

THE GREAT MIGRATION

Wildlife photographers and tour guides,
BOB HARVEY AND DIANE KELSAY,
offer some practical advice on how to
best plan and utilise your time when on
safari during the Mara river crossing

The Great Migration

Images of vast numbers of wildebeest and zebras plunging into the Mara River, leaping over crocodiles, and navigating the river with sheer panic in their expressions are like a magnet to wildlife photographers. Witnessing this and capturing spectacular images is one of the holy grails of nature photography, especially now that infrastructure is in place to get you close.

But, how do you plan this? What is the experience like? And what do you need to do to come back with great images?

THE SETTING

The Mara River and its tributaries forms a watershed in the northern Serengeti and adjacent southern Kenya. Rains in July to September (varying year to year) draw the great migration into this zone – and also periodically swell the river, making it more difficult and dangerous to cross. Mix into that a population of giant Nile crocodiles, some twenty feet long, which only need one good meal a year to survive, waiting in position to overpower the unlucky wildebeest or zebra.

In the symbiotic relationship between zebras and wildebeest, it is the wildebeest which smell distant rainfall and follow their noses toward it. There are not true leaders, just masses of wildebeest following their noses and each other. The zebras, missing the ability to sense rainfall, tag along, but bring with them a much more finely tuned alertness and sense of predators.

The Great Migration does not follow a specific repeatable route, but surges in whatever direction the last rain fell. Over the year, it traces a jerky clockwise pattern around the Serengeti, with segments of

the vast herds often moving in exactly the opposite directions of each other in any given moment. From July to September, that leaderless motion toward the smell of rain often brings groups of wildebeest and zebra to a crossing of the Mara, or one of its tributaries.

Think about the light. Wildebeest are dark and a backlight angle with sun on the water creates both dramatic light and challenging dynamic range issues.

THE WAITING

Herds of wildebeest and zebras find themselves on a steep bank over a river – a seeming barrier between themselves and the anticipated fresh pastures. Fear presides as they line-up along the edge, sometimes hundreds of faces-wide, all looking out over the river. As followers, they wait for anyone else to go first. A few will go down the bank to a lower shoreline, chicken out and try to get back up to the main herd. This can repeat itself many times, seemingly without end.

Vehicles full of photographers and other travelers are required to hang back from the edge of the river that the wildebeest might come to, lest they intimidate the herds and prevent the crossing. That can put you, as a photographer, quite a distance from the wall of faces staring across the river and the wait can seem endless.

There are many times when fear overcomes the desire to eat and the gathering herd retreats or moves parallel to the river. Some days there is no crossing at all. Then, the pressure from behind that front row of wildebeest nudges one into the water., or one close to the edge slips and stumbles in. It might turn around and go back or it may, frantically, charge across. If it splashes toward the other side, others will follow and soon hundreds, or even thousands, will follow. Every one of them will be a portrait of terror waiting to be photographed. The crossing event begins; vehicles suddenly move toward the river and the feeding frenzy of photography commences. ►►



Mara River, crossing underway
Nikon D850, Nikon 70-200mm
f/9, 1/800sec, ISO 640

Diane Kelsay

▶ THE ACTION – WHAT TO EXPECT AND HOW TO DEAL WITH IT

There are many good angles and most guides have been through this before and will have ideas on where to position you. Beware of plant life along the river's edge interfering with your shots. A good guide will also reposition so that photographers on each side of the vehicle get the front row some of the time.

Think about the light. Wildebeest are dark and a backlight angle with sun on the water creates both dramatic light and challenging dynamic range issues. You really want to capture those expressions on the dark faces, but you want the highlights in the splashes to hold detail too.

You should be working that action with a lens range between 200 and 800mm (or the equivalent if you are working with a crop sensor). You'll need the shorter end of that range when clusters of wildebeest or zebras come at you and the longer end of that range when you are trying to isolate one animal.

You will be capturing images from a safari vehicle, which likely has other photographers moving about and rocking the boat. You will also want to stop the action (for most images) – not only of the animals, but of the water being thrown about as well. We usually make most images between 1/1000 and 1/2500 of a second.

Think about depth of field; at forty to fifty meters, it doesn't take a lot of depth of field to deal with one animal, but more is needed to keep a group sharp. Keep your ISO as low as you



Crocodile attack, Mara River
Nikon D500, Nikon 200-400mm
f/9, 1/2000, ISO 1250

Bob Harvey

can and still achieve the fast shutter speed and sufficient depth of field. Remember, the higher the ISO, the lower your dynamic range. You don't want to land the perfect shot and have either, or both, the highlights or shadows void of detail. Work in RAW, as there is no point in throwing away data in this challenging situation.

It's tempting to select your highest frame rate and mash the shutter, but be selective and maintain space in your buffer. There will be moments when panic sets in, or a crocodile approaches when you will really need that buffer and fast frame rate. You will kick yourself if you hit the full buffer wall.

The crocodiles can be difficult to spot. They often lurk underwater and then emerge suddenly near a fragment of the crossing group. Be ready, quickly make any adjustments, and capture lots of images and don't assume that a wildebeest under attack will not escape. Once a crocodile attack begins, there will be many panicked faces and actions of the nearby wildebeest to capture.

As the crossing intensifies, look for both wildebeest and zebras flying-off the high bank toward the river. Sometimes they go down narrow chutes and kick-up a lot of dust – other times it's a giant leap to join the group ahead of them.

Don't forget to pay attention to the bigger scene. When there is a ribbon of wildebeest and zebras stretching from bank to bank and a crowd on the far shore pushing toward the river, a wider establishing shot will help you tell the story.

If you have the opportunity to photograph more than one crossing, try to get into a completely different position each time. One time, let the animals move toward you, another time try for a more sideways angle. Remember that the wildebeest choose the spot and your guides are working ▶

Cheetah family in the central Serengeti
Nikon D850, Nikon 500mm
f/6,3 , 1/1000sec, ISO 2500



► within parameters designed to protect the migrating herds, so don't pressure the guides to flout the rules. The consequences for them are severe and the opportunity for all of us depends on respecting the animals and the rules.

THE BIG PICTURE AND WHAT ELSE IS THERE TO DO?

When the crossing isn't imminent, there

are a wealth of other wildlife (and scenic) photographic opportunities nearby. Don't pout, work with what nature gives you. On the day we did our best Mara crossing images in 2019, we started the day with a pride of over twenty lions that our group was reluctant to leave!

In the dry regions of sub-Saharan Africa, water is a magnet for animals. Grazing animals are drawn to pastures and drink from

rivers and pools. Predators work those zones, looking for careless, injured or weak animals to feed upon.

The Mara watershed is no different. This is a rich feeding ground for many ungulates. All the big cats (lion, cheetah and leopard) are dining and raising families on the wealth of fresh meat. Hyenas make their own kills and also steal them from other predators. Jackals join the clean-up crew and do their own

hunting too. A wide variety of raptors, storks and vultures do their part in finishing off what the big cats start, also helping the crocodiles with their kills.

If your guide suggests the crossing won't happen for a while and wants to find something else for you, rest assured they will be in contact with other guides and hurry you back if a crossing seems imminent. Someone is always watching!

PLANNING ADVICE

This is not the time to be a photographer in a group that is not dedicated to photography. Those non-photographers will not have the patience to sit so you can be in position when the action happens. Join a dedicated photography tour designed by people focused on the needs of photographers.

Some days there is no reason for the herds to leave the green pastures they are standing in. Other times you can find herds on both sides of the river, each ready to brave the waters and get to the other side.

There are good reasons why one would approach the crossing from both Kenya and Tanzania. We take groups of photographers to both sides, but do understand that you have to pick a side – the two countries do not allow safari groups to cross the border.

In both countries, you can approach the Mara crossing zone by either safari vehicle or by flying in. Be aware of weight limits on your flight. We photographers tend to bring weighty gear and the local airlines look at total weight of hand and checked luggage. ►►

Lion, Northern Serengeti
Nikon D850, Nikon 70-200mm
f/14, 1/500sec, ISO 500

Diane Kelsay



► Sometimes, the solution is to buy extra seats, but there is a danger that the airline will charge you for those seats and then sell them to someone else as well and your camera gear is the weight they will want to leave behind. If you are buying a photography tour, find out how they deal with the weight of gear. If they haven't thought that through, or suggest you leave behind your favorite lens, look elsewhere.

There are good airlines, with great Covid-19 safety plans in place, to get you to either Kenya or Tanzania. The tourism industries of both countries have worked hard to create tourism bubbles that insulate visitors (and those who work with them) from the general

population. Still, be covid-alert, especially on international flight routes and until you have established that those sharing your tour are healthy.

Photographing the Mara crossing is not simple or guaranteed. The great herds are not poised on the river's edge waiting for you to drive-up to put on a scheduled performance. Remember, the herds follow the smell of rain toward greener pastures. Some days there is no reason for the herds to leave the green pastures they are standing in. Other times you can find herds on both sides of the river, each ready to brave the waters and get to the other side.

The long and short of this is that you need to build-in multiple days at, or near, the crossing to ensure that you witness

and photograph the event after making the investment to get there. As you look at providers, find out how many days they dedicate to potentially photographing the crossing. We suggest two as a minimum, but three really increases your odds. It is nature, so there is no guarantee.

WHERE TO LODGE?

Every tour operator has its own formula. Some of their decisions are about money – making their offer more 'competitive'. Others focus on luxury. Our thoughts, as photographers, are about photographic issues. We have seen wars between groups when a lodge doesn't have adequate opportunities to recharge batteries, or to plug-in for downloading. We always now

choose camps and lodges that guarantee every room has the ability to plug in, download and recharge. Even so, with changing ownerships of camps, be prepared for less than optimal conditions. Ask your operator to let you know if situations change.

We're also interested in the position of the lodging. How many hours, over what kinds of terrain, will it take to get in position for the crossing? If you are tying-up four hours a day coming and going, that cuts into your odds of being in position when a crossing event happens. The other side of this is that any mile traveled in this region is a potential treasure trove of photographic opportunities. ►►

Nile crocodile in the Mara River
Nikon D500, Nikon 500mm
f/8, 1/2000sec, ISO 1000

Diane Kelsay



Crossing drama, Mara River
Nikon D500, Nikon 500mm
f/7.1, 1/2000sec, ISO 1600

Diane Kelsay

► If you are approaching the crossing from the Tanzania side, your visit will begin and end at Kilimanjaro Airport, outside of Arusha. That puts you in position to visit a number of exciting parks and ecosystems along the way. This time of year, we are most excited about the Central Serengeti and Tarangire National Park. The Central Serengeti gives you good chances for cats, cape buffalo, other ungulates, jackals, hyenas and more. Our favorite cheetah family of all time was photographed in the Central Serengeti after our 2019 crossing.

The Tarangire River is the watershed that makes Tarangire National Park so special. In the dry season, elephants are drawn to the river in huge numbers. This is an incredible opportunity to photograph interactions, families, landscapes with elephants – and more. The same dry conditions pack the park with many other animals and the predators that feed on the plant eaters.

You will, inevitably, be offered the Ngorongoro Crater. It's a very special place - but, if you've seen it in other

seasons, you'll be disappointed at this time of year.

If you are approaching the crossing from Kenya, you will arrive and depart from Nairobi – a large, modern city. Kenya is a more developed country than Tanzania with fewer large reserves. But, it also has concerted programs to bring some threatened species back from the brink. It is easy here to put yourself in a huge natural compound where both black and white rhinos are roaming with no apparent concerns for safety.

We are big fans of Amboseli National Park, where perpetual waters create a green oasis which draws in a wealth of animals and puts them in the foreground while Africa's tallest peak, Mount Kilimanjaro, rises behind. We especially like to watch elephants marching through the dry 'pans' to get to those green areas. And, to be in position for the crossing, you will be situated in, or close to, Kenya's Masai Mara and the fabled Mara Triangle. This is Kenya's part of the Great Serengeti (most of which is in Tanzania) and is an incredible place to find a full range of the creatures that make a journey to sub-Saharan Africa rewarding.

When you are finally in position - and the waiting line of zebras and wildebeest suddenly break and begin flailing across the Mara River - live in the moment. Concentrate on the action, but keep your eyes peeled for smaller actions off to the side. Perhaps a stray group of wildebeest are suddenly panicking. That's how you'll find that crocodile making its move.

You will be presented with endless opportunities to build compelling compositions, ones that capture action which doesn't seem to be replicated elsewhere in the natural world; compositions that showcase the absolute terror on the faces of the wildebeest as they slip and slide and hop their way across the river.

The crossing begins abruptly and can shut-off at any moment, so work quickly and absorb everything. The images in your mind are as important as the images you create with your cameras. ●



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.