

A GLOBAL GUIDE FOR RIVER RUNNERS



WORLD WHITEWATER

JIM CASSADY AND DAN DUNLAP



RAGGED MOUNTAIN PRESS

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A Global Guide for River Runners

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Dedication



To Gerard Aglioni, Brian Judd,
Michael Ghiglieri, Bill McGinnis, Martha Dunlap,
our parents, and to the memory of Melissa Toben and John Foss

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Preface

Why a guidebook to the whitewater rivers of the world? We must have asked ourselves that question more than a few times during the time it took to complete this project. What it really comes down to is that we feel it's important for more people to think about river running on more than a local or regional basis—to paint a “big picture” of the sport. Whitewater is a finite resource, and more of it disappears every year. We need a global community of river runners to protect the resource, to keep wild rivers and wild places for this and future generations. Besides, the world continues to shrink. We've all spent too much time listening to experienced travelers and guides talk about their far-off whitewater adventures. Now there's a convenient reference work to help us appreciate and join in the discussion, and to use in planning our own adventures on the world's greatest rivers.

We didn't run all the rivers listed in this book, but we gave it our best effort. We traveled to every continent except Antarctica and boated, or at least inspected, as many of the featured rivers as we could. But alas, we haven't even seen them all, and it's hard to imagine that any one person ever will. For that matter, running a river once, in one type of craft and in one set of conditions, doesn't make anybody an expert on that stretch of water. So to meet the challenge of writing a guidebook covering over 250 rivers on six continents, we turned to the real experts—the folks who regularly run and guide on them.

We combined our own first-hand information with an exhaustive review of all available printed sources and extensive interviews with local boaters. We circulated the drafts of every chapter to folks who are knowledgeable about the area, other guidebook authors, private boaters, commercial outfitters, and managing agencies. Where possible, we got in touch with

river preservation groups for information on conservation issues. We used the mail, telephone, telefax, e-mail—everything but smoke signals—to locate readers and exchange information, but in the final analysis, this work would have been impossible without the Internet and the great number of boaters and outfitters connected together by computer.

Unfortunately, because of the scope of this work, it is necessarily selective; it is not a comprehensive review of all whitewater destinations. In many areas excellent local and regional guidebooks can be found which cover additional runs and often provide more detail. We encourage boaters to obtain and use these books (such as those listed under “Selected Sources” at the back of the book) in exploring areas new to them.

Certain criteria also governed our choice of rivers: the overall quality of the run; the popularity of usage of the run; geographical political balance to cover as many areas or countries as possible; and anticipated future importance of the run. It was not necessarily our intention to describe the top 250 or so whitewater rivers in the world. Rivers in areas such as the midwestern United States or the British Isles are included to convey the flavor of these regions, although even their local adherents would not compare them to the great runs of the Rocky Mountains or Alps.

Unfortunately, the extent of coverage of some areas does not match the quality of the rivers. Politics, lack of access, lack of good information or maps, and language translation problems combine to limit coverage in some areas such as China, Japan, and the republics of the former Soviet Union. We hope you and other readers will help us overcome these shortcomings and help us fill in information for future editions.

—Dan Dunlap and Jim Cassady

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Introduction

Because of the broad scope of this book, information for some of the regions and rivers is not as reliable as for others. Boaters should always make it a habit to verify published information locally.

Our selection of rivers was designed to appeal to all tastes and levels of boating expertise. We've included beginner to expert water, urban playspots and howling wilderness, one-hour lunchtime paddles and expeditionary runs. Kayakers, canoeists, and rafters will all find runs of special interest.

Locating and Hiring an Outfitter

Nearly all the rivers in this book can be run on tours arranged by professional outfitters who will provide guides, rafts or other craft, and support for kayak trips. In some areas, such as the United States, Canada, Europe, New Zealand, and Australia, or popular rivers in other areas, the adventure traveler has his or her own choice of outfitters on nearly every river. In other areas, such as Latin America or Africa, a few local outfitters may be found to take you on many of the runs. International companies such as U.S.-based Earth River Expedition, Mountain Travel-Sobek, and Ultimate Descents, and New Zealand-based Adrift Expeditions offer a variety of exotic trips, usually in remote areas.

Locating outfitters in heavily boated areas such as the United States, Canada, Europe, New Zealand, and Australia can be as simple as checking a phone book, tourist information agency, or travel agent. *American Outdoors* offers a list of outfitters in the United States, and managing agencies for state and national forests and parks often keep a list of licensed or authorized outfitters. The Internet

is another good source, as many outfitters will maintain a home page on the World Wide Web, and a list of outfitters in most areas can be found by revving up the search engines and following links from page to page. Another valuable resource is the USnet newsgroup `rec.boats.paddle` and its diminutive European cousin, `uk.rec.boats.paddle`. Specific inquiries as to certain regions, rivers, or outfitters will generate useful responses but unfiltered feedback. These newsgroups are among the most civil on the Internet, but use good judgment and ask follow-up questions.

The quality of outfitting services varies from region to region and company to company. Here are some tips to consider in making a choice:

- Give the most weight to recommendations from disinterested persons.
- The outfitter's promotional materials should be informative and address safety. Paid sales agents who do not have a full knowledge of these services may indicate impersonal service on the river as well.
- Larger adventure travel companies tend to be more reliable but may not offer the individualized service provided by some smaller companies.
- The quality of equipment used and provided by a company is a good indicator of quality of service. Better companies will furnish newer, state-of-the-art boats and, where appropriate, wetsuits and booties or other specialized river gear. Poorly maintained boats and equipment reflect poorly on the company.
- The outfitter or company should be able to address any customer's safety inquiries. An inquiry regarding an outfitter's safety record is appropriate, and better outfitters volunteer information about safety and

are frank regarding the risks customers may assume and encounter. On difficult rivers, an inquiry regarding optimal and/or safe river levels is appropriate, as is an inquiry into the company's policy on refunds should the customer not be comfortable with the river level. On difficult rivers it may be good to inquire whether the outfitter is providing safety kayakers or undertaking other safety measures.

In more remote areas such as Latin America, Africa, and most of Asia, the number of outfitters and the information available may be limited. Travel agents are a better choice in these areas to provide the names and qualifications of outfitters. The quality of outfitters and equipment used may be quite varied unless the outfitter is part of an established international company. In such distant areas the exercise of judgment is even more important.

On Your Own

The descriptions and maps in this book are not intended to be as detailed as those in the region-specific guidebooks available for many areas. The information provided here should enable qualified boaters to get to the put-in and approach the river with a reasonable assessment as to what to expect and what to watch for. We have listed the regional whitewater guidebooks in the bibliography and encourage paddlers interested in a certain area to buy and use these books in conjunction with *World Whitewater*. Some rivers, to our knowledge, are only described in this guidebook.

A few rivers in this book are so remote and exacting that few private boaters should attempt them. However, all of them have been run, and those who have gone before were provided with even less information than what's given here. For these rivers, and on any difficult or extended trip in a remote area, expedition travel and boating skills are a prerequisite.

Maps

We have provided maps for the most important rivers in each area; however, a serious boater may wish to find more detailed maps. The better maps will have a scale of 1:100,000 or smaller. A good source for maps is the map room of any major public or university library. Another source is Map Link (see the Resources chapter, page 323). Many of these runs are in remote areas, and maps are often either unavailable or at too large a scale to be useful. Highly detailed satellite maps of even the most remote reaches of the globe, paid for by the United States taxpayers will hopefully be declassified and made available to river runners.

International Travel

We have not attempted to write *World Whitewater* as a guidebook for international travel. However, a good travel guidebook can prove invaluable for a safe, successful, and rewarding trip. Guidebooks vary widely in quality and intended audience, so do some comparison shopping, and remember to look for the most recent editions. We have found the Lonely Planet publications to be comprehensive and geared well to the concerns of the adventure traveler.

Traveling with Whitewater Gear

Kayaks

If you are planning a trip in a remote area, you have probably already mastered putting a boat and gear on a car or bus. Flying with whitewater gear can be a challenge, especially if you take your hard-shelled kayak with you. Kayaks are usually considered oversized by airlines, and are often just too large to put on a bush plane when flying into remote areas; folding kayaks, however, can be well-suited

for air travel. It is essential to check with airlines in advance for their policy on transporting kayaks. Some carriers have friendly policies regarding surfboards, and it may be helpful to portray your boat in the same category, perhaps as a "surf kayak." Get the full name and whereabouts of the airline representative you speak with, and make notes including the date and time. Always arrive at the airport much earlier, as the issue will probably resurface at check-in. If all goes poorly, you may consider parcel carriers traveling the same route.

To avoid problems you may want to consider renting a kayak at your destination, especially if you are already used to paddling a plastic fossil and not too attached to your late-model boat. Rental boats in some areas tend to be older, sturdier models, and even then what you are promised is not what you get. Honing your skills in a Prijon Taifun or a Perception Mirage before you depart can be helpful. Bring your own spray deck, float bags, flotation vest, and paddle (breakdown type preferred), as these can be harder to find and expensive.

We have never attempted to fly with an open canoe and can impart little information to those who paddle them, aside from the information for other craft. As open-canoeists are by nature both stubborn and resourceful, it must be assumed they will solve any problems themselves.

Inflatable Kayaks, Rafts, and Cataracts

Inflatable Kayaks. In general, all inflatables are more suited to air travel than rigid boats. Inflatable kayaks, especially the high-performance type with non-rigid floors, are ideal "jet boats," sometimes small enough to use as carry-on with your breakdown paddle. These specialized boats are great for smaller rivers, but lack some of the performance qualities of hard-shells and will be overmatched in big water.

Rafts. Most decent-sized self-bailing rafts usually exceed the air carrier's weight limits. Removing the floor and thwart (assuming they are designed to be removed) is a possibility but a lot of work. It is a good idea to practice taking the boat apart and putting it together first before you leave. It may be possible to rent rafts in certain areas.

Cataracts. A small cataract with a breakdown frame may pass air carrier size and weight limitations and make a great support boat on kayak trips.

Respecting Locals and Other River Users

In many regions, local villagers, ranchers, and farmers make their homes along the banks of these rivers. Rivers also attract a wide variety of visitors: boaters, anglers, campers, hikers, swimmers, and others. River dwellers and visitors alike have the right to privacy, quiet, and solitude; please respect that right.

Treat the local people as you would expect to be treated, and respect their customs, property, and privacy. Although in some undeveloped countries their homes may appear to be modest and their means of living disadvantaged, they neither expect nor deserve to be treated in a condescending way by foreigners. While token or actual tribute may be required in a handful of circumstances, hand-outs only serve to perpetuate dependence on future visitors. If you wish to make a contribution to better the lives of the locals, a donation to a nearby hospital or other worthy facility will probably do much more good than a handout.

As for fellow boaters, make room for others at heavily used river access points. At busy put-ins and take-outs, load and unload right away and move your boats and vehicles out of the way as quickly as possible. At river access points, do not park in campsites. Walk around, not through, occupied campsites.

On the river, choose campsites and lunch spots well away from where others have stopped. Friendly discussion of upcoming campsites with other boating parties can avoid conflicts later in the day.

When your group is following another party, give them plenty of room when they head into rapids; this is a matter of safety as well as courtesy.

When approaching an angler, try to hold back and ask where to pass. Use and look for hand signals rather than talking. If in doubt, stay to the far side of the channel and move through as smoothly and quietly as possible. Quiet can be important to the art of fishing.

River Safety

Considering the powerful natural forces with which river runners contend, whitewater boating enjoys a very good safety record. Nevertheless, every year there are injuries and deaths on the river. Beginners and experts alike are represented in the statistics. The danger can't be eliminated, but you can minimize it by being prepared and taking appropriate precautions.

This is a guide to the world's great rivers, not an instruction manual on how to run them. *On the river, you are responsible for your own safety.* The keys to safe boating are adequate skills, proper equipment, and, above all, good judgment—none of which this book can provide. It's up to you.

Be prudent. Don't run a whitewater river without knowing precisely what you are doing. Seek competent advice and qualified instruction first, and make sure your equipment is appropriate for the river and the conditions. Be sure your skills and experience are equal to the situation. Be realistic about your skills and limitations. And don't boat beyond your abilities.

When you're learning, move up the whitewater difficulty scale very gradually. Before attempting Class 4, for example, you should

be able to handle Class 3 water easily, not just survive it. Proper learning takes time and patience. There are plenty of less difficult runs suitable for honing your skills.

For a comprehensive guide to whitewater safety and rescue techniques, we recommend *Whitewater Rescue Manual*, by Charlie Walbridge and Wayne Sundmacher.

The following is a list of essential skills and precautions for whitewater safety:

- Boating alone is not recommended.
- Wear a snugly fitted life jacket at all times when you are on or near the river. Crotch straps can help prevent the life jacket from coming off over your head.
- Wear your helmet when appropriate: in kayaks, in most all whitewater; in canoes and rafts, in challenging whitewater.
- Be a good swimmer. Know how to float in a whitewater river: feet first and elevated, in the deepest channel, and never just in front of a boat. Know when and how to swim aggressively for an eddy or boat.
- Learn self-rescue techniques, including swimming a rapid, escaping from a capsized boat, and, for you hard-shell boaters, Eskimo rolling.
- Know how to avoid hypothermia and how to deal with it. Hypothermia is a serious risk any time water and air temperatures add up to less than 120°F (49°C). Wear a wetsuit or drysuit when conditions warrant.
- Beware of high water. Most rivers undergo a profound and dangerous change when their flows rise. Never run a river at or near flood stage.
- Know how to recognize and react to river hazards, such as holes, snags, wrap rocks, undercuts, and rock sieves.
- Never run a rapid unless you can see a clear path through it.
- When in doubt, stop and scout. Still in doubt? Portage.
- Know the risks of pins and entrapments and how to avoid them. Pins kill more kayakers than any other kind of mishap.

Foot entrapments are another leading cause of death.

- Know the dangers of brush and trees in the river, usually called “strainers” and “sweepers.” These are deadly hazards. Stay clear. Be especially alert for snags during and after high water.
- Know the dangers of man-made obstacles: bridge abutments, fences, and especially weirs and low dams. Boaters can be recycled endlessly even in small “keeper” reversals below weirs.
- Beware of entrapment in loose lines.
- Use sturdy equipment in good repair. Carry personal and group safety gear: knife, carabiners, pulleys, toss bags, safety lines, spare paddles or oars, repair kit, etc.
- Carry a first aid kit and know how to use it. Learn or review first aid and CPR. Know how to recognize and deal with hazards in the locale, including severe weather, venomous or dangerous animals, toxic plants, pollution, and potentially hostile inhabitants. Know how to deal with emergencies if someone is unlucky.
- Mixing alcohol or other drugs with white-water can be deadly.
- Use caution on shore and on the road. Many injuries and deaths occur off the river—on side hikes, on shuttle roads, in camp—when boaters let their guard down.
- Tell someone where you are going, when you expect to return, and what to do (including where to call) if you don’t.

Using This Book

In the regional maps in this book, asterisked numbers indicate areas for which local maps are provided; the legend for each regional map gives page numbers for local maps. Local maps are provided to show access points and are not to be relied on to locate rapids or obstacles on the river. Arrows pointing to the river show put-ins and those pointing away take-outs; double-headed arrows indicate

both a put-in and take-out point. Daggers alongside river names indicate direction of flow. Rivers in this guide are rated on the international scale of 1 to 6. We rate rivers, or portions of rivers, according to their most difficult typical rapids. For example, the Futaleafu in Chile is rated Class 5, although it has numerous rapids that by themselves are rated Class 2, 3, or 4.

When there are one or two uncharacteristically tough rapids, we indicate this by a subscript number. For example, one section of Toby Creek in Western Canada is rated Class 3_s, reflecting the presence of a big Class 5 drop in an otherwise intermediate run.

A *p* indicates one or more portages, as in the case of Cahabon in Guatemala, rated 4_p. A plus or minus sign is roughly equivalent to “low” or “high”; thus, a Class 3– is a “low Class 3,” while a Class 3+ is a “high Class 3.”

The ratings are intended to be realistic judgments of difficulty at moderate flows. This means, among other things, that we don’t overrate rapids to protect boaters. But we also don’t downgrade rapids simply because more people are running them these days.

Bear in mind that difficulty changes with the flow; the degree of change depends on the river and the rapid. Most rivers become more difficult at higher flows—in general, Class 3 rivers require Class 4 skills at high flows, and so on—but there are definitely exceptions.

Rating the difficulty of a river, or even of a specific rapid, is a tricky and subjective business and a source of endless debate. Experienced boaters looking at the stretch on the same river may well perceive different challenges and hazards, especially if they are in different kinds of boats, or even if they hail from different countries or regions. Moreover, whitewater equipment and techniques are always evolving, and the rivers themselves are constantly changing.

The truth is that no simple code can fully convey a river’s unique combination of potential difficulties—especially when you consider complicating factors, such as degree of

risk, possibility for recovery, and variations in flow, season, weather, and water temperature. *The rating system is a rough approximation.* With that in mind, here are the definitions that we use to rate the runs in this book:

Class 1 is merely moving water with a few riffles. There are small waves and no obstacles.

Class 2 rapids have bigger waves but no major obstructions in the channel.

Class 3 rapids are longer and rougher than Class 2, and they have considerably bigger hydraulics (waves, holes, and currents). Route-finding is sometimes necessary, although Class 3 rapids generally require only a few maneuvers. Advanced and expert boaters can usually “read and run” them, but less experienced river runners should scout. Class 3 rapids may seem easy to passengers who are guided by experts, as on a commercial rafting trip, but intermediate and even advanced boaters sometimes run into trouble on Class 3 rapids.

Class 4 rapids are generally steeper, longer, and more heavily obstructed than Class 3 rapids. They are often “technical” runs requiring a number of turns and lateral moves. Preliminary scouting of all Class 4 rapids is definitely recommended unless the boater is highly skilled and knows the river intimately. Few want to try it, but when they must, boaters can usually “swim” Class 4 rapids without high risk of major injury.

Class 5 rapids look different—and bigger—even to the uninitiated. In addition to strong currents, big waves, boulders, and holes powerful enough to hold or flip boats, Class 5 rapids usually have one or more major vertical drops. Everyone scouts Class 5 rapids, even experts. Many are routinely portaged, even if they are runnable at certain water levels. An accident in a Class 5 rapid risks injury to boaters as well as damaged or lost equipment.

Class 6 rapids are magnified versions of Class 5, with additional problems and hazards. They are usually considered unrunnable, and for most boaters they are. But at certain water levels, teams of experts taking all precautions can and have run Class 6 rapids. Nevertheless, even in the best of circumstances, risks include not only injury but loss of life. Definitely not recommended.

Class U or p rapids or falls (unrunnable or portage) should probably never be attempted. This judgment, like any classification of rapids, is subjective to a degree. In fact, a few places that we label *p* have been run. Nevertheless, we consider them unsafe at any flow.

Significant rapids are often mentioned by name, rating, and/or location, and for many we provide a brief description. In some cases we include information on landmarks to help boaters recognize when they are approaching a big drop. Our descriptions are not intended as instructions for running a rapid. That judgment is always left to the boater, who should keep in mind that rapids change, water levels fluctuate, and opinions often differ as to the best and safest approach. We sometimes point out rapids that boaters may want to scout or portage; however, the decision to scout or portage is always the boater's responsibility. Remember the rule: *If in doubt, stop and scout. Still in doubt? Portage.*

We do not pretend to have included anything like a comprehensive list of rapids in our river descriptions. Better-known rivers are described in more detail than those where only a few have ventured. Boaters running more difficult rivers should be prepared for plenty of scouting and portaging.

The location of rapids and other important features is always approximate. The point is to give boaters some idea of how far one thing is from another. Readers are urged to take distances as only a rough indication.

Don't blunder into a big rapid just because you expect it to be farther downstream.

Finally, all the measurements in this book are given in the English system, followed by the approximate metric equivalent in parentheses. The terms "right" and "left" are always used assuming the observer is facing downstream.

Abbreviations Used in This Book

m	meter(s)
km	kilometer(s)
fpm	feet per mile
mpk	meters per kilometer
cfs	cubic feet per second
cumecs	cubic meters per second (approximately 35 cfs = 1 cumecs)

Conversions

gradient		
5 mpk	=	26 fpm
distance		
1 mile	=	1.6 km
1 km	=	0.62 miles
volume		
1,000 cfs	=	28.3 cumecs
100 cumecs	=	3,530 cfs

Minimum-Impact River Running

Pride in caring for the river should be one of the real pleasures of a float trip. Even if it means a little extra effort, every boater should help to maintain the river environment in as pristine a condition as possible. Here are some guidelines:

Leave nothing behind. Pack out all garbage. If fires are permitted in the river corridor, papers and burnables (*not* plastic) can be burned, but the ashes should be packed out (see the following tips on campfires). Before leaving, make a sweep through your entire camp.

Minimize the use of campfires, and exercise care. Most river cooking can be done on camping or expedition-style stoves. If you build a campfire, use a fire pan. Don't build fire rings. Preferred is a fire pan with legs, so the pan itself doesn't touch the ground.

If collecting firewood is permitted, be sure to gather only driftwood and "dead and down" wood. Standing dead wood, snags, and dead limbs are part of the river canyon setting; leave them alone.

Keep a close eye on your fire, and have sand, shovel, and water nearby. Make sure the fire is completely extinguished. Carry out charcoal and partially burned wood as you would garbage.

Dispose of human waste properly. If possible—and it usually is—carry all solid human waste out of the river canyon. This is a requirement on some rivers, and it is highly desirable on most, whether it is required or not.

For many years, river runners carried human waste in watertight ammo cans lined with plastic and doused with lime or some other deodorant. However, legally disposing of these bags is now more or less impossible in many areas. As requirements grow more stringent, new technologies are coming into play on some rivers.

Be careful with soap. Use minimal amounts of biodegradable, phosphate-free soap to wash yourself and your dishes at least 100 feet from the river and any side streams.

Keep wildlife in mind. Dozen of species dwell in the critical riparian zones along most rivers, and others come to the river to drink, hunt, and/or breed. Making noise or approaching too closely to observe wildlife or snap a photo can disturb nesting birds and other animals. Some nesting birds will even abandon their nests if frightened. A pair of binoculars or a telephoto lens will give you a front-row view from a respectful distance. Please respect

closures of sensitive sites, and keep your noise down when you pass them.

Maintain a secure and clean camp kitchen.

Food and garbage attract animals, which will thereafter associate people with food, hang around the campsites, and become "repeat offenders." Animals that become dependent on people for food may starve in winter when boaters no longer come by.

Respect historical and archaeological sites.

Pictographs, petroglyphs, artifacts, and dwellings of earlier inhabitants are an irreplaceable part of the river's history. Please be careful when you explore these sites. Leave everything in its place.

Limit groups to a moderate size.

Small groups have less impact—both on the environment and on the wilderness experience of other boaters.

Use extra care at fragile or heavily used sites.

River access points, popular campsites, favorite side hikes, legendary hot springs—all of these get intensive use, so more effort is necessary to keep them clean and unspoiled.

For a better understanding of Leave No Trace camping, boaters may want to read some of the many current books on the subject.

Talk to Us!

Do you have new or better information you would like to share about any of the rivers in this book or others you feel should be included? Did we leave information out of a description or include information that you feel is not accurate? Please tell us so we can get it right in future editions of *World Whitewater*, so you and your fellow river runners will have the best information available before they put in.

Contact information

Jim Cassady/Dan Dunlap
World Whitewater
c/o Ragged Mountain Press
P.O. Box 220
Camden, ME 04843-0220

Jim Cassady
Pacific River Supply
3675 San Pablo Dam Rd
El Sobrante, CA 94803
E-mail: pacriver@aol.com

Dan Dunlap
115 Judy Court
Martinez, CA 94553
E-mail: ww2o@kfogmail.com

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