

Press Release:

The Blacktip Sharks (*Carcharhinus limbatus*) of South Africa are the subject of a new ground breaking collaborative scientific study. Shark Scientist Jessica Escobar-Porrás has chosen Blacktip sharks as one of the key species to be studied in a comprehensive genetics study of sharks for her doctoral dissertation. “These are one of the largest of the reef sharks and are totally undervalued as a marine tourism resource in South Africa. Add to this the fact that we know very little about this species from a scientific point of view and they are not protected in South Africa. You can see my motivation for including them in the study!” enthuses Jessica. “The results will have a direct bearing on South Africa’s Blacktip shark population and their relationship to Blacktip sharks in the greater Indian Ocean region. Currently they are seen as a single lineage. Previous studies have shown that there are differences between this genetic lineage and lineages in other parts of the world but none have looked to the possibility of genetic differences within this huge geographic area” says Jessica.

Jessica is registered for her doctorate at the University of KwaZulu/Natal. Dr. Angus MacDonald from the School of Life Sciences at the university is her supervisor. This dynamic scientist is currently holding down three jobs to fund her research. Jessica’s hectic schedule sees her lecturing at UKZN, fulfilling the role of research assistant to Dr. MacDonald as well as conducting demonstrations at the laboratories within the university – all of this while doing the field work and writing up of her doctorate on multiple species of shark in various geographic locations along South Africa’s coastline!

The Blacktip shark component of Jessica’s genetic study is a unique collaboration between her, shark dive operator Blue Wilderness and an international organisation, Ocean Encounters, headed by freedive legends Fred Buyle and William Winram. Fred and William collaborate with scientists around the world by offering their unique freediving skills to conduct non-lethal and non-destructive scientific research on sharks.

The duo have worked on White sharks in Guadalupe, Hammerhead sharks in Malpelo, Great Hammerhead and Lemon sharks in French Polynesia and just recently a tagging study of Bull sharks (better known as Zambezi sharks in South Africa) in Reunion to answer critical questions about the habitat usage of these sharks and conflict with marine users in the all too well documented spate of attacks around the island.

The goal of seeking answers to very real and relevant questions regarding sharks and providing real answers and solutions to marine users and coastal communities is at the forefront of Ocean Encounters quest and a project like Jessica’s was a very natural fit according to Fred. “The need to understand where these Blacktips have come from and what the relationships between the individuals are is critical to the understanding of this species on your coast and has enormous positive spin offs for South Africa’s shark diving tourism” says Will. Both Fred and Will have been regulars to South African shores exploring the amazing shark fauna for several years and have both seen huge changes in the marine environment recently. “Against this back drop it is probably more important now than ever before to invest in the science of your coast.” according to Fred.

Mark Addison of Blue Wilderness is absolutely blown away by this unique collaboration and the unqualified success of the project so far. “None of this would have happened or come about without Jessica’s enthusiasm, passion and work ethic or the collaboration of Fred and Will. The hurdles and challenges of a project of this nature are enormous. Just getting through the red tape to be able to do the work would scare off the most determined individuals.” says Mark. “I am really grateful to Jessica, Fred and Will for giving our sharks a chance.” continues Addison. “Seeing this research translate into a more informed experience for clients will be a huge boost to our tourism offering here at Shark Park let alone on the rest of the coast which this species calls home. After all, a client who chooses to come to South Africa and then dive with our Blacktip sharks has probably made this decision over many other shark diving destinations around the world and I really see this new science as giving us the edge when they make their informed decisions.” says Addison.