

Piece of Paradise

Paige Stephens

University of Michigan Biological Station
English 317: Environmental Writing and Great Lakes Literature
7/29/2015
Dr. Keith Taylor

Abstract

In the UMBS parasitology course, my class had the privilege of working with Harvey Blankespoor. He was our professor's father and unofficial course aid, but he became so much more as the summer grew on. Behind his rugged and somewhat aged exterior is a man of youthful curiosity and extraordinary experience. From hunting for snails in Michigan to warding off bears in the isolated Alaskan wilderness, from forgetting sack lunches to dissecting a 900lb tuna, each memory contains character that can only be described as uniquely Harvey.

I grant the Regents of the University of Michigan the non-exclusive right to retain, reproduce, and distribute my paper, titled in electronic formats and at no cost throughout the world.

The University of Michigan may make and keep more than one copy of the Paper for purposes of security, backup, preservation and access, and may migrate the Paper to any medium or format for the purpose of preservation and access in the future.

Signed,

A handwritten signature in black ink that reads "Paige C. Stephens". The signature is written in a cursive style with a long horizontal flourish extending to the right.

Piece of Paradise

The sun is high and the skies clear at Paradise Lake. It is a perfect day for finding parasites. Our group piles into the van, packing binoculars, seines, and glass-bottom buckets into the trunk. Last in the van is a man in a large stained orange t-shirt, white tennis shoes, and a hat whose original color can no longer be determined. His name is Harvey Blankespoor, our professor's father and unofficial assistant in the parasites course. He tosses his camouflage waders in the back and trudges to the passenger's side. His body betrays his youthful enthusiasm as he slowly pulls himself up by the safety handle and shifts into the seat. His breathing is heavy, as if we were already out in the lake. "You ready Harvey?" I ask. He nods with conviction.

A minute or so into the drive, Harvey chimes in, "Oh no. Has anyone seen my lunch?" I laugh, remembering the phrase Curt, his son and my professor, told us all at the beginning of the course: "Dad can remember all the parasite life cycles, but not where he put his car keys." As I call to the rest of our class back at the lab to determine whether the lunch was indeed left behind, I hear bits and pieces of a joke Harvey is about to tell. It's easy to identify because he interjects every few minutes with, "You guys are really going to like this one."

We are the leaders on this excursion, but Harvey is the expert. For the majority of his career as a former UMBS researcher and professor, he has sought to understand and regulate swimmer's itch on Michigan lakes. Swimmer's itch was first discovered at UMBS by William Cort in 1928 (Cort, 1950). The disease affects many families staying at cottages or camping sites. The parents take their children for a swim in shallow waters and, upon drying off in towels, are usually startled to find that all their legs have become riddled with raw itching papules.

Harvey spent years discovering the swimmer's itch life cycle and which hosts are important in fueling it. He's found that both snails and common mergansers—duck-like birds with a red-feathered heads— pass the parasite onto its next stage. The eggs are deposited in bird feces, which hatch in the ocean, infect snails and transform into their next larval stage. In the morning, the snails shed out the cercariae intermediate—a microscopic worm with a globular head. If a merganser is present for the cercariae to infect, the cycle continues; however, when a human leg is available, the cercariae will blindly burrow into it instead, causing the intensive itch.

Our objective as a class is to determine whether a slightly different parasite helps perpetuate this swimmer's itch. If mergansers feed on slow moving fish whose eyes are infected by another parasite, we could assume that where we find that parasite, we would also find swimmer's itch. Luckily this parasite is found in the same easy-to-catch snails as the swimmer's itch fluke, so searching for them may be doubly beneficial.

We arrive at Paradise, beginning the lake survey with a boat tour. By this point in the course, all of us know that the first person to find a merganser gets a free ice cream cone. Harvey and Curt use any challenge as an excuse for a trip to the Big Dipper—*Who can find the cercariae in the fish eye, or acanthocephalans in the whitefish?*—even if the result depends mostly on chance. Keeping this next contest in mind, our group is attentively searching the shore for mergansers. We are fooled by many decoys—fake owls on docks, stumps protruding from shallow waters, big rocks dappled with shadow. Minutes go by until Harvey looks up momentarily from his conversation with the boat tour guide and points out a spot at the base of a metal dock. Sure enough, he has spotted a female with bright red feathers on her head, flanking a brood of 26 offspring. We venture close enough to get a fecal sample. We will check for the

swimmer's itch parasite, but not until Harvey treats himself to an ice cream cone and ends up buying one for each of us in the process.

Later in the day, we change into our waders and visit several sandy entry points at the lake. The glass-bottom buckets help to spot shells through the water. As we pick them up and attempt to identify them, Harvey circles around us. He gives a mere two-second glance at each of our finds, and throws out a name: *Campeloma decisum*, *Guniobasis livescens*, *Physa integra*. A Google search after class confirms his identification. Perhaps in old age, snail species are easier to remember than field lunches.

When we returned to the lab, I watch Harvey go back to the microscopes. It seems that part of the lake has come back with him. More than just the specimens we collected. He came back with youthful energy, curiosity, and fascination—with pieces of Paradise. It makes me wonder what his life was like at my age. What was he doing when his youthful body was able to keep up with his determination?

“Harvey, I’m going to need you to go out alone.” The words struck Harvey with a sting of fear. In the Alaska Department of Fish and Game, there were seventeen locations that needed to be monitored for the summer; however there were 33 employees, which meant that one person would be camping by himself. After the training session, the director had pulled Harvey aside and informed him that he was indeed that person. He would stay in Sand Point—located on the western shores of Popof Island—guarding the bay and nearby streams from illegal commercial fishing. His campsite was 100 miles away from the nearest village.

Three months in peaceful solitude might be a positive thing. After all, Harvey was used to the open space of rural Iowa. His life on the farm was one of the reasons why his application

had been received so well; long days of lifting hay bales had given him big biceps and a work-oriented mindset, which was a rare commodity for an eighteen-year-old. He had regularly endured drudging day and night in ankle-deep in manure. He could pitchfork 30-40 metal hay baskets in the average day. Even at the age of twelve, Harvey's dad had given him the task of working a threshing machine, a job too demanding for fellow teenagers half his size. Harvey felt confident that he knew what a man's work entailed. Wasn't he prepared for a few nights alone in the Alaskan wilderness?

The next morning, Harvey was transported to his campsite. When the plane touched ground, the other passenger helped him unload his belongings. Then Harvey turned to watch as his last chance of evacuation abandoned him on the bluff. There he stood, with only the shaky transmission of a radio for human contact. Harvey observed his surroundings—vast flat tundra surrounded by towering white mountain peaks that receded into the sea. There was a small motorized boat on the bay's edge, for which he had six gallons of fuel. He also had been given a rifle, which he hoped he would never need to use. Harvey knew that there should be six spawning streams for him to protect, but he could only see two from his site. Fisherman could go upstream in high tide, but if any illegal fishing was done within 500 yards of the spawning sites, Harvey was instructed to intervene. He set up the tent atop the hill that overlooked the bay, so that anyone who fished there might see that the game warden was watching.

Salmon filled the waters like leaves in a forest. Some mornings, the bay was so full of salmon that dorsal fins lined the entire shoreline. When sick of the every-morning oatmeal breakfast, Harvey would walk beyond his campsite across a small manmade bridge, one of the few signs that humanity had been there before him. Stopping far enough upstream of the nesting sites, he would dip his boot into the water and scoop out a fish. Eventually when the spawning

season was over, the fish began to die off. Loads of them would float down stream, piling up at river bends. Harvey stopped eating the fish.

One day, Harvey put the dead salmon to good use. He had been curious about the sea and what dwelled in it. So he punched holes in an empty gas can, attached a rope, added salmon pieces for bait, and threw it into the bay 20 feet deep. The next morning, he went back to the rope and reeled it in, feeling the strain as if the can were filled with sand. Instead, when it emerged from the water's surface, he saw starfish and other organisms hanging off the can's edge.

When kit foxes and other mammals would cross Harvey's path, they would sometimes stop to observe him, fascinated in their first human encounter. Harvey was also observant, wondering at their short stubby features. Why was it that most of the things he saw in Iowa were so much bigger, and had such long limbs? Later on he realized that this theory had a name called Allen's Rule, which explained how animals living in northern areas lacked surface area, thus conserving body heat.

Harvey knew that despite the frail size and harmless demeanor of the critters he observed, he was not the most dangerous predator in the woods. Training, he thought, had prepared him. He would be careful when walking through tall grasses on his treks, whistling and singing hymns like *Great is Thy Faithfulness* to reduce the likelihood that he would startle something with teeth and a bad attitude. He kept his food securely stored in a hole in the ground far away from where he slept. But on several occasions those precautions were not enough.

Crunch. Harvey jolted awake at the sound. A few more twigs snapped just outside of his tent. They crunched loudly, too loud for a small kit fox or raccoon. *Hwooh, Hwooh*—terrible

sounds of hoarse, guttural breaths. Harvey tried to adjust his eyes to see the silhouettes through the walls of his tent, but failed in the blinding darkness of the night. His imagination provided enough of a visual anyway. One grizzly was most definitely by his feet, another over by the tree line. Had he left out the granola? Surely he had packed it away in the pit. Could they smell fear? Another breath—this time several inches away from his face. He swore he felt its heat. With tent fabric as his only armor and improbable radio service, Harvey realized the grim prospects: if the grizzlies were to decide on him for a snack, he would die there. Weeks would go by without any outsider's knowledge of it.

Then a moment of clarity: he remembered that in the pack at his feet rested a dozen roman candles. He ever so slowly, so as not to make the sound of sweat dripping from his forehead onto his sleeping bag, slid his arm down to the foot of the bag, into the sack of candles, and grasped one. He located the matches, opened the box and pulled one out, piled the supplies in his lap and stopped for a moment. He could still hear the crunch of bear feet, of deep rasping breaths. The tent zipper would alert them. Perhaps they could already hear his rapid heartbeat. He would have to act swiftly. With his right hand, he unzipped his tent, grasped the matches and swiped it against the box in his left hand. He dropped the box, lit the candle wick, and threw it outside. Immediately the light burst into loud red crackling flame. The sparks illuminated the bears' bodies as they ran away from the campsite and into the trees. Eventually his heartbeat slowed again. But Harvey spent the rest of the night awake, using his ears as his sight when the candle died out.

The next morning he finally took the head warden's advice from training: Grizzlies don't ever cross urine. At first, he thought this was a prank on the rookies, but at this point desperation

kicked in. So before eating his oatmeal, Harvey made sure to water the surroundings of his campsite with all-natural bear repellent. He didn't need the roman candles after that.

While there was something exhilarating about being alone in the wild for months at a time, Harvey missed the company of others. Even in rural Iowa, neighbors and family would gather to run the threshing machine in harvest time. He missed Marlene's voice of reason and encouragement. She was imprinted in his mind even though they had just begun dating a short time before he left. Harvey could have even settled for the company of a stranger, just as long as they provided more discourse than the short static transmissions from the radio talking about updates from headquarters or warnings of inclement weather. Little did he know, his wish would be granted. But it would test his determination and his love for the life forms he was trying to protect.

Harvey had a total of three human encounters in 90 days. He did of course see people from afar, off on the sea among the vast numbers of boats. He could make out the fishermen's figures if he used binoculars, especially important when trying to detect illegal activity. But only three times did fishermen have the audacity to confront him on his campsite. The first visitor was a man with dark brown hair and broad shoulders. He had just come up from his boat, where the rest of the crew was waiting. Giving Harvey a stack of bills, he said, "I want to make a deal."

"What kind of deal?" Harvey asked.

"How about you take this here payment, and turn your head while we get on with our business?" This business, Harvey presumed, was illegal fishing along the spawning streams. He knew that he was outnumbered with the crew on the boat. The rifle at the seat of his tent would not threaten the fisherman in the slightest, but rather spur his retaliation. Still, Harvey was dedicated to his work. He had to try.

“Who do you think I am?” he exclaimed. “You got kids?” he asked, assuming that the man’s children would be about his own age.

“Yes.”

“Would you ever want them to act the way you’re expecting me to? I suggest you keep on fishing where you have been,” then added, “or there will be fines worth more than your summer’s catch could pay for.”

The man walked back to his boat. The second visitor was much different than the first—a woman with long legs and a much more ardent demeanor—but she had the same motive for her crew. “I hear you’re lonely here,” she said. “Maybe I can liven things up a bit.” She certainly did not know Harvey or otherwise she wouldn’t have bothered with such an immodest bribe. He sent her back to the boat, just as the first visitor, to continue fishing within legal confines.

The third visit was from a group of men prompted by rumors between the ships. Not knowing exactly what the Department of Fish and Game was entitled to, they wondered what a teenage game warden like Harvey might have in his tent. Night vision goggles? A heat-sensor camera? Wanting to know what exactly they could get away with, they approached Harvey at the tent and asked to come inside. Harvey did not let them enter his tent, since they would find it rather empty and realize he was less equipped to handle night disturbances. They returned to their boat, a little too quickly, Harvey thought.

That night at 1:00am after the sun had set, he woke to the familiar sound of a boat motor. Fishing was not allowed this time of night, and Harvey knew he would need to go out to stop it. Harvey was not a good swimmer, and up to this point it hadn’t mattered much because there hadn’t been a need to go a far distance from shore. Nonetheless, he grabbed his rifle, hopped in the boat, and checked for a life preserver before setting off onto the bay. As he began to

approach the vessel, the motor died out. Without the noise, he lost his sense of the ship's location. Perhaps Harvey's presence was enough to elicit good behavior. Then he heard another motor start from the opposite end of the bay. When he went toward it, that one, too, stopped. This repeated several times until Harvey realized the crews had teamed together and were getting the better of him. If, however, Harvey gave up on chasing the boats, they would receive twice the catch. So he zigzagged across the lake for hours until the sun rose and the whole bay was awake with the sound of motors. He returned to his tent on the shore and watched them fish.

At the end of August, a plane came by to take Harvey home. His parents would attest that their son never talked more than when he returned from his Alaskan summers. He told stories of prowling grizzlies, of "just darling" kit foxes, and always of the salmon-filled tides. The love of these interactions outweighed the harshness of the cold tundra and lack of human interaction and he took an offer to return as a game warden for a second summer. That year he convicted a crew of \$130,000 worth of violations. Given the lack of facilities in the region, the judge flew in and the court case was held in his airplane.

The Department of Fish and Game asked Harvey to return a third summer to search for violators on a different island. By this time Harvey was engaged to his high school love. Marlene encouraged him to go, understanding that his heart was also beckoned by the marvels of the wild. The summer came to a close, but Harvey's work wasn't finished. So they asked him to stay longer. Then the week of his wedding approached, and Harvey became nervous. A deep fog covered the island. The radio transmission was too weak to determine when a plane would arrive to pick him up, and there was no way of communicating back home. Finally one day a plane broke through the clouded horizon. He returned to Iowa five days before the wedding. Marlene was still there waiting for him. Needless to say, Harvey needed a special kind of wife, and he had

found her. The next year, the Alaskan Department offered Harvey a full time career. He cordially declined.

Marlene continued to support Harvey's spontaneity, no matter how distant the call. With a newly growing family, Harvey was asked to research the river blindness parasite *Onchocerca volvulus* in Southern Sudan. Though he had never been to Africa, knew nothing about the culture and spoke no Arabic, he was on a plane to Sudan within three weeks. Once he was there, over seventy people stood in line as Harvey took pictures of suspicious looking nodules on their skin. With the help of local school children, Harvey also tested various locations to determine where the parasite was most prominent. His lab work involved electron microscopy, which requires incubators at three different temperatures; however, Harvey had no electricity. He assembled his own incubators—three running vehicles with roll-down windows to regulate temperature. Though resources were scarce, Harvey completed the study and forever changed the lives of locals. The students who had helped him with his work found safer routes to school that would lessen their likelihood of infection.

There were many more occasions where Harvey's inquisition and skills inclined him to venture to far-off places. While teaching at Trinity University, Harvey and Marlene would visit the SHEDD Aquarium of Chicago—the largest indoor aquarium in the world—and they befriended the scientists there. When fish at the aquarium began to die unexpectedly, the ichthyologist contacted Harvey and asked him to determine the source. Harvey hopped on a plane to the Bahamas where the fish were originally captured. He identified the parasite harming them and saved the SHEDD Aquarium's rare species. Before Harvey's trip was over, Bahamian fishermen in a contest brought a 900lb prize-winning tuna to shore. After hearing that the meat was too old for eating, Harvey's first question was, "May I cut it open?" He knew that every

animal was a potential discovery, that nothing could be wasted. Inside the fish he found intestinal worms the length of a pencil. While the sight would fill some with disgust, it instilled a fascination in Harvey that he knew he would pursue for the rest of his life.

At 10:00pm, I return to the lab to finish mounting some slides. The day at Paradise is long behind me. As I open the door, I see Harvey in the back corner, cutting open a fish and placing the entrails in large glass bowls. I see that his eye glasses have been, as usual, left by the microscopes in the back of the room. So I bring them over next to him. "Harvey," I exclaim, "It's ten o'clock and you're starting a dissection?"

"Every fish is a new story," he replies. "It cannot be wasted."

I smile and take to my slides. As I work, I am serenaded by the whistling of a hymn.

Works Cited

Cort, William W. "Studies of Schistosome Dermatitis XI. Status of Knowledge after More than Twenty Years." *Am. J. Hyg.* 52 (1950): 251-307. Print.