

BROWN BEARS ON THE KATMAI PENINSULA

Wildlife photographers and tour guides, **BOB HARVEY** and **DIANE KELSAY**, talk about photographing bears during the epic salmon run. The intersection of bears and salmon creates an amazing set of photographic opportunities and challenges.

Brown bears on the Katmai Peninsula

Around August time, deep in Katmai National Park in Alaska, a group of the world's largest run of sockeye salmon is charging upstream toward spawning beds. Before they reach those beds though, they must run a gauntlet of powerful brown bears.

If you've been dreaming of photographing these iconic scenes, there are two iconic types of bear images which probably have you salivating. The first is a fish literally jumping into the mouth of the bear, which is standing atop Brooks Falls.

The second is a big bear charging straight at the camera through shallow water, with water flying everywhere.

Many photographers arrive thinking if they can capture one, or even both, of those images they can go home and die happy. The great news is that your chances are good. The even better news is there are so many more great opportunities than just those two.

Bears are intelligent creatures and fishing is a learned skill, not instinctual. Every bear learns both

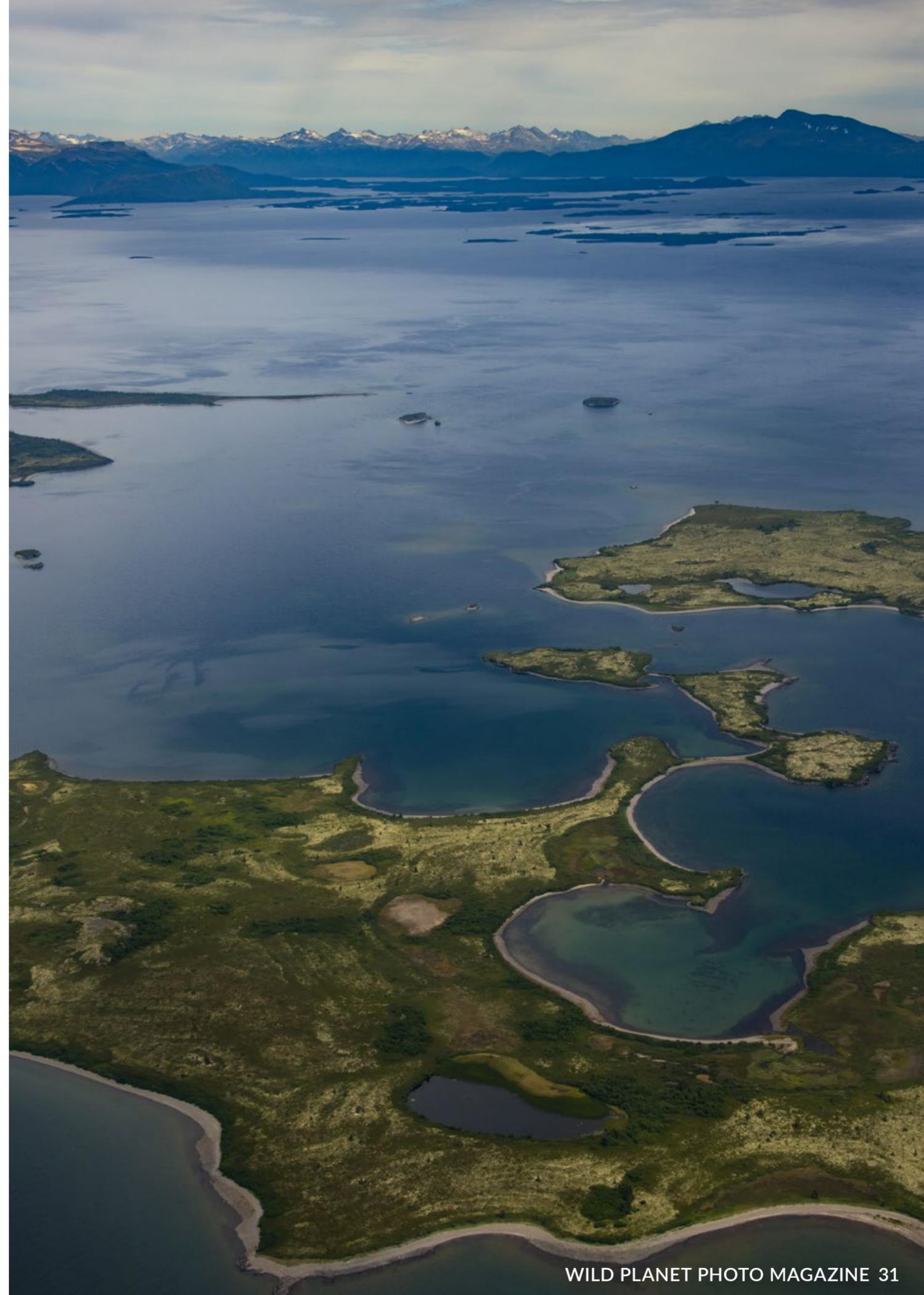
from its mother and from life experiences, resulting in various methods of catching salmon.

Some bears charge through shallow water, scattering it everywhere (along with the salmon) by following one salmon they have an eye on. When that charge is toward you, it can yield that classic image which looks like it's charging at you. Watch for the moment when one of the forepaws

reaches forward, exposing the claws. (Warning: watching this unfold through a long lens can be disconcerting!).

When a bear charges at right angles to you, you get a whole different set of opportunities. It's amazing to witness and, in many ways, more exciting than the straight-on charge. The spray is equally exciting with this perspective, but watch out for background objects that can either steal your point of focus, or interfere with your composition. Try for shots where the far forepaw is reaching forward - and shoot plenty of these, as they won't all work. Capture the ►►

When bears come up without a fish, it's time for them to do the 'dog shake' and expel water clinging to the fur around their heads.



▶▶ moment when that far forepaw hovers over the intended quarry and watch for the big plunge. We love shots where there is a dazzling pattern of stopped water drops and splashes with bits of the bear behind the veil. Shoot every time you can and find the best one on your computer.

Salmon 'hole up' in deep pools before they move upstream as a group. Some bears take advantage of this by partially or completely submerging, diving or snorkelling for fish. Often, before the dive, you see a bear dog-paddling into position with only the head out of the water. Be ready for when the dive ends, as you may suddenly see a face holding a struggling salmon!

When bears come up without a fish, it's time for them to do the 'dog shake' and expel water clinging to the fur around their heads. Mash down your shutter for this one, as the timing is faster than you can handle and each iteration can be a successful image.

Now, the waterfall shots. There is a very strong pecking order among bears (achieved with many scars and lots of noise), and a few powerful bears 'own' the best fishing spots, both above and below the falls. Others spread out further below the falls.

Bears above the falls position themselves as close to the edge as possible, often leaning forward in a way that convinces you that one slip and they could tumble, and sometimes that does happen. They watch as the fish jump and try to maneuver to catch the close ones in their mouths. Sometimes a big paw comes into play. Set-up on continuous high and press the shutter ▶▶

DINING! - Brooks Falls
Nikon D850, 200-400mm lens
f/6.3, 1/1000sec, ISO 640



TIME TO LEARN TO FISH - Funnel Creek
Nikon D500, 200-400mm lens
f/5.6, 1/1600sec, ISO 1000



▶▶ when you see a fish leaping toward the bear. You have compositional choices; compose to include the bear and the waterfall (or at least part of it) and have a full perspective with 'stopped' water and a fish approaching the bear, or you can go tight on the bear, or even its head. That's a harder shot as you may not see the fish through your lens until it's too late to open the shutter. You can crop to that tight shot in post, but it will have a lower pixel count.

There are other good fishing spots right below the falls and they lend themselves to great compositions. Bears

park themselves in deep pools with salmon often failing at their jump - and when they do, they often become easy to catch. Other times, the bears feel around with their paws and find salmon preparing to jump.

At Brooks Falls, photographers are mostly confined to two platforms. When there are more visitors than spaces at the closest platform, the Park Service gives you a time period and then chases you out. You can wait and come back in for another round and repeat.

That's just fishing bears - there is so much more. When a bear catches a fish, it

eats it, or at least the good parts. Watch for when a bear first catches a fish, to see that live fish in the awesome jaws of its captor. Some bears prefer to carry the fish to the bank, or a nearby rock, to enjoy the feast, presenting great close-up opportunities with teeth, claws and salmon.

Remember that brown bears are solitary creatures who are drawn together by the salmon feast. Many of them have not seen each other for a year, so there's a lot of 'retesting' to see who is strongest this time around. The performances are truly spectacular,

and you get the impression they are fighting 'for keeps'. Often these are old sparring partners who first saw each other at the salmon gathering as cubs. When fighting in the water, there are streaks of water (frozen by your shutter speed) following the paws and claws, as they pound each other. This is a great time to play with video.

Mixed in with this giant salmon party are mother bears (sows) bringing along cubs of various ages. Care needs to be taken so that the big males don't kill any cubs.

The big photo opportunity is of little bears learning what salmon tastes like and how to catch a fish - we're talking comedy! Throw in gulls trying to steal salmon from babies, and two little cubs fighting over one fish, and you have the material for some pretty fun shots.

In bright, sunny weather, your challenge is holding the details of the dark bear against the incredibly bright splashes of water.

THE SETUP

Most serious bear-watching tours involve either getting to the lodge, or getting to the shoot, in a small plane. Operators watch weight so you'll need to reduce your full kit, besides, on location your gear is on your back.

You will want two bodies; at this point DSLRs, but soon mirrorless might rule. The issues are how fast they wake up, how fast they acquire focus, how well they follow focus, ▶▶



Brown bear charging into a school of sockeye salmon - Funnel Creek
Nikon D500, 200-400mm lens
f/8.0, 1/1250sec, ISO 500

▶ dynamic range management, at which ISO noise starts to interfere and stabilization. Pixel count may also be important, depending on your intended use. We often carry one full frame body and one crop sensor.

You can produce great images with a zoom that tops out at 400mm. You might like the speed of a prime 400mm and the reach of a 500mm or 600mm. That said, the action can be anywhere between ten and

Alaska's Katmai Peninsula is not a fly-drive, self-guide situation. You will need help getting to where the bears are - and you'll want professionals keeping you and the bears from irritating each other.

forty meters away and it can change quickly, making a good argument for a zoom, or another lens on your second body. A second lens could be in the 70-200mm range. You'll want a wide angle like a 24-70mm, or a bit wider.

Take a tripod that you are willing to carry, with a gimbal-style head. You will spend hours with your camera on that gimbal head (instead of supported by your arms) and be fresher when the action starts.

We carry our camera bags inside a backpack-style dry bag, reducing the risk when getting in and out of floatplanes and giving protection on of those days with light rain or driving mist. Rain protection for the cameras and lenses is also important.



SHAKING IT OFF! - Funnel Creek
Nikon D850, 200-400mm lens
f/7.1, 1/1000sec, ISO 400

THE CHALLENGES

Stopping the action - You need 1/1000th of a second, or faster. We prefer 1/2000th of a second.

Focus - Lock onto the head before the charge starts and hang onto that focus until the bear stops. To do this, watch the bear through your lens, with the focus locked on the head. The charge can start so quickly that acquiring focus (on the point you want) is difficult once it starts. With flying water and flailing

limbs, there are so many potential spots for your camera to lock onto.

Depth of field - You want the bear and the flying water drops in focus and, potentially, a salmon in front of the bear. But you also want to soften any background that might distract; plants or driftwood on the shore can really interfere and are difficult to clean-up when they are behind splashes.

Exposure - In bright, sunny weather, your challenge is holding the details

of the dark bear against the incredibly bright splashes of water. The higher your ISO, the less dynamic range you have, and dynamic range is what you need to hold that detail. In overcast weather you don't have so much of a dynamic range issue, but you may find your ISO is creeping high enough that noise becomes an issue. This is a dance: if you use one of the automatic modes (P, shutter priority, aperture priority, or auto ISO) you lose control completely, ▶▶

ANOTHER MISS! - Brooks Falls
Nikon D500, 200-400mm lens
f/8.0, 1/1000sec, ISO 1250



FERUS VITA

▶▶ as each frame will meter to a different balance of bright white and dark bear. You want control in this situation and it can get away from you quickly, which is why we work in manual.

When light is reasonably constant, we build an exposure before the action starts; something like 1/1600th, f7.1, ISO 1000 in bright light and 1/1000, f6.3, ISO 1600 in lower light. We shoot a test, adjust, shoot again, and quit when we're happy. Then we nudge things around a little as the light strengthens or weakens. We're not thinking about exposure when the action starts. Review often.

Single shots or Continuous Shutter? Wildlife photography is about catching the moment and we choose that moment most of the time, rather than hoping that a continuous 'spray and pray' approach will work. That said, there are moments like bears shaking off water and salmon jumping into the bear's mouth, when short bursts at your highest continuous shutter speed pay off. We suggest most of the

time it's better to choose the moment than to hope, but set-up in a way that allows you to open up the throttle when you need to. Beware of missing the best shot because you filled your buffer.

But wait, there's more! When you make the journey deep into Alaska's Katmai, there is more to photograph than bears. You'll be up in small planes, flying over vast stretches of territory. Your vista will be adorned with rivers, ponds, lakes, wetlands, canyons, volcanos, glaciers and more. Floatplanes taking off and landing also make for awesome images. There are caribou and wolves (scarcer), gulls feasting on salmon scraps and, closer to the coast, bald eagles, which all deserve your attention.

PLANNING

Alaska's Katmai Peninsula is not a fly-drive, self-guide situation. You will need help getting to where the bears are - and you'll want professionals keeping you and the bears from

irritating each other.

Choose a photography group to travel with - the other groups don't have patience for serious photography.

Alaska is expensive. Operators here need to make each year's income in a few short months and they will want a healthy up-front payment and final payment well before arrival. The good ones will guide you to be generous with tipping employees. Tipping is an important part of the Alaskan economy.

Tour operators compete for your business. Some book a minimum amount of time with the bears to lower their costs. Our experience shows that there can be days when the weather interferes with your plans, or with the safety of flying to where the bears are, so we prefer to build in a buffer day, just in case we get weathered out. Personally, we can never get too much time with the bears, and there are other things to photograph if the group is ready to move on.

Space is always an issue in bear photography tours. One extra person (and gear) can mean another plane and

pilot (and a place to sleep), all of which are in short supply in the wilds of the Katmai Peninsula. Book early, but be sure you have your ducks in a row, because cancellations can be tough. Check the terms before you buy.

COVID-19 is having a huge impact on photographing bears in 2020. Research thoroughly before you try to go. This is a fluid situation, which we expect to be better managed in future seasons.

One last, sobering, thought; most photography group operators are 'all about' not disturbing the bears, especially as there is so much action and good photography without intentionally irritating them. However, there are a few out there that are into tossing rocks at bears, or surprising them, to make them act aggressively. Don't let yourself be part of that - it's not only a threat to you and the bears, but to everyone's ability to continue photographing these magnificent creatures. ▶▶



THE CHASE AND THE CATCH! - Funnel Creek
Nikon D500, 200-400mm lens
f/6.3, 1/1000sec, ISO 500

Brown bears are solitary creatures. Omnivores, they live by themselves, following opportunity. In the short Alaska summer, they must first recover weight lost during the long hibernation and then build up reserves for the coming winter. At the top of the food chain, they face few threats (other than man and each other) and largely focus on dining. Bears that have access to salmon grow substantially bigger than their cousins that have a more inferior diet of berries, small and large mammals, carrion, freshwater fish, etc.

The Bristol Bay sockeye salmon run is the world's largest surviving run of salmon; forty million sockeye salmon, spreading out through multiple river systems in a watershed that covers forty-thousand square miles. The area is home to seven-thousand-five-hundred people, most of them clustered near the coast, engaged in commercial fishing.

Salmon return to where they hatched to spawn and die. They begin to die once they leave salt water and enter fresh water, racing to spawn before they run out of life. Sometimes that journey can take a month or longer. The strongest (and luckiest) will survive the challenge to pass on their genes.

The collision of bears and salmon we described in the opening paragraph can involve over fifty

bears and a steady stream of salmon working upstream - so many that it takes weeks to pass this point. At Funnel Creek (a special place where multiple streams converge) the salmon pause to smell the waters to work out which stream to take to the point where they hatched.

Funnel Creek and Brooks Falls are just a couple of the many places that bears congregate to feast on salmon. Each of the other locations is magnificent in its own way and each has its own set of logistics.

Pebble Creek is a proposed mine for gold, copper, and molybdenum. The proposed mine is described as potentially the size of Manhattan and as deep as the Grand Canyon and the ore deposit is between two of the most productive salmon streams in the Bristol Bay watershed. Despite the environmental impact (research predicted major damage to the environment, the salmon runs, local tribal interests and the commercial fishing industry), the current US administration and the State of Alaska are pressing toward permitting this mine.

In light of that, let's not assume that this massive salmon run that draws these huge crowds of bears to feast is forever. If the bears can't find forage to ensure the long winters here, they may abandon this area, or be greatly reduced in numbers.



▲ FIGHT! - Funnel Creek
Nikon D500, 200-400mm lens
f/8.0, 1/1000sec, ISO 1000



BOB HARVEY & DIANE KELSAY

Both owners and guides for Nature Photography Adventures, a small US organization dedicated to getting photographers to special natural and cultural locations and phenomena at great times for photography. They have a long history in photography, conservation and planning international sustainable tourism.