming just to drive home the point.

By 1966, the Craigheads would report, “Timberwolves had taught us we have been treed by bears.” Once, as Frank stood in the semi-darkness, he was suddenly aware of seven grizzlies running shoulder to shoulder directly at him “like an onrushing train.” Fortunately, grizzly bears typically want nothing to do with human contact, and, at the last second, as the bears caught his scent, they veered away. Often enough, the Craigheads said, bears have to race into a stream to prevent a bear they’d shot with a tranquilizer dart from drowning — untrue, even as they plunged in, whether the animal was still awake enough to attack. One time, a mother bear tracked them in their truck to get her cub back. And on another adventure, they were backed out onto a high, snowy cliff ledge with nowhere to go by a black bear they thought had been knocked out with a dart. It was dawn when the bear started after her, she merely glared at them tolerantly, as if a more aggressive bear would have charged. The Craigheads realized that all the time they were learning about her, she was taking their measure as well. “A relationship of trust, and perhaps respect, was established between us.” The bears had teach them to simply get away from the human intruders, scaled a vertical snow wall to escape them.

But the Craigheads shrugged off the notion that what they were finding was no big deal. They were proud of the fact that they never used their guns defensively, having found that when they did, each time we handle a grizzly, we slip into ranger jackets and put on ranger hats.”

“The grizzlies had concluded that the Craigheads were not loners, as was previously believed, but maintained elaborately social hierarchies. They observed that females would adopt orphaned cubs and that the young cubs would learn to explore their environment under this protection. The Craigheads also found that the grizzlies prepare their winter dens well in advance of their actual slumber. And, through many of her social interactions, they came to better understand bear hierarchies; for example, females with young — which is common in grizzly terms — would often share the same den — seven cubs in seven years. Watching her, especially with her cubs, made the bear world seem closer to their own.”

A Yellowstone Park ranger asked the brothers why they were so worried that the bear — who could still feel, hear, see, and smell while drugged — might recognize them and come after them at a later date. Frank replied: “Bob, we’ve got all that work done through many of her social interactions, they came to better understand bear hierarchies; for example, females with young — which is common in grizzly terms — would often share the same den — seven cubs in seven years. Watching her, especially with her cubs, made the bear world seem closer to their own.”

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bears began to die. Just how many was in dispute. The Craigheads felt official numbers were suspect, and some rangers in Yellowstone concurred. A report from the National Academy of Sciences is damning: 

“Control actions” (trapping, translocating or killing) went from 13 in 1967 to 633 a year between 1968 and 1970. The peak grizzly population during the Craighead years was 245, and, according to a report in the journal Ecology, presented by the Interagency Grizzly Bear Study Team, the population was likely down to 136 by 1974.

Some of the dead bears would inevitably be among those that readers of the Craigheads’ exploits had gotten to know. After the dump closings, Marian’s range increased to find enough food. She even entered campgrounds for the first time in her life. In the fall of 1969, with the added pressure of a berry shortage, Marian and her yearling cubs began to scavenge a campground. Early on the morning of October 13, a park ranger got between Marian and her young in order to immobilize the cubs. “As might be expected,” Frank wrote, “Marian came out of the woods at full charge.” She was shot dead with several slugs from a .44 magnum.

Since Marian’s death, life has improved for the grizzlies in and around Yellowstone National Park (a population that straddles forests in Wyoming, Idaho and Montana). It is now believed there are 500 to 600 of them — enough for the government to have taken away their “threatened” status this past spring — a move that a number of environmental groups oppose.

JOHN RETIRED FROM THE UNIVERSITY OF MONTANA SHORTLY AFTER THE END OF THE GRIZZLY STUDY. Frank was an adjunct professor for the State University of New York at Albany. Both men still conducted research and stayed active in conservation work. Frank headed up the bear division of the International Union for the Conservation of Nature and Natural Resources for a time, writing Track of the Grizzly, and John founded the Craighead Wildlife Wildlands Institute in Missoula, and wrote scientific books on grizzlies and grizzly habitat. Combined, over 50 years of work, the brothers published more than 70 technical papers, nearly a dozen popular pieces for National Geographic and more than eight books.

Years later, nature writer McNamee would say in his book The Grizzly Bear, “The Craighead study still stands as the longest-running, most thorough, most fertile, and most definitive of them all, the standard by which all subsequent study of bears has been measured.” McNamee wrote that the Craigheads’ work “forms the very basis of contemporary science’s knowledge of grizzly bears.” Strangely, after the big battles for the grizzly, there was a rift between the twins. “An identity crisis at the age of 53,” said one family member. The estrangement occurred over Frank’s solo publication of Track of the Grizzly in 1979. John’s family says he was blindsided by it. And though they maintain the brothers never stopped talking to each other, the conflict is often mentioned by many people who knew them at the time. John Craighead’s son John says the brothers were always squabbling about one thing or another, as siblings do, and in some ways this was no different than other disagreements.

Frank’s wife, Esther, died in 1980. And almost as soon as he remarried in 1987, he was diagnosed with Parkinson’s. By the end of Frank’s life, the twins, who so often seemed joined as one, were together once more.

John Craighead’s daughter, Karen Haynam, recalls a day at Frank’s house during that time. John was at a loss about what to do, what to say. “Just be with him, Dad,” Karen advised. So John sat with Frank, and the two men, who had been so close that they could practically read each other’s minds, sat silently together, holding hands.

The Craigheads were outspoken in their opinions, and park officials tried to muzzle them. Eventually, the brothers’ headquarters were bulldozed. And bears began to die.

**Key to last week’s Second Glance**

(Noembver 4)

1. Yellow-eyed Susan
2. True fly
3. Bright-eyed
4. Blue fish
5. Holeness
6. Seeing stars
7. Bead and switch
8. Caught one!
9. Cellular division
10. Ladybugged
11. Starless
12. Am I blue?
13. Fresh greens
14. Cordless
15. Rotated

**Vicki Constantine Croke writes about animal issues for media such as NPR and Discover magazine. Her latest book, The Lady and the Panda, is being adapted for a film. She can be reached at vickicroke@vickicroke.com.**