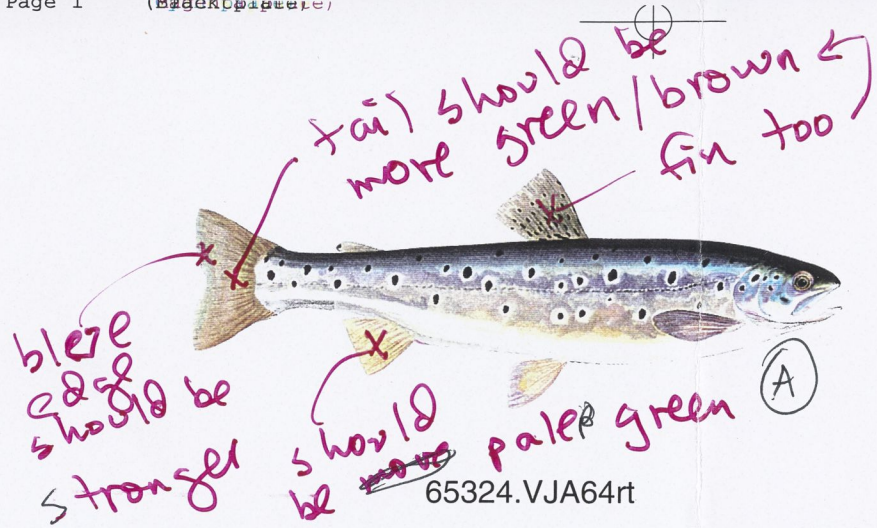




can you get the reds of the lures slightly darker, less tomato colored, as is art?



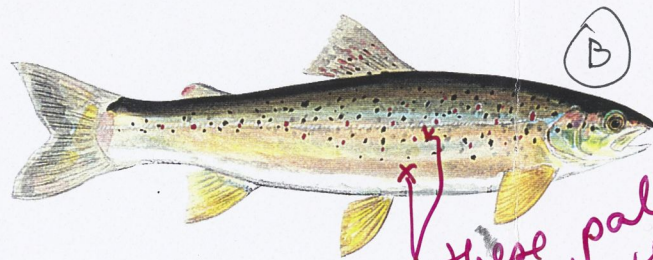
65324.UJA63rt2



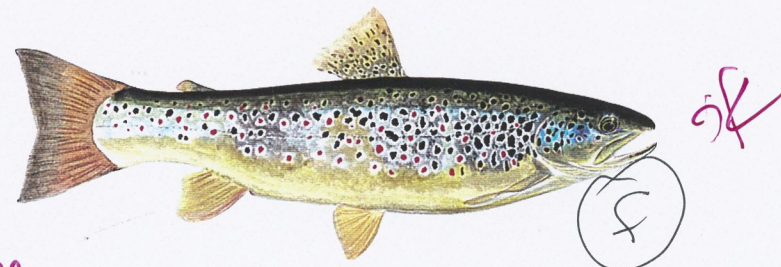
65324.VJA64rt



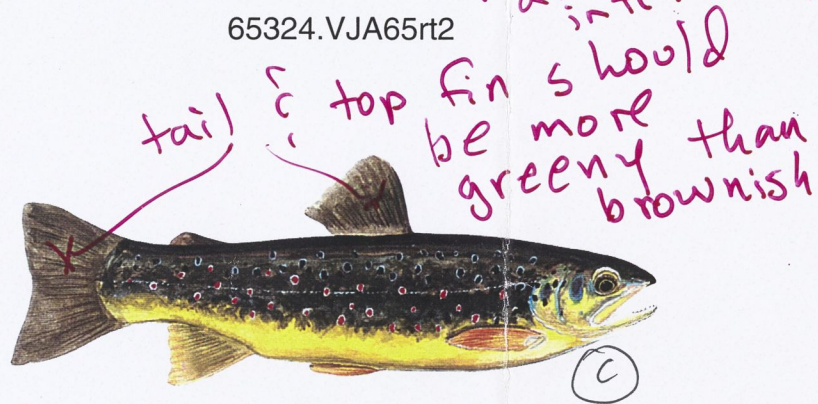
65324.VJA68rt



65324.VJA65rt2



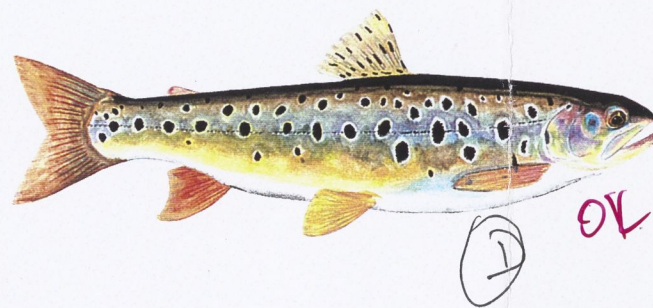
65324.VJA69rt2



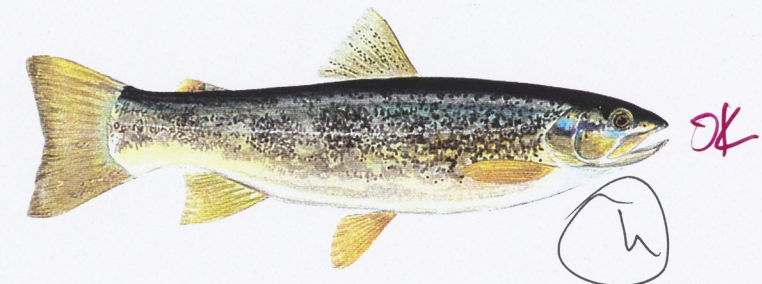
65324.VJA66rt2



65324.VJA70rt2



65324.VJA67rt



65324.VJA72rt2

this color copy is slightly too red over all

Alian's fly

Brown trout  
(*Salmo trutta caspius*)  
Balik Gölü, Eastern Turkey  
Eastern Turkey (A)

Brown trout  
(*Salmo trutta labrax*) (E)  
Black Sea tributary, Slovenia

Softmouth trout, Buna River  
(*Salmothymus obtusirostris zeterensis*)  
Bosnia  
(*Salmothymus obtusirostris zeterensis*) (B)

Brown trout, Vodomatia River  
(*Salmo trutta dentex*)  
Northern Greece  
Vodomatia River, Northern Greece  
Brown trout (F)

more gray fly net

Krka Brown trout  
(*Salmo trutta macrostigma*)  
Croatia  
Brown trout (C)

Softmouth trout, Krka River  
(*Salmothymus obtusirostris ktkensis*)  
Croatia  
(*Salmothymus obtusirostris ktkensis*)  
(*Salmothymus obtusirostris ktkensis*) (G)

Johannes Hering a trout

Mosque in the Black Sea drainage  
Turkish man casting a net in a  
Caspian drainage stream

Brown trout, Abant Gölü  
(*Salmo trutta abantis*)  
Turkey (D)

Flathead trout  
(*Platysalmo platycephalus*) (H)  
South central Turkey

Softmouth

1

Trout text  
January-February 1999  
11/23/98

**TITLE:** Fishing the Ancient  
Headwaters

**DECK:**

**BYLINE:** Text and illustrations  
by James Prosek  
2271 words

It was not until we reached the hostilities in the semidesert of southeastern Turkey that I fully realized I was in the company of a monomaniac.

"I don't think we should go down to Chatak," I said. "Is a trout worth all this?"

Johannes shook his head, grinning.

"I will trade you to the Kurdish terrorists for a trout from the headwaters of the Tigris," he said. "They like Americans."

We were stopped by the Turkish military not far from the Iraqi border. In the past few hours, more than 100 armed tanks had passed us on the road.

The officer who came to the driver's door of our Land Rover was not much older than I; he wore a green uniform and carried a gun on his shoulder.

"What is your purpose for traveling to Chatak?"

"*Alabalik*," Johannes said. "Trout."

At the time it seemed like a ridiculous answer, but we had told the Turkish officers the truth: We had come to fish for trout. Our monthlong journey had taken us to Italy, Greece, Turkey, Macedonia, Serbia, Bosnia, Croatia, Slovenia, and Austria in search of pristine headwaters. Now and then I paused to wonder exactly how I had come to be traveling through these places in a vehicle stuffed with fishing and camping gear, journals, vials of alcohol, glass aquariums, and cameras. Our purpose was to discover and document subspecies of trout.

Johannes Schoffmann, age 47, is

2

a baker and an amateur ichthyologist; he has made it his goal to document various types of trout, in particular the subspecies of brown trout native to Europe and Asia. Johannes catches fish and traces them on paper with a pencil, marking down their scale counts, number of fin rays, and other characteristics. He preserves their liver tissue in alcohol, carefully labeling each vial. The tissue samples are mailed to Louis Bernatchez, a biologist in Quebec who is using DNA to create an evolutionary map of trout and to define the characteristics that make each [SUBSPECIES?] unique.

The theory of trout evolution holds that all species stem from an ancestral trout that once inhabited the oceans. Toward the end of the Ice Age, when the glaciers melted and great bodies of water covered large areas of the continents, this ancestral trout moved into inland waterways. As the glacial waters receded to the oceans, it was stranded in various streams. That prototypical trout presumably evolved into all the diverse species that we have today, some ancient and others more recently evolved.

When Johannes and I started our trip I was 22, fresh out of college and looking for adventure. I had been fascinated by trout for years. I had grown up fishing the trout streams near my home, in Easton, Connecticut. When I was 13, my father cut out a small article from *Yankee Magazine* about a type of trout that was once thought to be extinct but had recently been rediscovered in eight small ponds in northern Maine. The discovery of this particular fish, the blue-back trout, made me wonder whether there might be other trout out there besides the rainbow, brown, and brook trout that I knew of.

Little has been published on the numerous subspecies of trout in North America, and there is even

- 250. patterns of differences w/ geography

- 21st cent 500 - 1500  
- 1st - 1000 - Pleistocene  
- 2nd - 1000 - 1500

- ocean level at 100 ft.  
- 300 ft. above

- 500m - a

made from print

- charr

- 1998

~~less information about the trout in the rest of the world. The published papers that do exist are for the most part antiquated. As a child, I had painted birds, tracing the drawings of John James Audubon. Now I began documenting the various subspecies of trout, and when I was 20, I published a book called *Trout*, an illustrated catalogue of the trout of North America. Next, I wanted to illustrate the trout of the world as Audubon had illustrated the birds of America.~~

Where to begin? I had always wanted to visit the headwaters of the Tigris and the Euphrates, in eastern Turkey, since some of the earliest civilizations and probably the earliest fishermen had established themselves between those two great rivers. I also knew that the first recorded reference to fishing with an artificial fly was from a second-century text by a Roman named Claudius Aelianus, who described how the Macedonians fished for trout in a river near what is now the Greek town of Thessaloniki. I wondered if the trout were still there.

I wrote to Robert Behnke, a professor of wildlife biology at Colorado State University who is perhaps the world's foremost trout taxonomist. He replied that he knew of only one man who had ever fished for trout in this region, and that was Johannes Schoffman, who lived in St. Veit an der Glan, Austria. I wrote to Johannes, telling him I might be in Europe that summer, and he invited me to visit him.

Johannes met me at the train station in St. Veit after my 17-hour ride from Paris. We quickly realized that we had a communication problem: Johannes could write English but could not speak it well. I did not speak German. But we discovered we both spoke Spanish—and the universal language of trout, of course.

Though he was 25 years my senior, I soon discovered Johannes to be, at least in part, my alter

ego. He was left-handed as I was, drew pictures of trout, and spent spare moments dreaming of them and planning fishing trips. As a baker, he typically worked from 2:00 A.M. to 9:00 A.M., leaving plenty of daylight for fishing.

The day after I met Johannes, we traveled over the border into Slovenia, to a valley where the emerald Soca River flows—one of the most pristine and incredibly beautiful valleys I had ever seen. After a lunch of prosciutto, cheese, and red wine, we drove to the stream with the intention of catching a specimen of the native marble trout. I was not deterred by the sign next to which Johannes had parked his Land Rover—a fish with a red X over it, the universal sign for no fishing—but when I went to pick up my fly rod from the back of the car, Johannes shook his head.

He proceeded to put on a full-body wetsuit, hood and all, and walked, with his fins, to the edge of the stream. Within 30 seconds of jumping into the ice-cold and crystal-clear pool, he surfaced with a small trout cradled in his neoprene gloves. How could I have anticipated a man who fishes for trout with his hands?

The following day, before my train left for Paris, I told Johannes I would like to join him on his next expedition in search of trout. He said, "I might go to Turkey next summer, maybe Albania."

"That would be fine," I told him.

So in summer of 1996 Johannes, his wife, Ida, and I embarked on a TK HOW LONG? trip that would take us from St. Veit to Trieste, Italy, by ferry to Igoumenitsa, Greece; through Turkey to the borders of Georgia, Iran, and Iraq; around to Greece again; to Macedonia, Serbia, Bosnia, Croatia, and Slovenia; and then back to Austria.

In our pursuit of trout we sometimes had a vague reference to follow, such as a stream men-

5

tioned in a biological paper published in Italian at the beginning of the century. Mostly, though, we followed Johannes's instincts and our knowledge of where trout might live. We drove through mountain regions, stopped by clear streams, walked to their banks, and used a thermometer to see if they were cold enough to support trout.

A wild-trout population requires, among other things, clean, well-oxygenated water that is typically between 56 and 75 degrees Fahrenheit, and a streambed with suitable spawning habitat. Such fragile, pristine ecosystems are becoming harder and harder to find. In the 10 years that Johannes has been traveling to Turkey in pursuit of trout, he has seen entire populations wiped out by explosives, nets, and streambeds silted in by road construction. He predicts that in 20 years few native trout will survive in Turkey.

drive  
not exactly

In many of the countries where we traveled, there were no apparent fishing regulations. Even where regulations did exist, they were not enforced: The people there were more concerned with their immediate survival than with the future of their environment. Still, Johannes said the eight or so years of war in Bosnia, Serbia, and Croatia had for the most part been good for trout populations because the people had been hiding in their basements instead of fishing.

We found trout in all the countries we visited and in about half the streams we fished. The fish we caught were primarily brown trout (*Salmo trutta*), although we were also in search of the flathead trout of southern Turkey (*Platysalmo platycephalus*) and the marbled trout (*Salmo marmorata*).

Some + US

The more traveling we did and the more trout we saw, the more I began to realize that the naming process I was accustomed to was obsolete in describing variations of fish. The brown trout in every

Simple system  
not  
complex. better

6

drainage differed significantly in their colors and their spots; sometimes the trout in different streams within the same drainage had different coloration and different spots.

The most beautiful trout we saw were in western Turkey, not more than eight miles from the Mediterranean coast. Johannes had a paper written by an Italian biologist in the early part of the century that mentioned this stream and the brown trout that inhabited it. We were staying in the town of Akcay, with a German couple who were friends of Johannes and Ida. One morning Johannes and I navigated dirt roads through a grove of ancient, twisted olive trees and down a steep slope to the banks of the stream.

The lower reaches of the stream were nearly dry, but in the headwaters, which ran through the olive orchard, the stream was remarkably pristine and cold. It is there that we caught some of the most colorful little brown trout I had ever seen, bright yellow sides, purple parr marks, and large red-and-black spots. All the fish had a peculiar oblong black spot above and behind each eye, which, from above, resembled a false eye.

I fished with my fly rod and then joined Johannes, diving in the cold water. That afternoon, just miles from where we had caught the trout, we dove with our masks and snorkels in the warm Mediterranean and watched colorful little fish dart in and out of rock crevices.

Johannes's favorite river was the Krka, a crystal-clear, spring-fed stream in Croatia. This was the first time since the war began that Johannes had been to the Krka. He said there were many more trout now than on his previous trips—and larger ones—because much of the river was fenced off due to land mines. Along paths and roads, signs pointed to the ground, warning: MINE. We were cautious, using only well-worn



7

paths to the stream. At one point we lowered ourselves off a bridge into the water and dived for the trout ~~without touching the bottom.~~ We saw brown trout that

looked to be upward of seven or eight pounds, as well as a trout that Johannes called the softmouth trout (*Salmothymus kekeris*), which is unique to the Kaka

obtusirostris

Softmouth trout live in only one other stream—the Buna River, in Bosnia, which we also visited. They are characterized by a slight overbite, presumably to facilitate feeding on insects on the riverbottom. They had black spots, like brown trout, and silver and gold sides.

Johannes had planned our itinerary, but at one point I asked if we could make a detour. I wanted to fish the stream in Greece that Claudius Aelianus wrote about 18 centuries ago. Johannes told me before we began our trip that what appears in Aelianus's text as the Astraeus River is actually the Aliakmon River. Johannes had caught trout, though very few, in tributaries of the Aliakmon. I tied the same fly that Aelianus described—using ruby-colored wool and two cock's feathers—but when we reached the Aliakmon, Aelian's stream had been replaced by a maze of irrigation ditches diverting water from its main stem.

We continued our journey and searched several headwaters of the Aliakmon near the town of Tripotamos (meaning "three rivers" in Greek). The water in one of the tributaries was clear, cold, and trouty, and I cast my ruby-wool fly in all the likely spots, but we saw no fish. It was one of many examples during our trip of how the encroachment of human civilization has been detrimental to the survival of trout. [author, ckg; but do we know they had existed there before?]

One of our stops was the Vodomatis, near the town of Vikos-Aoos, in northwestern

8

Greece, by the mountains of the Albanian border. This stream was what I imagined the Aliakmon to have looked like in its prime: emerald tinged, clear, and cold. The brown trout of the Vodomatīs were large, 16 to 20 inches. Their subspecies name, *dentex*—meaning *tooth*—derives from their large teeth. Johannes told me that they were similar to the Aliakmon fish.

The Vodomatīs and the other rivers we saw that still ran clear and full of trout gave us hope that preservation is possible, and brought us back to a time when all the cold streams of eastern Europe were capable of holding trout. As I cast Aelianus's fly into this stream and reeled in a beautiful brown trout with blue gill plates and cream-yellow sides, I felt as though I were participating in a centuries-long continuum that, if we are careful with our resources, can carry on for centuries more.

###

Dear Dr. Behnke:

Hope you get this package in time. I realized that James' handwriting is no better than mine, and that you would be well served if I typed out the eight trout names (captions) to the pictures. Here they are:

- A) Brown trout (Salmo trutta <sup>ios</sup>caspius) Balik Golu, Eastern Turkey
- B) Softmouth trout, Buna River (Salmothymus Obtusirostris zetensis)  
Bosnia
- C) Krka Brown trout (<sup>S</sup>salmo trutta <sup>dentex</sup> macrostigma) <sup>Adriatic</sup> croatia <sup>oxyrincher</sup>
- D) Brown Trout, Abant Golu (Salmo Trutta abanticus), Turkey
- E) Brown trout, (Salmo trutta labrax), Black Sea tributary, Slovenia
- F) Brown trout, vodomatis river (<sup>sal</sup>Salmo trutta dentex), Northern Greece
- g) Softmouth trout, Krka river (Salmothymus obtusirostris krkensis), Croatia
- H) Flathead trout (<sup>Salmo</sup> ~~plat~~salmo platycephalus) south central Turkey

Disregard pink magic marker  
notes next to fish

Thanks,

Keith

# B O R N

Hawaii, once an Eden of avian diversity, has lost half its native

# T O B E

birds. But if the captive thrushes released this month survive,

# W I L D

scientists may be able to save others in trouble. **BY JOAN CONROW**

**It's late September** and uncharacteristically dry in the Alaka'i Wilderness Preserve, one of the wettest spots on earth. The four of us are rejoicing in the fine weather as we trudge up steep hills, clamber over tree roots, and plow through chest-high ferns to reach the building materials that have been dropped into the tropical forest by helicopter. We lose the trail several times before we find the supplies. Paul Oesterle and John Turner of the Peregrine Fund, along with federal biologist Erik Tweed, are already tired from their previous day's work in another part of the



This month, 15 captive-bred puaiohi will be released in Hawaii's Alaka'i Wilderness Preserve (opposite). The goal: To create a new population of the endangered songbird.

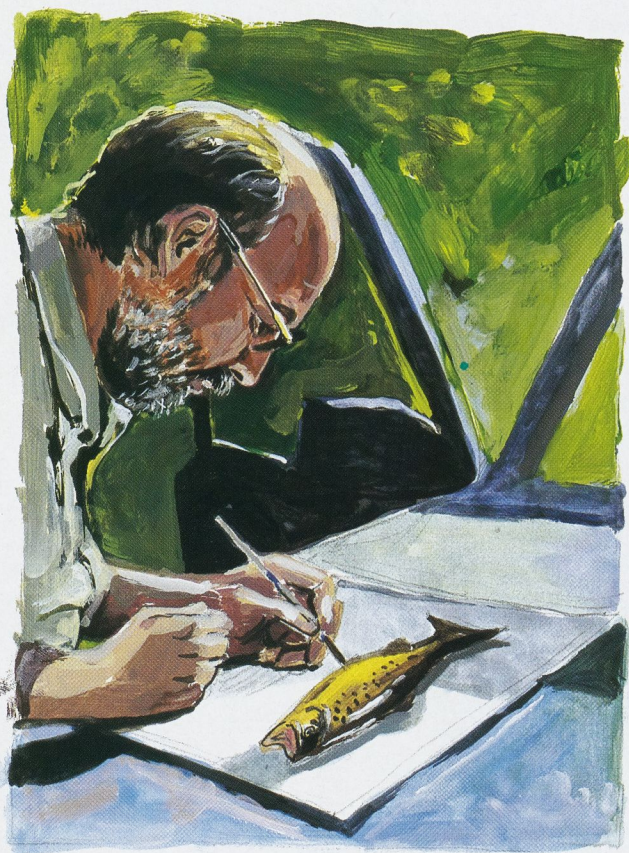


*Mosque in Black Sea drainage*

accustomed to was limited in describing variations of fish. The brown trout in every drainage differed significantly in their colors and their spots; sometimes the trout in different streams within the same drainage had different coloration and different spots.

The most beautiful trout we saw were in western Turkey, not more than eight miles from the Mediterranean coast. The paper that had been written by the Italian biologist mentioned this stream and the brown trout that inhabited it. We were staying in the town of Akcay, with a German couple who were friends of Johannes and Ida. One morning Johannes and I navigated dirt roads through a grove of ancient, twisted olive trees and down a steep slope to the banks of the stream. The lower reaches of the stream were nearly dry, but in the headwaters, which ran through the olive orchard, the stream was remarkably pristine and cold. It was there that we caught some of the most colorful brown trout I had ever seen: bright-yellow sides, purple parr marks, and large red-and-black spots. All the fish had a peculiar oblong black spot above and behind each eye, which, from above, resembled another eye.

I fished with my fly rod and then joined Johannes, diving into the cold water. That afternoon, just miles from where we had caught the trout, we dove with our masks and snorkels in the warm Mediterranean and watched colorful little fish dart in and out of rock crevices.



*Johannes tracing a trout*



Johannes's favorite river was the Krka, a crystal-clear, spring-fed stream in Croatia. This was the first time since the war began that Johannes had been to the Krka. He said there were many more trout now than on his previous trips—and larger ones—because much of the river was fenced off, owing to land mines. Along paths and roads, signs pointed to the ground, warning: MINE. We were cautious, using only well-worn paths to the stream. At one point we lowered ourselves off a bridge into the water and dived for the trout without touching the bottom. We saw brown trout that looked to be upward of seven or eight pounds, as well as a fish that Johannes identified as the softmouth trout (*Salmothymus obtusirostris*). Softmouth trout live in only one other stream—the Buna River, in Bosnia, which we also visited. They are characterized by a slight overbite, presumably to facilitate feeding on insects on the riverbottom. They had black spots, like brown trout, and silver-and-gold sides.

OUR ITINERARY HAD BEEN PLANNED BY JOHANNES, but at one point I asked if we could make a detour. I wanted to fish the stream in Greece that Claudius Aelian had written about 18 centuries ago. Johannes told me before we began our trip that what appears in Aelian's text as the Astraeos River is actually the Aliakmon River. Johannes had caught trout, though very few, in tributaries of the Aliakmon. I tied the same fly that Aelian described—using ruby-colored wool and two cock's feathers—but when we reached the Aliakmon, it had been replaced by a maze of irrigation ditches diverting water from its main stem.

We continued our journey and searched several tributaries of the Aliakmon near the town of Tripotamos (meaning "three rivers" in Greek). The water in one of the tributaries was clear, cold, and trouty, and I cast my ruby-wool fly in all the likely spots, but we saw no fish. It was one of many examples during our trip of how the encroachment of human civilization has been detrimental to the survival of trout.

In its prime, I imagine, the Aliakmon must have looked something like the Vodomatis. Located near the town of Vikos-Aoos, in northwestern Greece by the mountains of the Albanian border, the Vodomatis was emerald-tinged, clear, and cold. Its brown trout were large, 16 to 20 inches. Their subspecies name, *dentex*—meaning "tooth"—derives from their large teeth. Johannes told me that they were similar to the Aliakmon fish.

The Vodomatis and the other rivers we saw that still ran clear and full of trout gave us hope that preservation is possible. As I cast Aelian's fly into this stream and reeled in a beautiful brown trout with blue gill plates and cream-yellow sides, I felt as though I were participating in a centuries-long continuum that, if we are careful with our resources, can carry on for centuries more. 🐟

*Illustrator James Prosek, the author of Trout and Joe and Me, is now at work on a book about the trout of the world. This is his first piece for Audubon.*

and red wine, we drove to the stream with the intention of catching a specimen of the native marble trout. I was not deterred by the sign next to which Johannes had parked his Land Rover—a fish with a red X over it, the universal sign for no fishing—but when I went to get my fly rod from the back of the car, Johannes shook his head.



He proceeded to put on a full-body wetsuit, hood and all, and walked, with his fins, to the edge of the stream. Within 30 seconds of jumping into the ice-cold and crystal-clear pool, he surfaced with a small marble trout cradled in his neoprene gloves, then let it slip back into the water. How could I have anticipated a man who fishes for trout with his hands?

The following day, before my train left for Paris, I told Johannes I would like to join him on his next expedition in search of trout. He said, “I might go to Turkey next summer, maybe Albania.”

“That would be fine,” I told him.

**S**O IN THE SUMMER OF 1996 JOHANNES, HIS WIFE, Ida, and I embarked on a monthlong trip that would take us from St. Veit to Trieste, Italy, by ferry to Igoumenitsa, Greece; through Turkey to the borders of Georgia, Iran, and Iraq; around to Greece again; to Macedonia, Serbia, Bosnia, Croatia, and Slovenia; and then back to Austria.

In our pursuit of trout we sometimes had a vague reference to follow, such as a stream mentioned in a biological paper published in Italian at the beginning of the century. Mostly, though, we followed Johannes’s instincts and our

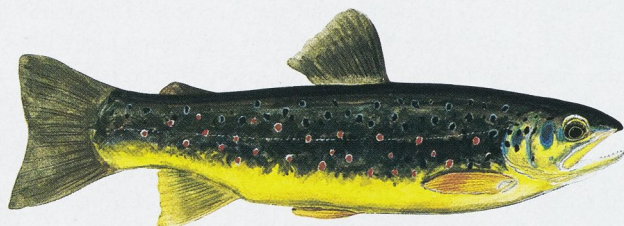
own knowledge of where trout might live. We drove through mountain regions, stopped by clear streams, and used a thermometer to see if they were cold enough to support trout.

A wild-trout population requires, among other things, clean, well-oxygenated water that is typically between 52 and 72 degrees Fahrenheit, and a streambed with suitable spawning habitat. Such fragile, pristine ecosystems are becoming harder and harder to find. In the 10 years that Johannes has been traveling to Turkey in pursuit of trout, he has seen entire populations wiped out by fishermen using explosives or nets, and streambeds silted in by road construction. He predicts that in 20 years few native trout will survive in Turkey.

In many of the countries where we traveled, there were no apparent fishing regulations. Even where regulations did exist, they were not enforced: The people there were more concerned with their immediate survival than with the future of their environment. Still, Johannes said the eight or so years of war that had devastated Bosnia, Serbia, and Croatia had allowed trout populations to recover, since people had been hiding in their basements instead of fishing.

We found trout in all the countries we visited and in about half the streams we fished. The fish we caught were primarily brown trout (*Salmo trutta*), although we also caught flathead trout in southern Turkey (*Salmo platycephalus*) and marbled trout (*Salmo marmoratus*).

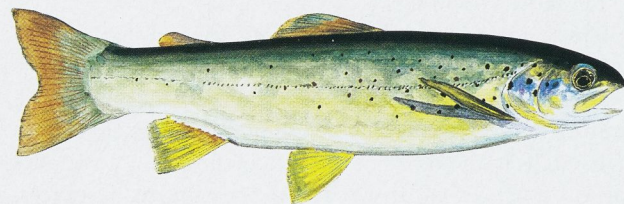
The more traveling we did and the more trout we saw, the more I began to realize that the naming process I was



*Krka brown trout (Salmo trutta macrostigma)*  
Croatia



*Brown trout (Salmo trutta abanticus)*  
Abant Gölü, Turkey



*Softmouth trout (Salmothymus obtusirostris)*  
Krka River, Croatia



*Flathead trout (Salmo platycephalus)*  
south central Turkey

the Pleistocene glacial epochs—the past 2 million years—climatic conditions promoted dispersal, isolation, and speciation. The last glacial epoch began 60,000 to 70,000 years ago and ended 8,000 to 10,000 years ago. During the colder periods, trout dispersed throughout the Mediterranean area—the Black Sea, the Adriatic Sea—and this distribution gave rise to the diversity that Johannes and I observed on our trip.



two great rivers. I also knew that the first recorded reference to fishing with an artificial fly was in a second-century text by a Roman named Claudius Aelian, who described how the Macedonians fished for trout in a river near what is now the Greek town of Thessaloniki. I wondered if the trout were still there.

**W**HEN WE STARTED OUR TRIP I WAS 22, FRESH out of college and looking for adventure. I had been fascinated by trout for years, having grown up fishing the trout streams near my home, in Easton, Connecticut. When I was 13, my father cut out a small article from *Yankee* magazine about a type of trout that was once thought to be extinct but had recently been rediscovered in eight small ponds in northern Maine. The discovery of this particular fish, the blueback trout, made me wonder whether there might be other trout out there besides the rainbow, brown, and brook trout that I knew of.

I wrote to Robert Behnke, a professor of fishery biology at Colorado State University who is perhaps the world's foremost trout taxonomist. He replied that he knew of only one man who had ever fished for trout in this region, and that was Johannes Schoeffmann, who lived in St. Veit an der Glan, Austria. I wrote to Johannes, telling him I might be in Europe that summer, and he invited me to visit him.

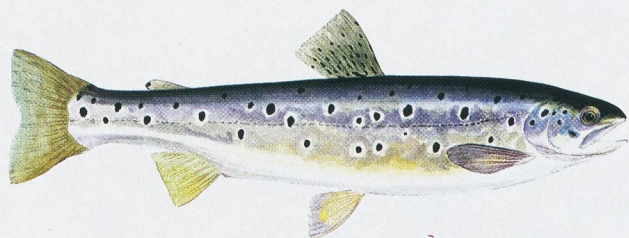
As a child I had painted birds, tracing the drawings of John James Audubon. Now I began documenting the various subspecies of trout, and when I was 20, I published a book called *Trout*, an illustrated catalogue of the trout of North America. Next, I wanted to illustrate the trout of the world.

Johannes met me at the train station in St. Veit after my 17-hour ride from Paris. We quickly realized that we had a communication problem: Johannes could write English but could not speak it well. I did not speak German. But we discovered that we both spoke Spanish—and the universal language of trout, of course.

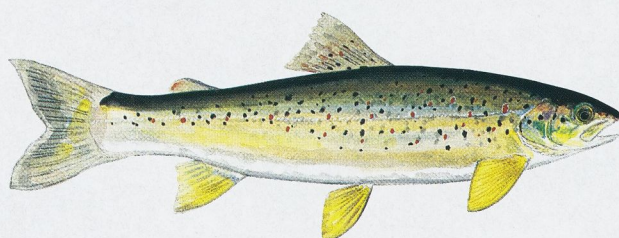
Where to begin? I had always wanted to visit the headwaters of the Tigris and the Euphrates, in eastern Turkey, since some of the earliest civilizations and probably the earliest fishermen had established themselves between those

Though he was 25 years my senior, I soon discovered Johannes to be, at least in part, my alter ego. He was left-handed as I was, drew pictures of trout, and spent spare moments dreaming of them and planning fishing trips. As a baker, he typically worked from 2:00 A.M. to 9:00 A.M., leaving plenty of daylight for fishing.

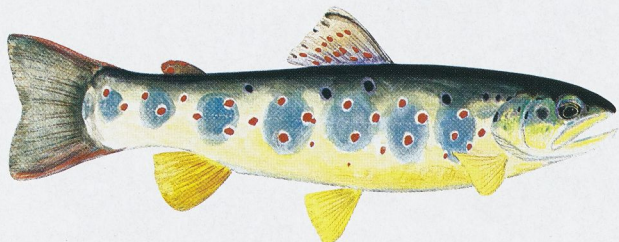
The day after I met Johannes, we traveled over the border into Slovenia, to a valley where the emerald Soca River flows—one of the most pristine and incredibly beautiful valleys I had ever seen. After a lunch of prosciutto, cheese,



*Brown trout (Salmo trutta caspius)*  
*Balık Gölü, eastern Turkey*



*Softmouth trout (Salmothymus obtusirostris)*  
*Buna River, Bosnia*



*Brown trout (Salmo trutta labrax)*  
*Black Sea tributary, Slovenia*



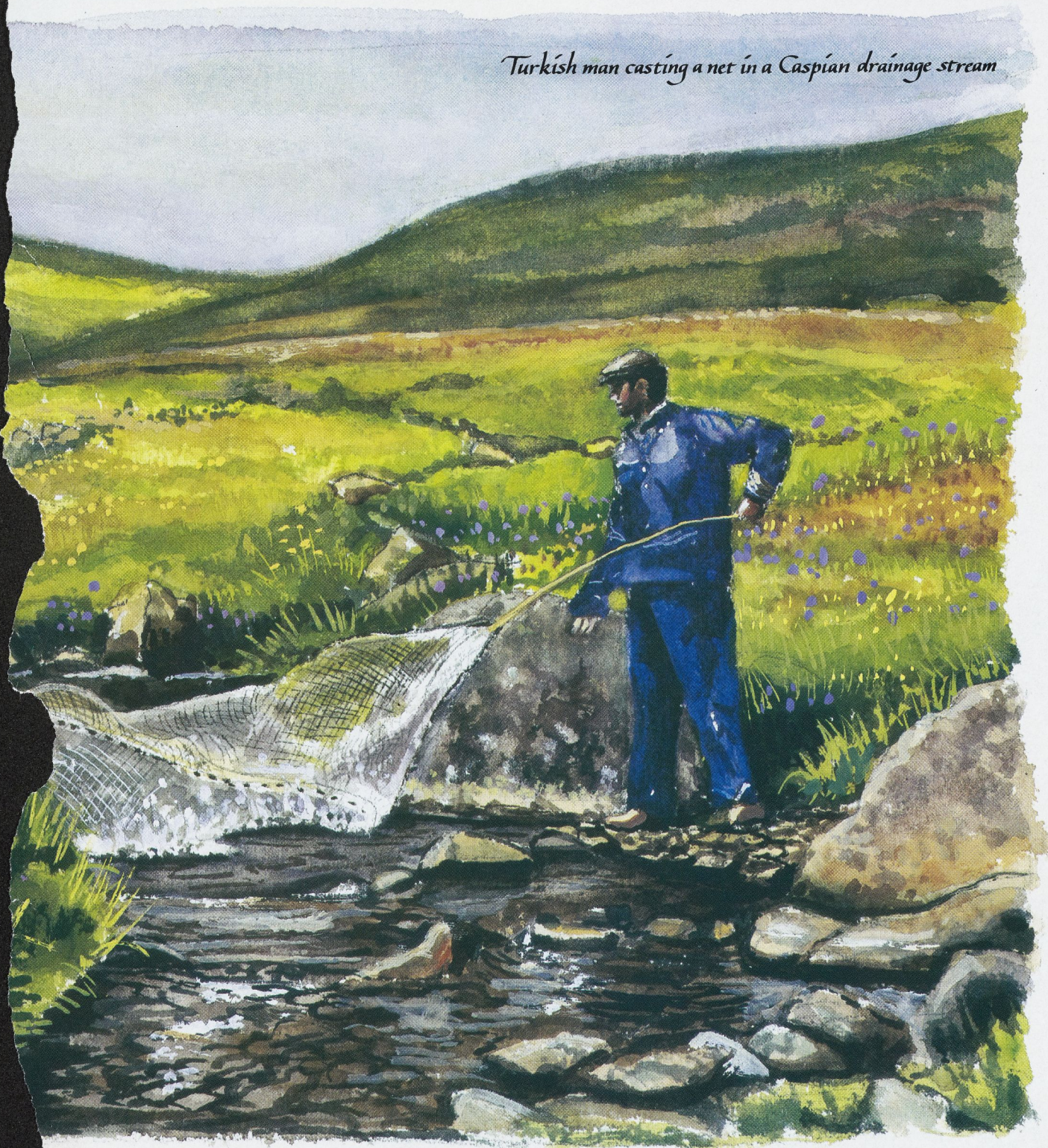
*Brown trout (Salmo trutta dentex)*  
*Vodomatis River, northern Greece*



# ENT HEADWATERS

DODGING THE TURKISH MILITARY, IT WASN'T YOUR AVERAGE FISHING TRIP.}

*Turkish man casting a net in a Caspian drainage stream*



# FISHING THE ANCI

{ BETWEEN SWIMMING PAST LAND MINES IN BOSNIAN STREAMS AND

**I**T WAS NOT UNTIL WE REACHED THE HOSTILITIES in the semidesert of southeastern Turkey that I fully realized I was in the company of a monomaniac.

"I don't think we should go down to Catak," I said. "Is a trout worth all this?"

Johannes nodded his head, grinning.

"I will trade you to the Kurdish terrorists for a trout from the headwaters of the Tigris," he said. "They like Americans."

We were stopped by the Turkish military not far from the Iraqi border. In the past few hours, more than 100 armed tanks had passed us on the road.

The officer who came to the driver's door of our Land Rover was not much older than I; he wore a green uniform and carried a gun on his shoulder.

"What is your purpose for traveling to Catak?"

"*Alabalik*," Johannes said. "Trout."

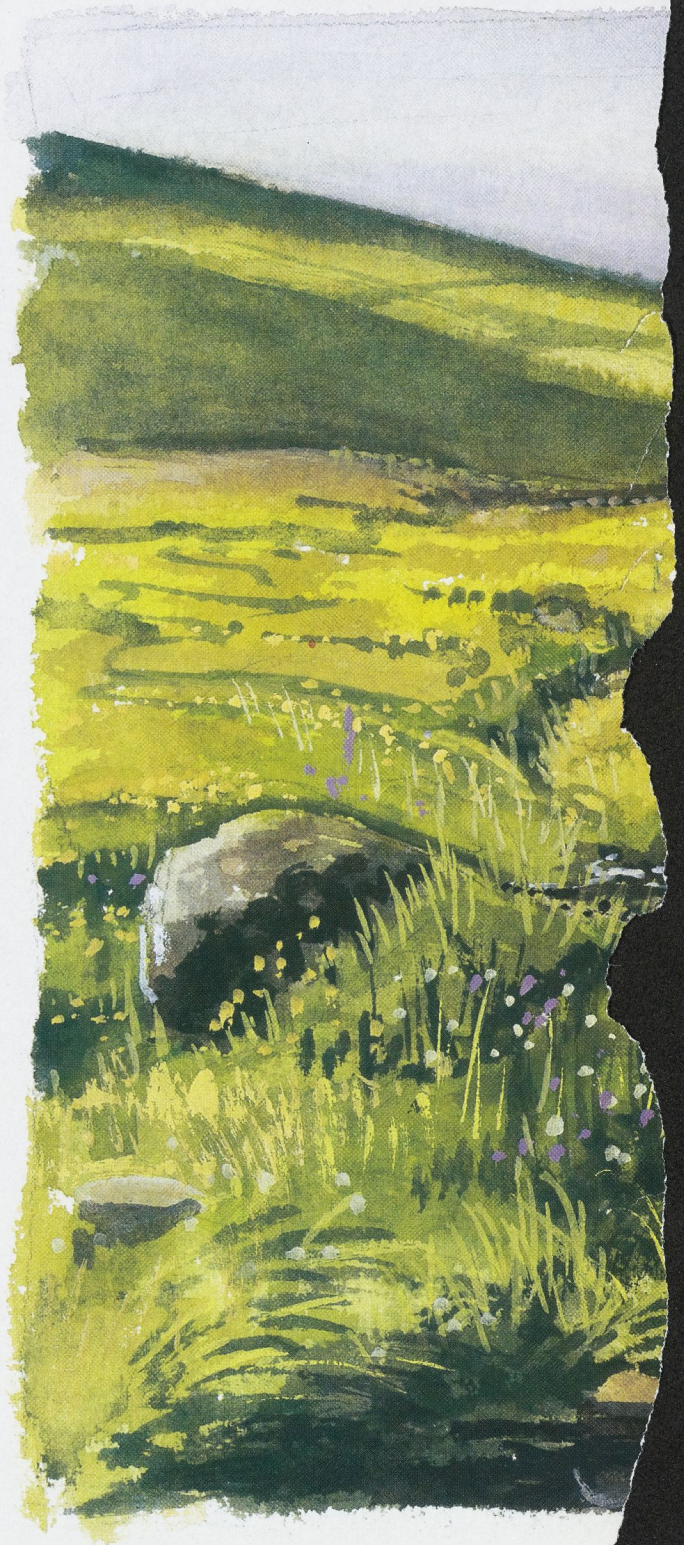
At the time it seemed like a ridiculous answer, but we had told the officers the truth: We had come to fish for trout. Our monthlong journey had taken us to Greece, Turkey, Macedonia, Serbia, Bosnia, Croatia, and Slovenia in search of pristine headwaters. Now and then I paused to wonder exactly how I had come to be traveling through these places in a vehicle stuffed with fishing and camping gear, journals, vials of alcohol, glass aquariums, and cameras.

Our purpose was to discover and document subspecies of trout. Johannes Schoeffmann, age 47, is a baker and an amateur ichthyologist; he has made it his goal to document various types of trout, in particular the subspecies of brown trout native to Europe and Asia. Johannes catches fish and traces them on paper with a pencil, marking down their scale counts, number of fin rays, and other characteristics. He preserves their liver tissue in alcohol, carefully labeling each vial. The tissue samples are mailed to Louis Bernatchez, a research biologist at Laval University in Quebec who is using DNA to create an evolutionary map of trout and to define the characteristics that make each lineage unique.

The theory of trout evolution holds that about 15 million years ago, the common ancestral trout separated into two branches, one of which eventually gave rise not only to the modern species of Pacific salmon but also to the rainbow and cutthroat trout. The other branch became the ancestor of the Atlantic salmon, the brown trout, and related species. During



*Aelian's fly*



STORY AND ILLUSTRATIONS BY JAMES PROSEK

# EXPLORING ANTARCTICA SOUTH GEORGIA & THE FALKLAND ISLANDS

LED BY NATIONAL AUDUBON SOCIETY  
ORNITHOLOGIST DR. SUSAN R. DRENNAN

JANUARY 14 — FEBRUARY 4, 2000

OPTIONAL EXTENSIONS TO EASTER ISLAND  
OR THE LAKE DISTRICT AND PATAGONIA

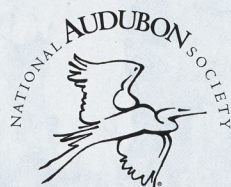
Far to the south lies a land of dazzling snowfields, crystalline glaciers and dramatically carved ice mountains soaring above an untamed frozen wilderness. There are no human sounds in this land of primeval beauty, only the wild cries of birds, seals, and whales echoing across a vast expanse of land and sea.

Next winter, the National Audubon Society invites you to experience the wonders and grandeur of a land where few have ever set foot as we discover the world's last frontier—the great White Continent. This special voyage includes passage to South Georgia. Explore its coves, fjords, historic sites and observe its active wildlife which includes King Penguins and four species of seals—leopard, Weddell, fur and crabeater. Visit Ernest Shackleton's grave and imagine his heroic sea voyage and exhausting trek across the Allardyce Mountains to obtain help for his men stranded on Elephant Island.

Our voyage takes place during the austral summer, when the weather is best, temperatures are moderate and days are long. Penguin chicks have hatched and it is common to see elephant seals along the beaches. Zodiac landing craft—swift and sturdy motorized rubber boats developed by Jacques Cousteau—carry us from the ship to virtually anywhere along the coast. We will sail aboard the five-star 170-passenger *Hanseatic*, a sturdy ice-class vessel that represents state-of-the-art in expedition cruising.

We hope you will join the National Audubon Society Nature Odysseys on this splendid expedition and count yourself among the privileged few who have experienced both the wonders of the White Continent and South Georgia. **To reserve your space, or for more information, please call Beth Ryan today at (212) 979-3066.**

PRESENTED BY



Nature Odysseys

