

Bass Breathe and Eat, Even in Summer

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Bass are hard to find in Lake Keowee in the Summer. If you understand why they are hard to find, then you have a better chance of finding and catching them.

Like you and me, bass need to eat and breathe to survive. One of the ways they are different from you and me is that they are cold blooded, which means that their body takes on the temperature of the water around them. And, since all chemical processes happen faster at higher temperatures, the warmer the water gets in Lake Keowee, the faster bass body processes go and the more they need to eat and breathe.

At the same time, the warmer water gets, the less dissolved oxygen it can hold. So fish, especially big fish, find it harder and harder to breathe in shallow water as the Lake Keowee water temperature rises to its summer levels.

Already, in late June, in most areas of Lake Keowee, the surface water temperature has now risen above 80°F, and that temperature extends down below the surface ten to twelve feet to the first thermocline. In July/August, the surface water temperature will reach the upper 80s to low 90s for the summer, and that temperature will eventually extend down about 20 feet to the first thermocline.

Okay, but how does this help us find bass?

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Imagine you're a big bass trying to survive in Lake Keowee in Summer. You have a basic choice: go deep or go shallow. (I don't think bass make this choice consciously like humans would, but instinct, hunger, and body oxygen levels drive them to go one way or the other.)

If you go deep, the water is cooler, your body cools down, and your body processes slow down. You need less oxygen to breathe and less food to eat. But eventually you still have to eat, and your food is in the shallows because small fish are far less oxygen sensitive than larger fish and the smaller fish find their own food and safety in the shallows.

If you go shallow, you'll find food to eat, but the water you're processing in your gills doesn't have enough oxygen to keep you going for long, so when you "run out of breath", you have to go deep for more oxygen.

So, as a big bass, your best strategy is to go deep until you get hungry, then come up close to shallows where your food is, but still in the cool water below the thermocline that holds enough oxygen for you to breathe well. You can hold there, building up the oxygen in your body, kind of like humans breathing deeply before diving under the water. Then, when your body has a lot of oxygen, you can make a foray into the hotter, oxygen-depleted, shallow water looking for food. When your body oxygen runs low, you can retreat to your holding area nearby to build up your body oxygen for another foray. And when you've gotten enough to eat, you can settle back down into the cool depths and relax until you get hungry again.

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"Well, this is all very interesting," you say, "but let's be practical. I'm really not a bass, I'm an angler out in my boat looking for bass. Where do I go to try to catch some?"

Remember, bass are going to spend only the little time necessary to feed in the shallow water, and will spend most of their time in the deeper, cooler, oxygen rich water. Since fishing down on the bottom in a hundred feet of water is not practical, the place you're most likely to find catchable bass is under the thermocline in oxygen-rich water that is a very short run to the shallows where they find food. So, based on that, here are several approaches you can try to find bass with some chance of success.

- You can fish with surface lures and shallow-running crank baits at the edges of main lake shallow points that drop off suddenly to water more than 25 feet. These points provide the bass with the shortest foray migration path between the oxygen-rich, deeper, cooler water and the shallows where their food prefers to stay, so in these areas bass can quickly move shallow, eat, and move deep again. Fish the edges of these shallow areas at the drop-offs into the deeper water. And fish at the crack of dawn when the water in the shallows is the coolest. The crack of dawn is when it's still dark, but if you look to the east you can see the first hint of morning light. In early July with a clear sky on Lake Keowee that's about 5AM and gets later as the summer progresses. You're not likely to catch bass this way after the sunshine hits the water for the day and starts warming it up. (Another terrain with short migration paths between the deep and shallow water where small fish hang out is the earthen dams where Route 130 goes along the lake and the riprap drops off quickly into deep water.)
- Once the sunshine hits the water, or even earlier, you can drag Carolina-rigged, plastic worms and other soft baits, live worms, and live minnows along the 20-40 foot depth contours near the usual shallow areas where bass feed to try for the bass that are holding there between runs into the shallows for food. If the sky is clear, the sun is high, and the water surface is calm, bass are likely to be at the deeper end of that range. This is where bass spend most of their time in summer when they are shallow enough to be catchable.
- You can troll deep looking for bass suspended below the warm surface water. Unlike largemouth bass that prefer the cover of a shoreline, spotted bass often suspend in the deeper water. To try for suspended bass, if you don't have downriggers, use about 2½ ounces of weight ahead of 3-6 feet of leader attached to a deep-diving crank bait. If you let out 100 feet or more of line and troll very slowly with your main engine, you can figure your lure will be down about 35 feet or so. (After you lose a few lures passing over areas that are too shallow you'll get a better handle on how deep your lures really are for your rig and your trolling speed. Don't take it personally, losing lures that way happens to all of us while we are calibrating our rigs!) People have been successful doing this trolling along the sides of deep channels and points in 50 to 90 feet of water. I personally don't troll, but I've heard from those who troll successfully that a good time of day to try this is 10AM to 2PM with at least a slight breeze and some clouds in the sky.
- During days with a strong wind, you can fish with spinner baits and baitfish-colored crank baits in areas where the wave action puts more oxygen into the water. In these conditions there are two likely bass hangouts. First, try fishing a windward shore where the waves are crashing into riprap. It may be hard to control your boat in the wind, but the waves breaking on the shore not only put more oxygen into the water,

the waves also dislodge baitfish from their rock hiding places and force them out into open water where the bass have learned to wait for them! Second, try fishing a shallow bar (2-10 feet deep) near deep water where the wind is blowing waves over the bar, putting some oxygen into the water and generating a little current across the bar. On the down-wind edge of the bar the wind current forms a vertical eddy that sucks some of the cooler water up along the bottom toward the bar in a kind of undertow and makes it more comfortable for bass to lurk there in the cooler water hunting for small fish that the current sweeps past the edge of the bar. Also, any green algae in these shallows releases oxygen into the water as part of photosynthesis, making the downwind side of the shallows more oxygen rich.

- You can go to tail race of the Jocassee Dam where water enters Lake Keowee in the summer at about 70°F when the dam is generating power. There is more oxygen in the colder water there, and schools of baitfish and bass are often active for a few hours when the dam starts generating each day. The trick here is to use a lure that closely resembles the baitfish, because the bass there know exactly what their target meal looks like. However, don't pick a lure that is exactly like the baitfish, or your lure will be just one-in-a-trillion among the baitfish, and then what are the odds a bass will pick yours to gobble? So in that environment you want your lure to be similar enough to the baitfish so the bass will accept it, but slightly different to stand out just enough so the bass will notice and go for your lure instead of the trillions of baitfish. Your lure also needs to be heavy enough to cast a long distance since the bass are often not considerate enough to feed close to fishing boats!

Whatever you try, good luck! Summer is still the hardest time to catch bass on Lake Keowee. So go prepared with appropriate clothing to at least enjoy the experience, including a wide-brimmed hat, sunglasses, and sunscreen. It's really beautiful out there, especially in the cooler morning air just before sunrise. As my father often used to tell me, "He who goes fishing and complains that he didn't catch fish forgot why he went."