## SHRED Interview of Paul Baribault, President & CEO of San Diego Zoo Wildlife Alliance - January 2023

1. What do you think are the top environmental issues facing the world today? Of these, which ones do you think humans can make a definite impact on?

The world is interconnected. There is not one issue that we can all focus on to resolve the health of the planet. We need to think of the planet as one giant ecosystem. So, if we want a healthy environment, we need to maintain healthy local ecosystems, we need to maintain healthy populations of local wildlife to create those healthy local ecosystems, and we need people to live in better balance with nature. One of the simplest statements I've ever heard on the topic of planet health is that the planet is going to be fine no matter what we do... We're putting at risk our ability, as a species, and countless other species', ability to live on the planet. That's what we have to maintain a focus on.

So, planetary health as it relates to human health, is directly tied to having healthy ecosystems, healthy wildlife living in those ecosystems, and humans striving to live in balance with nature.

Humans directly impact all three areas (ecosystem health, wildlife health, human health). We can make huge strides in all of these, and have proven we can:

- Going back to the 1980s, LA's Smog was so bad, your parents and I had smog days in school, where we couldn't go outside to play sports. With a concerted and focused policy effort, and a balanced approach with businesses, the city of LA turned things around and totally eliminated what was once a crisis.
- For wildlife health, we have misunderstood for far too long the important role wildlife plays in maintaining healthy ecosystems. One of the best recent examples of this is of the wolves being reintroduced to Yellowstone

national park. Before they were re-introduced, rivers were often flooding, pastures had largely become dead from overgrazing, and the soil was in effect dying from a depletion of nutrients. When the wolves were reintroduced by humans, the wild grazers (eg. Deer) stopped hanging out all day in the pastures and fields, for fear of being hunted by wolves. That allowed the grasses to grow again, which allowed insects to return. Insects returning allowed smaller species to return to the fields, which gave larger species a food source, allowing them to once again start naturally fertilizing the wildlands of the park. Life sprang back in a manner of a few years. All because a single apex predator was reintroduced to the national park. This did create other impacts, most notably, the reintroduction created some human-wildlife conflict, because a predator was now impacting managed herds of sheep and cattle. But, this is an important reality. We, as humans, have to be better at learning to co-exist with wildlife. This is as true in urban centers as it is in kenya where villages are attempting to coexist with elephants.

- Humans experienced in 2020 what happens when we put too much pressure on nature. COVID came from a bat species being sold in a "wet market" in china. This situation was created due to increasing human demand for food and space. Nature will fight back the more pressure we put on her, and this is just one of many examples of nature reminding us that nature will continue. Whether the planet is livable for us is going to be tied to whether we learn to better coexist with nature.
  - 2. While the San Diego Zoo and safari park seem to mostly deal with land based animals and mammals, are there areas in the zoo that touch on the ocean ecosystem and any of its species?

YES! Actually, some of our most impactful work we do is with Polar Bears. We work closest with Polar Bears International, the most world renowned polar bear conservation organization on the planet. We helped them get their start nearly 20 years ago and have been supporter both financially,

through conservation science and technology leadership in the field, and leveraging our own skills on grounds. We have been leading a study with our polar bears at the zoo to understand their caloric burn rates. (Think of a fitbit on a polar bear!) . By learning their caloric burn, we can better understand their true ranges. So, as food sources shrink for them in the arctic, we are helping to understand how their population is being impacted from a scientific standpoint. The more fact driven data we can help bring to the conversation, the more we can move the needle on policy to protect these great creatures and symbols of climate change. Further, the research we are able to do at the zoo can only be done in a managed care setting. We are accelerating the knowledge of our partners in the field by decades because of what we learn about bear behavior and physiology right here in San Diego. One of the foremost polar bear scientists in the world, Dr. Megan Owen, is on our staff, is vice president, conservation science and leads all our scientific work.

We also do robust conservation work around penguins at the southern tip of South Africa. And, we have some really remarkable work we have yet to announce around Killer Whale population studies we are doing. More to come on there, but, it involves drones and analyzing breath samples when a killer whale surfaces at sea... groundbreaking and innovative.

3. Some people have a negative connotation of zoos and their treatment of animals. As one of the preeminent zoos in the world, how does San Diego Zoo Global counteract these stereotypes? What might critics not know about the positive impact the Zoo, Safari Park and Wildlife Alliance have locally and globally?

This is a great question and one I couldn't possibly do complete service to here. I view the core of most negative views toward zoos as tied to two realities: (1) There are over 3,500 "zoos" in the united states today. Only 260 of them are accredited by the association of zoos and aquariums, which means only 260 of them adhere to the highest standards in the world

of animal care & health management, nutrition, habitat design, and much more. Those other over 3,000 other places are everything from roadside zoos, and tiger king -type horrors, to even some places labeled as sanctuaries. And sadly, most sanctuaries, which tend to carry a public perception as being better places than zoos, tend to have barely acceptable care, health and nutrition standards being adhered to. And, (2) Zoos have historically done a terrible job telling their story, and that is because most people who come up through Zoo leadership are not storytellers and simply do not understand how media works. And as a result, over the last 20+ years, zoos have intentionally stayed quiet afraid to engage in a public dialogue around all the amazing work many of them do. San Diego Zoo Global (Now, as of 3/21, San Diego Zoo Wildlife Alliance), was no different before I joined. But, I have completely changed that. See this recently published interview in Forbes for further context: https://www.forbes.com/sites/jefffromm/2022/12/15/the-challenges-of-a-more-sustainable

e-society-are-reshaping-the-zoos-of-tomorrow/?sh=3a9421a813ba

What is essential to understand is all the expertise a zoo curates and uses to help the world's wildlife populations. We have conservation science professionals, nutrition experts, wildlife health experts, geneticists, sustainability experts, disease investigation leaders, and even a few robotic technology innovators. What we learn caring for wildlife every day allows us the ability to share our knowledge with our partners around the world. Sharing with them key insights, understandings, and perspective around wildlife that would be impossible to gain in the field. We export those skills and raise the bar around what's possible to protect, care for, and manage wildlife globally. One example of this is with our work in Northern Kenya. We support Reteti, the only community led, elephant orphanage in the world. We show up there and offer the community our expertise in veterinary care, nutrition, elephant management, etc. We help them with learning how to share their message with the world and how to build coalitions in their region. We show up in service to support them, which for me is key in terms of how outside help needs to be offered today to communities around the world. But, there is no question Reteti would not be the success it is today, taking in elephant orphans and re-leasing them

back into the wild today, without all the expertise and knowledge we have shared with them over the year. And I have countless more stories I could share.

A recent example of our importance came from COVID. The gorilla troop we care for at the Safari Park were the first documented case of Gorilla's getting covid in the world. It drew a TON of media attention. (see Nat Geo Article:

https://www.nationalgeographic.com/animals/article/first-great-apes-at-us-zoo-receive-coronavirus-vaccine-made-for-animals). But, what was more fascinating to the public, but not surprising to me, was all the calls we received from ape conservation organizations in Africa. They had no idea how covid would affect wild populations, what the symptoms would look like, and what the impacts would be. They all called us, desperate to learn what the impacts would be, so they could try to better protect wild populations. Before the news broke in the press, I called Jane Goodall, as I am chair of her board, and wanted her to know this was coming. She said to me: "Thank god they are there in your care. There is no better place on the planet for them to be."

Today, we proudly lean into our work and the difference we make in the world. Leading Zoos are leading conservation organizations, driving revenue to reinvest in conservation work around the world. We invest millions a year, made possible by donors, guests, and members, who believe in our mission and look for us to use our expertise and experience to drive better outcomes for wildlife and ourselves.

We are proud of being the top zoo in the world, accredited by the AZA, and always look to share our story to further expand understanding and appreciation of the talent and skills we share with the world.

4. I understand you were the executive chair of The Aspen Institute High Seas Initiative. What was the goal of that

## organization and how did you impact environmental conservation?

I did do that for a short bit! Sylvia Earle, recognized by TIME Magazine as "Her Deepness", a Jane Goodall for the Ocean, and probably the most influential ocean conservationist in the past 50 years, asked me to join as Chair of the High Seas Initiative as they were trying to understand where they needed to focus to be most impactful. I was there really during the set-up and guidance phase. Had a couple retreats with Ocean Conservation luminaries (from Barbara Block, to Brian Skerry, to David Shaw & others) and laid out an approach. The problem we were trying to address was: every nation bordering on an ocean has its own exclusive economic zone (EEZ) into the ocean. 200 miles. Everything within that boundary they can do whatever they want. Past that point, it is literally the wild west. There are no laws to protect the deep ocean, and as such, deep mining or trawling operations are expanding as technology allows us to operate deeper in the ocean than ever before. And, what's worse is most nations in the world quietly subsidize deep ocean mining beyond their 200 mile limit, at a deep loss, in the hopes of finding the next gold rush... whatever material/metal that is...

International waters are essentially pirated waters.

Plus, there has been an explosion of new technology deployed in the ocean, further speeding up the emptying of our oceans from an industrial fishing standpoint.

Like on land, its about maintaining a balance. A healthy ocean depends on healthy populations of wildlife. And people needing to maintain a balance with nature. On land, people can see destruction. In the deep sea, its largely invisible. We felt the High Seas Initiative, led under Aspen's banner, could bring governmental leaders in for a dialogue, to understand the realities, challenges, and risks of the decisions they were making, likely

without a clear understanding of the potential devastation they were creating.

We had marked that out as a goal. Had identified how to present the argument to world leaders. Identified a way to share the level of ocean health at risk by these actions. And, explained how stopping now would be a win for everyone. The reason stopping was going to be a benefit was because the deep sea is where most ocean life exists. They come into more shallow waters/ coral reefs, to breed. And then depart back to deeper waters. The shallow waters are often within the 200mi limit. So, if we get everyone out of the deep sea from a mining and fishing standpoint, and keep fishing efforts to within our own shores, we will really be creating the ability for the ocean to provide the world's coasts and fishing industries what they need to serve the public's demand. A near endless supply. But, if we fish and mine in the deep ocean, there will be no breeders to return to the shallows to generate more offspring. We are literally killing the hand that feeds us.

Our focus was keeping the ocean world in balance and getting key world leaders to adopt policies to reverse their current actions.

It should be noted, Sylvia has a hardline position against the planet eating seafood. She, however, has recognized the nature of the global fishing industry and recognizes trying to shut it down completely is an impossibility. But, making it more sustainable, needs to be a first step. She supports focusing on sustainability of the ocean as an important first step if she ever hopes for people to stop taking food from the ocean, with the exception of native island cultures with no option but fish for survival. (Felt I needed to share this because she is most on the record about her position re: seafood consumption and wanted to make sure you had that context)

5. How can students and young adults most effectively make a positive impact on our ocean ecosystems and help build awareness/help environmental change in general?

Most importantly, students and young adults need to work to stay informed. Its super easy, in a social media driven new world, to hear the loudest person, or the person with the most likes, or the person who you have shared interests and perspectives with. That rarely leads to a well-informed public. We can all see how its failed the public's political discourse.

Look to conservation organizations such as ours to understand our work. In our work are the problems we are trying to solve and who we are working with to achieve results.

Look for organizations striving to meet the UN Sustainable Goals. Those goals are designed to create a more sustainable planet. We have aligned our work to work toward these goals across multiple areas – from sea and land to female empowerment and community leadership.

Get engaged with conservation organizations that pique your interest and are out there doing real, tangible work. If the work being presented by the organization is too hard to understand, chances are its not as effective or as efficient as it should be. If its an org seeming to spend more of its budget critiquing or criticizing how work is being done, their budgets are likely being spent more in courtrooms than in the field.

Look for innovation and a vision of hope. We all need hope!

We are living in one of the most remarkable times in human history. The world is changing rapidly. The extreme weather events across the world the last couple years are a canary in the coalmine. We have the knowledge and understanding better than any time in our history to see what is happening to our shared ecosystem. And, we also are at a point of history where we have more people in the technology and innovation space than ever before. We can still change the path we are on, but just like with the smog in LA in the 80's, we need to understand what success looks like, and take the actions needed to change outcomes.

I am proud to lead an organization dedicated to leveraging all the skills and knowledge we have built over the last 100 years and put it toward creating real and meaningful change in the world. Collaborating, Innovating, Inspiring, so that we all may Thrive.