

2023 Annual Harriman Ranch Report

My Ranch fishing and guiding in 2023 was impacted by my wife, Nell, having breast cancer surgery on 30 June. My hours on the water were reduced due to Nell's illness, but she insisted I fish and guide as much as possible during the 15 June to 15 September period that has comprised my typical "season." She encouraged me to guide both before and after the surgery and when she was going through radiation treatment. As I write, in December 2023, Nell is feeling good and regaining strength. We received superb health care in Bozeman and invaluable counsel from physicians who are clients of mine.

Ranch fishing continued its dramatic decline, and 2023 replaced 2022 as the worst I have experienced in my 41 consecutive years and 15,109 hours on the 8.5 miles of water. This year, my clients and I averaged taking a rainbow every 11.2 hours. That compares to our landing one every 4.3 hours last year. The variation between my clients landing a rainbow every 4 hours as compared to every 11 hours is chilling. As always in my reports, each rainbow mentioned is at least 17 inches long.

In addition, in 2020, the last year I had quality fishing on the Ranch, we had 16 days that I define as "exceptional" by landing at least 4 rainbows while walking/wading. In 2023 we had only one day we landed four rainbows. Yes, I fished fewer hours in 2023, but if we calculate the total hours allocated to each four-fish day, it is 291 hours for the one four-fish day in 2023 and 34 hours for each four-fish day in 2020.

As I address in detail below, the decline in fishing was accompanied by a continued decrease in our aquatic insects, a reduction in the sizes of several mayflies, a fourth consecutive year in which my clients and I failed to land a rainbow of at least 23 inches in length, a continued increase in aquatic vegetation and algae, and continued problems with the escape of warm water and silt from the old irrigation canals at the top of the Ranch.

The most productive guide trips on the Ranch in 2023 were taken in boats. Their success was not exclusively because they could cover more water than those of us who walk/wade but also a function of the drain imposed on those who waded through the thick aquatic vegetation. The wading was tough in August and September. Most skilled, intelligent Ranch regulars who did not float the water would invest two to three hours of fishing in the mornings—many using bikes to gain easy access to the more distant sections of the Ranch water. That strategy allowed them to avoid the physical challenge of a full day of walk/wading. On one of those long days, my client Jason Morey documented he took 18,500 paces, which translated into 9.2 miles of walking and *wading*. Try investing a comparable day if you are in good physical condition.

The early season fishing was terrible. None of my clients landed a single rainbow during my first three days of guiding. It was not a function of lack of skill on the part of my clients. We only saw an average of one rising fish daily despite covering significant water from the top of the Ranch through the Avenue of the Giants. On June 26, I finally had clients land two rainbows. Returning to the parking lot, we encountered Chris Brand, the first Knight Scholar to work for the Henry's Fork Foundation (HFF) in 1989. Chris guided for Henry's Fork Anglers, was a board member of the HFF, and I suspect has supported the Knight program and the HFF more generously than any of the many other Washington and Lee University students and faculty who have fished the Henry's Fork. When I told Chris my clients had taken two fish, he responded enthusiastically, addressing them and saying, "I hope you recognize what an accomplishment it is to land two rainbows this year! I just made a tough phone call to a good friend in the East I had invited out to fish for a few days. I told him not to come because the Ranch fishing has been so poor."

It was shocking how many of my clients, who had good days in previous years, had terrible fishing in 2023. Two superb anglers, regulars on the Delaware River, fished with me one day in late June 2022. They hooked 10 rainbows and landed 6. I could not guide them on the three days they selected in late June 2023 because of Nell's surgery. Each highly skilled angler landed one rainbow in their three days, fishing until dark each day.

The catastrophic decline in PMDs continued. My clients and I took two fish on PMDs in 2023. Flies imitating PMD duns *were more effective than any others from 1983 to 2011, and we had productive fishing with them from early June into September.* The decline in the PMDs has been documented on many other western rivers. (In 2017, I was shocked when I attended a meeting in Bozeman, Montana, and local fishery biologists addressed what they called "the dramatic decline in PMDs on the Yellowstone River.") Why have similar comments not been made by the HFF concerning the comparable decline in the insects on the Henry's Fork?

There were other instances of anglers not finding rainbows in places where we could count on them being in other years. In late July, I went into The Channels with another skilled client. We saw many Trico spinners and duns but did not find a single good rainbow feeding.

Our once productive afternoon hopper fishing in late August and the first two weeks of September declined precipitously. On several long afternoons casting hopper

imitations, zero rainbows came to our flies. That has never happened in any previous year.

As has been the case for at least five years, we saw very few honey ants and found them in good numbers on only one day. In the first twelve years of the twenty-first century, I would encourage clients to come specifically for the superb honey ant fishing during the first two weeks of August. The ants were the third most productive flies in my first twenty-nine years of fishing the Ranch. We landed three rainbows on honey ant imitations in the last three years.

We had a few good, short mornings in September when casting Tricos, Mahoganies, and Blue Wing Olives, but it was rare to find fish rising for the remainder of the days. The precipitous decline in fishing in the late summer and early fall resulted in a dramatic decline in the number of anglers fishing the Ranch after noon. I have never seen so few vehicles in the top of the ranch parking lot between the hours of 4:30 p.m. and 6:00 p.m., nor have I ever before returned from Bonefish to the parking lot without seeing an angler in the water or on the banks, during the 50-minute walk. I had that experience six times in 2023. The lack of anglers was not simply a function of the poor fishing but also because wading through the heavy aquatic vegetation was exhausting. A final comment on my walk/wade trips in 2023 was that less than half of my trips resulted in a client landing a rainbow. That, too, was a sobering first.

The variations in fishing success between 2022 and 2023 are dramatic; moreover, when I made comparisons with earlier years, the variations were even more pronounced. In 2023, *our most productive day*, recorded by my highly skilled client, Jason Morey, produced four rainbows while fishing hoppers blind in August. Interestingly, two of those four fish had pronounced lesions on their tails. It is probable they were caused by an angler's fingers. We achieved the "three or more fish landed" standard for what I consider to be an appropriate measure of an excellent day of walk/wade fishing on the Harriman Ranch stretch of the Henry's Fork River *on only two days*—my other forty years of Ranch fishing and guiding produced an average of 8.1 days of landing at least 3 rainbows. My best day resulted in 12 netted rainbows. The sum of the days of three rainbows or more landed for all 41 years is 266. The difference between two days of 3 or more fish at least 17 inches long and eight days of 3 or more large rainbows in three months of fishing *is immense*.

We did not take a fish of at least 23 inches in length *for the fourth season in a row*. In 2010 and 2011, we took seven rainbows that were at least 23 inches long.

Some highly competent Ranch anglers continued to have good days on the Ranch. As a guide, I have an opportunity to observe many anglers. The 2023 season convinced me that due to the decline in the fishery, the Harriman Ranch now demands even more excellent fly-fishing skills than it did in the past. Previously, a reasonably experienced angler could enjoy success in their first days on the water if they were lucky enough to encounter good bugs and decent weather. In 2023, the only anglers capable of landing multiple fish on a given day while walking/wading were *exceptionally skilled*. I remember days in the Islands or Bonefish when I saw one of the highly skilled anglers—often Bruce Raskin or Ben Albano—land at least a couple of good rainbows by noon. In my remaining 5 or 6 hours on the water, it was common for my clients not to land a rainbow, and *I would not see another angler land one*.

I have recorded all the rainbows my clients and I have landed that were at least 20 inches in length. Until 2023, the percentage of fish that achieved that length would be about 20 percent of all the 17-inch and longer rainbows annually. In 2023, the percentage of rainbows at least 20 inches in length rose to a shocking 37 percent. Before we accept the high number of 20-inch rainbows as positive, it would be prudent for the HFF to determine if the high percentage of rainbows at least 20 inches long may be a function of losing an age class of what would now be 17-19 inch fish.

According to those who regularly fish Last Chance and East Harriman, fishing was much better *above and below the Ranch water on the Henry's Fork in 2023*. Some of that water was close to the borders of the Harriman State Park—much of it within a mile of the upper boundary of the property. I suspect the reasons relate to the shallow, expansive, slow-moving nature of the Ranch water, which acts as a “heat sink,” and the fact many creeks and outlets from canals and drainage ditches carry water, maintaining higher temperatures and silt into the 8.5-mile stretch of water. Yes, many anglers had good fishing on the Henry's Fork below and above the Ranch, but that should not keep us from appreciating that the jewel of the river, which has attracted anglers from all over the world, is within the boundaries of the Harriman State Park.

Positive Findings

This year, I received reports from anglers fishing rivers in Idaho and Montana who reported significant declines in the number of good trout landed and their physical condition—several reported trout suffering from various pathologies, including lesions, fungi, and parasitic infections.

In contrast, while my number of Ranch rainbows landed per hour was down dramatically, I was impressed with our trout's size, physical condition, and endurance. I

looked carefully at pictures of trout taken by friends from other rivers in Montana and Idaho. Virtually without exception, the fish looked less fit and lighter in weight for their length than our rainbows. For example, a good friend proudly showed me a picture of a 20-inch brown he took on the Madison. It did not compare to the 20-inch rainbows my clients, and I landed on the Harriman Ranch in the context of depth, girth, and weight.

My records demonstrate that our fish have maintained their characteristic robust weight and girth for their length over my 41 years of fishing. In the early 1980s, I weighed each Ranch rainbow that attained what, for me, was the stunning length of 22 inches. I was shocked by the size of the rainbows because, as a young man, I celebrated any trout I took on a dry fly that achieved 13 inches in length in tiny streams near my home in Bucks County, Pennsylvania. I measured the depth of each Ranch fish in a straight line from the top of their back to the bottom of their belly. Those measurements averaged 4.5 inches in length. The average weight of those 22-inch trout I landed in the 1980s was 4 1/4 pounds.

A 21-inch rainbow landed by my client, Tom Blurock, in Bonefish Flats in September 2023 measured 5.5 inches from the top of his back to his belly. I do not know how many rainbows 21 inches in length have been among the 2,842 Ranch rainbows that have graced my nets; however, I am confident none was more impressive than Tom's fish. We have many haunting problems on the Henry's Fork fishery in 2023, but we still have remarkably fit rainbows.

Some of our rainbows are experiencing health problems. Two that have attracted the attention of anglers and guides have been gill lice and lesions on the fish's gill plates. Both pathologies are visible to the naked eye. There are no doubt other pathologies that disciplined, scientific examinations of a reasonable sample of our rainbows would define.

Interactions Between Experienced Anglers and the HFF During the 2023 Season

In the summer of 2023, some current HFF board members responded to the criticisms raised by many Ranch anglers concerning what we deemed a significant decline in the Ranch fishery by meeting with several of us on three occasions. The Chair of the HFF Board, Nina Motlow-Gates, deserves credit for setting up and effectively overseeing the meetings on the afternoons of 14 June, 14 July, and 14 September. The sessions were informative and constructive. I was impressed with the politeness, attentiveness, and good spirit that Nina and Brandon Hoffner—the executive director of the HFF who attended the last meeting on 14 September—brought to the events.

The head scientist of the HFF has taken a positive step. Dr. Rob Van Kirk has begun to provide real-time data on water temperatures, flows, silt deposits, and turbidity throughout the Harriman Ranch stretch of Henry's Fork fishery. Rob's data are informative and comprehensive. They are compiled with care and well presented. I respect Rob and sincerely appreciate how gracious he has been about the A Paul Knight Program I directed that has funded Washington and Lee University students to work with the HFF each summer since 1989.

Unfortunately, what is conspicuously lacking in Rob's reports is that the most pressing threats to the fishery are not precisely defined, acknowledged in HFF publications, or, most importantly, addressed by fieldwork to reduce their impacts. At the last meeting with HFF on 14 September 2023, I referred to Rob's reports by providing an analogy with a physician trying to address the needs of an ill patient in significant decline. I perceive what Rob is doing as comparable to a physician taking a rapidly declining patient's daily temperature, pulse, blood pressure, and respiration rate. Documenting the daily measurement variations is not halting the patient's decline. The HFF must diagnose the critical problems causing the decline in the fishery and then rapidly address them with comprehensive, effective fieldwork.

In our last meeting with HFF, I articulated what many other experienced anglers, guides, and I believe are the most critical problems the fishery faces in 2023:

1. **The catastrophic decline in some species of aquatic insects:** Imitations of PMD duns and caddis adults took 311 rainbows, or 38.6 percent of the 805 rainbows landed by the six most productive flies my clients and I fished from 1983 through 2012. From 2018 through 2023, imitations of the same insects took only 2.6 percent of the 594 rainbows landed on the six most productive flies.

The dramatic decline in the productivity of aquatic insects is mirrored by a marked increase in the effectiveness of flies imitating terrestrial insects. From 1983 through 2012, 111 of 1,536 rainbows landed, or .07% were taken on flies imitating hoppers and flying back ants. From 2018 through 2023, no less than 396 of our 710 rainbows landed, or 55.7 %, were taken on imitations of hoppers and black flying ants.

There is other evidence of the decline in many species of aquatic insects since the 1983-2011 period. The rainbows my clients and I took in the early period were with imitations of 36 types of insects. 30 of those were not included in my list of six most productive flies. Twenty- seven of those 30 imitations mimicked aquatic insects. For the 2018 through 2023 period, 10 other types of insect

imitations took rainbows in addition to the top six flies. Nine of those flies imitated aquatic insects. So, 30 of the 36 flies that took rainbows between 1983 and 2011 imitated aquatic insects. Since 2018, only 15 of the flies that took fish imitated aquatic insects. The data not only support the decline in aquatic insects but also help explain why more fish were documented by the top six flies per year in the later, shorter period than in the first. My focus on the top six flies did not address the fish taken by the “other,” less productive flies, *of which there were twice as many imitations of aquatic insects in the first period.*

2. **The diminishing sizes of some aquatic insects:** Species dramatically impacted include PMDs, Tricos, Mahoganies, and Callibaetis. Species that were size 14 are now size 16 or 18. Species that were sizes 18 and 20 are now sizes 22 and 24. Again, science must define the reasons for the disturbing development to address it effectively.
3. **The near elimination of our native whitefish:** It is likely too late to save the whitefish, but that grim fact should make us more determined to define what caused their virtual elimination to the end of helping us protect our rainbows.
4. **A significant decline in the number of our largest rainbows:** In the last five years, 2019-2023, we landed *only one* rainbow of at least 23 inches in the 2,160 hours of fishing we invested. In the prior thirty-six years, we landed 27 exceptional rainbows, one for every 548 hours we invested. Twenty-six of these largest rainbows were taken on dry flies, and the other two landed while sight nymphing. No rainbows were taken on streamers, leeches, or nymphs *with any type of indicator.*
5. **The stunning increase in aquatic vegetation and algae:** Throughout the Ranch water in August and September, the masses of vegetation and algae have significantly detracted from the Ranch fishing experience since 2018 by increasing the threat an angler will fall in the water while wading, making it much more challenging to land our strong rainbows, demanding that anglers clean their flies constantly, and dramatically increasing the fatigue of anglers who walk/wade for entire days.

If you think I am exaggerating the impact of the vegetation, try wading from below the Big Island to the rapids above the Ranch Bridge between 4 and 5 pm during late August or early September *and cross the river twice.* Before 2018, you could wade the stretch easily; now, the effort will exhaust you. Why has the HFF not engaged in a disciplined study of what has caused the dramatic increases in

certain species of aquatic vegetation and if there is any way to reduce it? Is it possible some species were recently introduced, and some are exotic?

- 6. The escape of water and silt from the old irrigation canals at the top of the Ranch:** The problem continues despite the corrective action taken by the HFF in 2017. It creates two problems: first, significant quantities of warm water and silt enter the river from the two irrigation outlets, and second, the banks of the river flood with water that leaks out of the canals. The worst release of water and silt from the canal occurred in 2006. For the first time, flooding of the banks at the top of the Hopper Bank occurred in 2023. (I remain convinced that the only reason the HFF addressed the leaking of the irrigation canals was because of the brilliant report that John Wilbrecht wrote that effectively documented the profound negative impact on the fishery.)

It is highly relevant that none of the projects or programs recently published by the HFF in a list of thirty-six “projects and programs happening on/for the Henry Fork currently” have resulted in successfully addressing any of the six critical problems articulated above.

Reasons for Hope

I was encouraged at our 14 September meeting with HFF leadership when I asked what was explicitly being done to address the catastrophic decline in many species of aquatic insects. Brandon said, “We are planning to hire an aquatic entomologist.” I was one of many experienced anglers and guides thrilled to hear that step will finally be taken. I speak for many Ranch anglers when I say we hope it happens soon.

Three experienced Ranch anglers, all of whom have been board members of the HFF, supported the concerns I outlined in my 2022 Annual Ranch Report and made other vital suggestions concerning how we might better meet the fishery's sobering challenges during our meetings.

At our June meeting with the HFF, Layne Hepworth, former Board Chair, raised questions regarding fund allocation. I agree that “mission creep” becomes a problem with many organizations over time. Money is fundamental to survival, but when money and status co-opt the foundational purpose of an organization, corrective action is required. Most experienced Ranch anglers collectively believe that the HFF will fail to save the Harriman Ranch fishery unless they immediately initiate dramatic changes in priorities and policies.

I was proud that one of the owners of TroutHunter and former HFF Board member, Rich Paini, said at the June meeting, *“We need to see significant changes in the HFF.”* I would argue that *every one of the most experienced Ranch anglers agrees with Rich.* Professionals with advanced degrees in fisheries biology and aquatic entomology must address the six critical problems jeopardizing the fishery to reduce or halt the dramatic declines.

Finally, Mike Lawson, a two-time HFF Board member and one of a small group of anglers responsible for establishing the organization, wrote an insightful piece documenting his concerns that more intensive investigation was not given into whether targeted dredging might be a viable option to implement on the Reservoir. Mike’s comments did not suggest he was confident a dredging effort could be effectively implemented at a reasonable cost. Instead, he suggested the HFF *had not adequately explored the potential value of implementing the work.*

Similarly, many Ranch anglers perceive that the idea of purchasing water from Island Park Reservoir to be released exclusively to enhance the fishery was also not explored as aggressively as it could have been by HFF.

What Anglers, Guides, and Outfitters Can Do

As I said in my 2022 Annual Report, it is easy to be critical of HFF. It is only reasonable for those of us who have been harshly critical to come up with ideas of what we can do to help address the decline in the fishery.

I am one of many anglers who celebrate that more attention has been directed to the Harriman Ranch stretch of the Henry’s Fork in the last year by HFF. One important step has been regularly taking and publishing water temperatures over a more expansive stretch of the Ranch.

We must also acknowledge the possibility that regardless of how much higher a percentage of HFF funding is directed toward stopping the decline of the fishery, we may not be able to save it. The catastrophic declines in other great rivers in America are well documented, and several once-productive wild trout fisheries now appear to be doomed.

I have not addressed the impacts of climate change on the Henry’s Fork. As stated in my other annual reports, I have been disturbed that the HFF has rarely addressed climate change in its many publications. For the deniers, just yesterday, 6 December 2023, the temperature reached 60 degrees in Bozeman, Montana. A temperature that

high has not been recorded on that date in the last eighty years. Climate change is indisputably harming the fishery. I am not suggesting that the HFF can solve global warming; however, their failure to address its impact on the Henry's Fork River and their refusal to acknowledge it in their literature is inexcusable.

The grim facts I have demonstrated should not keep us from doing all we can. I have a good friend who is an experienced angler from the East—who had a career as a biologist and fished the Ranch regularly from 1984 through 2022. He did not fish the water in 2023 as a function of what he deemed to be the catastrophic decline in the fishery. He believes we should *do all we can to reduce stress on our rainbows*. He argues that one way would be to restrict a section of the Ranch water to only walk/wade angling. The logical place to do that would be on the water from the Top of the Ranch to Osborne Bridge since only a tiny section of that water, above and below the Ranch Bridge, is not easily waded. Conversely, most of the water below the Bridge has a deep channel in the middle of the river, making it impossible to wade across the river under normal water levels until you are within approximately 200 yards of the southern border of the Ranch water. The step would indisputably minimize stress on many of our rainbows and eliminate mortality for a few.

As one who runs walk/wade trips exclusively—as a function of believing that is the most challenging and gratifying way to fish the unique water—the idea is attractive. However, to be fair, *until 2023*, my clients and I imposed stress on more than a few rainbows by blind fishing hopper imitations while walking/wading. On a few afternoons, we landed as many as 6 rainbows, hooking 8 to 12. Large hopper flies can cause lethal hemorrhaging in the throats of our fish. For that reason, my clients and I never use hopper imitations larger than size 10. I will admit a client caused what I suspect was a lethal wound in the throat of a beautiful rainbow with a size 10 hook, but it will happen much more frequently if you use larger flies. I have seen hopper imitations tied on hooks as large as size 4. I would want a fishery biologist to assess if my concerns are valid and if we should consider reducing our float and hopper fishing hours on the Harriman Ranch stretch of the Henry's Fork and encourage anglers, guides, and outfitters to endorse the use of hopper imitations that are never larger than size 10.

The owners of the two fine fly shops in Last Chance will not be enthusiastic about reducing their revenue-producing guide trips run in boats; however, I think it is eminently reasonable to suggest we should all try to come up with ideas that will allow us to reduce stress on our vulnerable rainbows. Another advantage conferred by having a stretch of water that would be boat-free would be that it would reduce the confrontations that arise between floating anglers and those who walk/wade.

I also predict that the serenity experienced by walk/wade anglers in the wade-only sections would be shocking to us all. I am not talking simply about the proclivity of the floating anglers to be louder than the waders but also the many intrusive sounds imposed by drift boats when they run up on the shore, hit rocks, and when oars strike the boat, and when equipment, gear, tackle, bottles, and cans are dropped in the boat. The acoustics of the Harriman Ranch make it incredible how far the loud, distracting sounds can carry.

For those who believe the act of providing areas only for walk/ wade anglers will deprive them of the float trips they love, I do not think it is an exaggeration to suggest the action might be relevant to having any quality fishing on the hallowed 8.5 miles of water in five years.

Also, our rainbows' proclivity to fight violently can exhaust them. They should all be rested for a significant time before they are released. Fish must be returned to the water as rapidly as possible—or better yet—never removed from it. We need to be deeply concerned about how we can protect our declining numbers of rainbows and the unique fishing the Harriman Ranch water provides for them.

A Demand for Changes by the Most Experienced Ranch Anglers

Nearly all the most experienced Ranch regulars are critical of the limited efforts the HFF has made in the last decade to protect the Harriman Ranch Fishery. Implementing the South Fork Initiative had a profoundly negative impact on all those anglers' enthusiasm for HFF. If you are ready to challenge my last comments, try to find a single experienced Ranch angler *who is not a current member of the HFF board or was a board member when the South Fork decision was made* who is supportive of the controversial initiative, which contradicted the mission statement of the organization: *“The Henry's Fork Foundation is the only organization whose sole purpose is to conserve, protect, and restore the unique fisheries, wildlife, and aesthetic qualities of the Henry's Fork and its watershed.”*

Supporters of HFF have suggested that critiques of the organization are coming primarily from anglers who have contributed neither funding nor labor to protect the river. It is true that some regulars of modest economic means have never funded the organization. That should not deprive them of the right to be critical of it. Many spend staggering numbers of hours on the water each year, are knowledgeable about the fishery, and are concerned about its decline.

In addition, I guide anglers who have been very successful in lucrative professions and *are brutally critical of what the HFF has done recently*. Those clients lack neither intelligence nor generosity. Several have provided remarkable financial support to other conservation groups and would be thrilled to donate generously to an organization they trusted to “*conserve, protect, and restore*” the Henry’s Fork if they saw hard evidence that the most critical problems on the river were being met with effective fieldwork.

I hope that the commendable effort HFF made in 2023 to listen to those of us who have been critical of what they have *not* done on the Harriman Ranch water in the last decade will stimulate them to do more and do it in a spirit of wanting, above all other considerations, *to halt the decline in the unique appeal the Harriman Ranch fishery provides for fly anglers from all over the world*. To accomplish that, the Henry’s Fork Foundation must eliminate any program not directed to the Henry’s Fork, rapidly evaluate the aforementioned critical problems affecting the fishery, and focus all efforts to halt the decline in the health of the river the organization was created to protect.