## **How To Row The Grand Canyon Rapids**

Jim Michaud

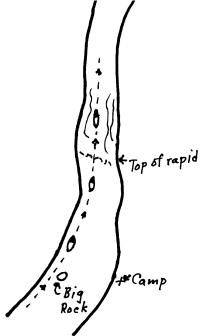
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**Note:** In this How To guide, the term Low Water means levels of around 10,000 cubic feet per second (cfs) and below. The term High Water means levels of 20,000 cfs and above. This guide is how I personally like to row the Grand Canyon. There are other ways to run the rapids so use this guide at your own risk. You know the adage: "When in doubt, scout it out!" Things change in the Canyon, so read and run what you see, and don't feel you have to run it the way I see it.

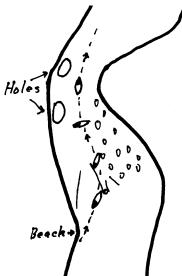
**Mile 8.0 – Badger Rapid**. Run down the tongue in the center of the river. There's a big hole along the right edge of the tongue. Look for a smooth horizon line with a slight hump to it just right of center at the top of the rapid. The hole is right behind the horizon line hump. The entrance to the rapid is turning left and tends to push you off to the right towards the hole so make sure that you don't go into it. To the right of the hole it's all rocks and ledges and to the left of the tongue there are many rocks too. The scout in on the left.

Mile 11.4 - Soap Creek Rapid. (See drawing). The river turns to the left just before the

rapid causing the boats to go too far right unless approached correctly. As you approach the rapid stay close to the left shore and pass to the left of a large rock near the left shore. After the shoreline turns left stay just to the right of the eddy line. This will line you up with the tongue. Soap Creek Rapid is two to three times as long as Badger and the waves are bigger. The scout is on the left, and the pull-in is just above the big rock near the shore.



Mile 17.1 – House Rock Rapid. SCOUT ON THE LEFT. (See drawing). House Rock



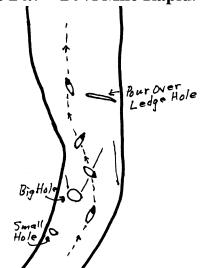
Rapid is a great raft flipper. The rapid turns hard right and there are two holes on the outside of the turn. All the water feeds into the holes so you must be rowing HARD right all the way down the rapid. Row 90 degrees to the current (not just 90 degrees to the shoreline). When leaving the scouting beach it's best to row backwards and get to the right of the tongue. If you stay in the tongue your bow will get turned downstream and you'll end up trying to row uphill and end up hitting the holes. There's a small curler right at the top of the rapid on the right side of the tongue. Ideally, you want the back of your boat going over that curler as you pull toward the right. Don't dig your downstream oar into the water too deep, as it may hit a rock and come at you like a rocket. Use your upstream oar to keep your ferry angle. Go sideways over two small pourover's on the right hand side and you are through. At flows

above 17,000cfs, there's an easy right hand run along the right shore. This rapid is much easier to run in the afternoon when the water from the dam is higher then in the morning hours.

**Mile 23.2 – Indian Dick Rapid**. Stay left. There's a blind hole at the bottom right of the tongue that can flip rafts if you don't stay left.

**Mile 24.4 ledge** – **Georgie Rapid**. This rapid is a river wide ledge with a tongue at center right. In high water it's a nothing but in low water it will flip rafts. During low water try to run to the right of the tongue. There's a horizon line to the right of the tongue but the back side is sloping and won't do anything to a raft. Mind the rock on the right once you are through the entrance. You can stop on the left to scout but don't stop too close to the ledge or you may not be able ferry over to the tongue in time to run it.

Mile 24.7 – 24 ½ Mile Rapid. SCOUT ON THE LEFT. (See drawing). 24 ½ Mile Rapid



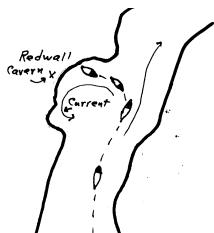
has a large ledge-hole at the bottom right of a left turning rapid which cannot be seen until it's too late. The way to run it is to row backwards into the eddy water behind the hole on river left. When the stern of the raft cuts across the eddy line the bow will swing downstream and you will float on the left past the big ledge-hole in the right-center of the rapid. In low water the rapid is no big deal. Just stay left. Mind the tail waves and hydraulics that can flip a small raft. Just hit-um straight.

Mile 25 - 25 Mile Rapid. It's a left turning rapid. Start on the left of the wave train and pull left to stay off the rocks.

Mile 25.7 – Cave Springs Rapid. Go Right.

**Mile 26.9 – Tiger Wash Rapid**. Sneak Far left at the top, then pull back right to get away from the redwall cliff at the bottom.

Mile 33.3 – Redwall Cavern. (see drawing). When entering Redwall don't try to cut



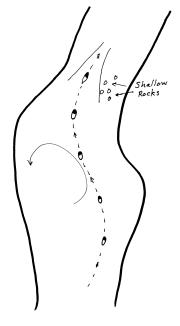
across the big eddy. Follow the dotted line on the drawing and stay just to the inside of the main flow on the downstream side of the eddy current. If you blow it, float around in the eddy and come in again. If you get swept downstream you still have time to pull in below the rock outcropping downstream of the beach.

**Mile 44.0 – President Harding Rapid**. Pass to the left of the large boulder. There are submerged rocks on the right.

**Mile 56.3** – **Kwangunt Rapid**. It's a sharp left then right turning rapid. Enter on the left side because there's a big hole on the right half way down the rapid. At flows above 17,000cfs, you can go right of this hole. There's a pull-in scout beach on the left well above and out of sight of the rapid.

**Mile 69.0 – Tanner Rapid**. Start center, moving left. There's a couple of large wave-holes at the bottom center and right of the rapid that can flip a raft. Once past these holes, move back to the right as a cobble bar from the left shore extends up toward the rapid, and you need to go right of this bar. The river then turns 90° to the left then makes a horseshoe turn to the right. As you enter the horseshoe turn there's a **huge wide**, **blind hole** at the start of the rapid on river left. Make sure that you stay to the right of this hole.

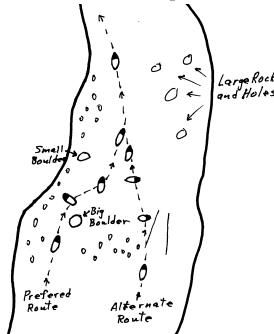
Mile 72.9 – Unkar Rapid. (See drawing). Start the run from the right then head towards



the center left and down the tongue of the wave train. Don't be too far right or you can easily get stuck on shallow rocks. The water level is dropping during the day so if you nget stuck you'll be there for a very long time. Don't be too far left either because there's a big hole next to the left wall near the start of the rapid. Finish up near the center of the river to avoid being hung up on rocks down the river a ways.

**Mile 75.8** – **Nevills Rapid**. Enter far left and stay left all the way down. There are several large rocks in the main current towards the bottom of the rapid that will pin a raft..

Mile 77.2 – Hance Rapid. SCOUT ON THE RIGHT. (See drawing). During the summer



of 2012 the left side was totally blocked by boulders being washed into the left side of the rapid due to the side creek flashing. You must now do the right side run. There's a trail before the rapid on the right that takes you to a scouting point above the start of the rapid

The right side route is to start on river right and stay close to the left side of the entrance. As soon as you can, turn facing right and row backwards as hard as you can so that you end up near the river left shore. The river is turning to the left so it will be pushing you to the right towards the large holes and rocks. Make sure that you hit the holes straight. A quarter mile below Hance is Son-of-Hance. There can be a large hole tucked away in the center right there so go left or way right.

**Mile 79.1 – Sockdolager Rapid**. It's a long rapid. Start center moving right to avoid the first big wave then straighten out and hit-um straight.

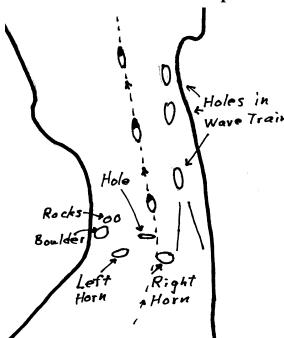
**Mile 82.1** – **Grapevine Rapid**. Start center angling right then work back to the center as soon as you can. There's a hole on the left and a ledge of rocks on the right half way down the rapid. It's a nice long rapid like Sockdolager but doesn't have the huge wave at the beginning.

Mile 85.3 – Zoroaster Rapid. Start on the left.

Mile 85.8 - 85 Mile Rapid. Watch out for a hole half way down the tongue on the right that's big enough to flip rafts..

**Mile 89.5 – Pipe Springs Rapid**. Between Phantom Ranch and Horn Creek are several left turning rapids that have very bad keeper eddies on the right. Any time that you encounter a rapid in this area that's turning left it would be wise to run it well to the inside of the turn. Note: take note of the lone rock just off Pipe Springs Beach on your way to Horn Creek.

Mile 90.8 - Horn Creek Rapid. SCOUT ON THE LEFT. (See drawing). At the start of



the rapid there are two rock piles that are referred to as the horns. In high water the horns are covered and in low water they're exposed. As you pass by Pipe Creek Beach look for a lone rock just off the beach. If the rock is underwater then just go down the middle of Horn creek, passing between the horns. The hole between and below the horns will be filled in. If the rock is out of the water stop and scout Horn Creek Rapid from the left. My favorite route through Horn is to pass very close to the left edge of the right horn. This will place you just to the right of the hole that's just downstream and between the horns. It will also place you far enough to the left of the nasty holes that are in the right hand wave train.

Another low water option is to come in from the right of the right horn rowing hard backwards and busting the eddy fence below the horn as

close as you can to the horn. If you bust through the eddy fence too low you'll end up in the wave train holes. If you're too early you'll hit the horn and the raft will bounce back into the tongue and again you'll end up in the wave train holes. Timing and speed is everything.

## Mile 93.9 – Granite Rapid. SCOUT ON THE LEFT.

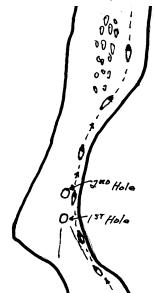
**In high water** the best approach is to come in from river left to avoid being flipped by the big reactionary waves along the right wall. You may be hitting the big hole at the bottom of the rapid but it won't do anything to you as long as you have the raft pointing towards the hole as you hit it.

**In low water** the best route is down the center of the wave train near the right wall because the left approach has too many rocks in the way. Going down the wave train will keep you to the right of the hole at the bottom.

Below the rapid on the right is a huge eddy that's hard to get out of. If you do get caught in the eddy the best way out is at the lower end of the eddy. There is a small channel out the right side of the cobble bar at the foot of this eddy that is only open at medium water levels. You may get trapped in this channel at low water.

Mile 95.5 – Hermit Rapid. SCOUT ON THE LEFT. Hermit is the biggest wave train on the river, the fifth wave being the biggest. The ninth wave is now a hole that can flip a raft. It's best to move right before or right after running the fifth wave. In low water it's no problem. Just go down the middle and move a little to the right as you run the rapid in order to avoid the hole. In water levels in the high teens, the waves keep getting bigger with the fifth wave being a monster. In the twenties and above, this rapid washes out until flows over 45,000 make the right run very exciting. If you go down the middle keep pushing hard on your oars and keep them in the water so the water will carry you over the fifth wave. Another option is to go hard left at the top of the rapid and then run the rapid to the left of the wave train.

Mile 98.8 – Crystal Rapid. SCOUT ON THE RIGHT. (See drawing). At any water level



above 8,000 cfs you can enter the rapid to the right of the tongue, staying as close to the shore as possible. Keep the raft close to the shore as you pass by the second hole. Keep moving the raft to the right and finish the rapid on the right of the rock garden.

Another option is to go down the left side of the tongue and go to the left of the holes. Don't go too far left because you'll end up going over a pretty big ledge. You can then finish the rapid by staying left along the left wall to the far left of the rock garden. Be careful though because there's a few holes on the left side that you need to hit straight.

A third option is to go down the tongue rowing backwards and break through the right diagonal. I don't really like this line because it's too easy to be fed into one of the two holes, or overpower and crash into the right shore.

**Mile 100.0 – Tuna Rapid**. Tuna Rapid has a sharp 90° left turn at the bottom. Keep to the left as you go around the corner in order to avoid being slammed against the right wall. The section coming up is called the Gems because of the names of the rapids. They're like the Roaring 20s except much bigger. Just read them on the fly and run them.

Mile 101.1 – Agate Rapid. Run down the middle.

**Mile 101.8 – Sapphire Rapid.** The biggest of the series. Run down the wave train and watch out for a hole on the right near the bottom of the rapid.

Mile 102.6 – Turquoise Rapid. Run center left.

Mile 104.5 – Emerald Rapid. Run center left.

Mile 105.2 – Ruby Rapid. Stay left. There are rocks at the top of the rapid that you can go right of, pulling back to the left to get left of some large waves on the right near the bottom of the rapid.

**Mile 106.5** – **Serpentine Rapid**. Enter on the left. There are two sleeper pour-overs on the top right that can flip your raft.

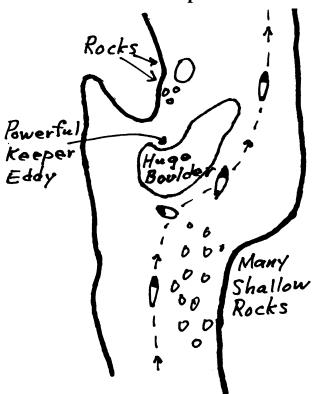
**Mile 112.8 – Waltenburg Rapid**. Big, long rapid. The start of the rapid is recognized as you go around a left turn and notice two very large boulder piles. The river then turns right. Stay as far right as you can for the first 100 yards in order to avoid a very large hole on the left. Run the rest of the rapid anywhere.

**Mile 129.7 – Specter Rapid**. The wave train follows the right wall with reactionary waves coming off the wall. Just to the left of the wave train is a very wide ledge hole.

**High water left side run:** SCOUT ON THE LEFT. If you try pulling away from the waves you'll end up falling into the ledge-hole. The way to run it is to drift to the left of a small rock island in the middle of the smooth water just before the rapid. As you pass the island start rowing backwards very hard toward the left shore and bust through the left diagonal as <u>early as you can</u>. Keep rowing so that you clear the big ledge-hole then just drift down the left side.

Low water run: The left side of the river is too rocky so start on the right of the island and just run down the wave train. Another option is to go to the left side of this island, and as you go past it, stand up in your boat to locate the big hole, then start pulling easy right toward the right side of this hole. This helps you to go just right of the hole and stay away from the right side wall.

Mile 131.1 - Bedrock Rapid. SCOUT ON THE RIGHT. (See drawing). You want to go



right of the island. Go down sideways staying right and rowing backwards to the right as hard as possible, staying just off the rocks along the right hand shoreline. The raft must end up on the right side of the pillow that's in front of the huge boulder island. As soon as you're past the pillow quit rowing so that you don't get caught in the sticky eddy along the right shore at the island. The left side is a maze of crashing crosscurrents and a very sticky eddy. If you go left you stand a very good chance of either flipping the raft or slamming hard against the backside of the boulder island and breaking oars and/or oar locks (been there, done that).

In very low water it's possible to go left of the boulder island. As you go around the island try staying left to avoid smashing into the keeper eddy.

**LEFT SIDE RUN** (very low water): As

you round the boulder the current will try to slam you into the keeper eddy on the backside of the boulder, breaking your oarlock or doing other nasty things to you. To prevent this do the following. As you enter the slot behind the boulder turn the raft so that your bow is facing the boulder and pull back on the oars.

## Mile 132.3 – Deubendorff Rapid.

**High water run:** SCOUT ON THE RIGHT. In high water the best route is down the small V on center right. The main flow has a big flipping holes in the wave train and a big hole at the bottom left that has a big rock in the middle of it.

**Low water run:** SCOUT ON THE LEFT. During low water the right is too rocky for rafts. Start just to the left of the rocks in the center of the river, entering to the right of the tongue, and try hard to get right by the time you get to the bottom. Mind the large rock along the right hand shore at the foot of the rapid.

**Mile 134.3** – **Tapeats Creek Rapid**. Stay in the middle of the wave train because there's a big hole on both the left and the right half way down the rapid.

**Mile 138.4 – Doris Rapid**. Stay in the middle of the waves. There's a big hole to the right of the wave train.

Mile 139.7 – Fishtail Rapid. During low water start center right because there's a big hole at the bottom of the wave train on river left. During high water it's OK to run the wave train.

Mile 150.2 – Upset Rapid. SCOUT ON THE RIGHT. As you go around the left bend there's a gravel beach downstream on river right. In high water the gravel will be covered and you can proceed down the right. In low water you will want to pull over before the gravel and scout. At the lower end of the rapid there's a very large hole in the right center of the river. Now you know why this rapid is called Upset. The run is to drift down sideways on river right while pulling hard to the right so that you go between the hole and the gravel beach. You can also go down the left but if you do go left end up way left as you go past the hole. Right above the hole on the left is a diagonal curl that tends to feed you into the hole so make sure that you're way to the left as you pass the hole.

**Mile 179.7** – **Lava Falls Rapid.** SCOUT ON THE RIGHT. Since 1995 the left side was fairly easy. Lately the left side has been getting harder especially at low water. It's now easier to run the right side. Enter the rapid fairly close to the ledge hole. The current flows slightly to the right which will line you up for the center of the V-wave. Power through the center of the V-wave. After powering through the V-wave try to pull the raft a bit to the left then square up before riding the tail waves. At high water levels, scout left and run left.

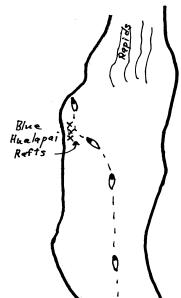
Note: If you enter the rapid too far to the right you could end up in the tiny eddy just to the right of the V-wave. Coming out of the eddy usually results in a flip to the left as you fall over the right side of the V-wave. If you enter too close to the ledge hole you could end up sideways on the left side of the V-wave and flipping to the right.

**Mile 205.6 - Mile 205 Rapid** – The rapid turns left at the bottom then right. Start center or just left of center then move left at the bottom of the rapid just enough so that you don't end up in the eddy on the right. Don't pull too hard to the left or you will end up in a giant eddy on the left.

Mile 209.2 - Mile 209 Rapid – BIG pulsating hole in the middle of the river. There's a large lava rock near the right shore just before the river turns sharp right. About 100 yards after the right turn there's a big, pulsating hole waiting to gobble you up. In high water you can pull almost all of the way to the left shore and miss it easily. In low water the left side has lots of rocks in the way so you can't pull over as soon. Keep pulling to the left even if it looks like you might not make it. There's a little diagonal wave at the left edge of the hole that will deflect you away from the hole.

## Mile 217.8 - Mile 217 Rapid – Like 205 except a little easier.

Mile 225.9 – Diamond Creek Takeout. (See drawing). After going past the river



gauging station you'll see the beach downstream on the left. Aim the rafts at the Blue Hualapai rafts near the upper end of the beach as you approach. Do not aim your raft directly at the beach. The river flows downstream in front of the beach instead of upstream like the eddy water above the rafts. Many people have missed the takeout and had to carry all their gear up a very long rapid over a lot of big boulders.

Mile 231.2 - Mile 231 Rapid - Run down the right.

Mile 232.5 – Killer Fang Falls Rapid. SCOUT ON THE RIGHT (From a big eddy).

**Right run:** There's a big, long wave train that starts on center left and ends up on the right. On the right edge and at the end of the wave train there are two tall skinny rocks that look like fangs. The fang rocks are about twenty feet off the right shore. Try to cross the wave train as soon as possible in order to avoid being pinned on the fang rocks. If you don't succeed in crossing the wave train square up your raft and squeeze between the fangs and the right shoreline. I've seen it done with an 18-foot raft.

**Left run:** There is also a run just to the left of the large pour-over at the top of the rapid. Stay about a boat's width away from the left wall in order to miss another hole that's against the left wall. You will run a tight slot just left of this pour-over and head directly into an eddy where you can park and watch the right-to-left run action. This is not a great place to run safety for your fellow river runners. If they get into trouble with the fangs just downstream of you, you will have to get out of the eddy first to provide assistance if it's needed.

Mile 233.9 - Mile 234 Rapid – Start on River Right.

**Mile 280.5** – **Pearce Ferry Take-out**. The take-out is on the left. Just below the take-out is the Pearce ferry Rapid. The difficulty changes drastically depending on the lake level. The route through it also changes so be sure to scout it if you're going to run it.