



**SAFE**<sup>®</sup>  
SAVING ANIMALS  
FROM EXTINCTION

SHARK AND RAY

2025-2029

## Conservation Program Plan

By 2035, we have built diverse partnerships to deliver effective action for the conservation and recovery of sharks and rays.

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# Our story so far

SAFE Shark and Ray aims to enable evidence-based support for conservation action for all 1200+ species of sharks and rays; engage action among key collaborators and the public; support science-based shark conservation communication; and create opportunities for direct, impactful, and collaborative support for conservation and recovery of this taxa.

Operating under the International Union for Conservation of Nature (IUCN) One Plan Approach, this program plan integrates ex situ and in situ conservation. It coordinates and maximizes the collective expertise and opportunities of zoo and aquarium professionals working with elasmobranchs in human care, and conducts in situ research and conservation action for the recovery of sharks and rays in the wild.

As one of the original SAFE programs within the Association of Zoos and Aquariums (AZA), SAFE Shark and Ray is entering its ninth year since inception, and has successfully completed its second Conservation Program Plan. As a model and highly visible SAFE program with a broad species focus, the vision statement created during the planning process extends the designated timeframe for this third, five-year plan, as our goal is to remain relevant, intentional, agile, and responsive to conservation needs throughout this Conservation Program Plan and beyond.



## Our Vision

*By 2035, we have built diverse partnerships to deliver effective action for the conservation and recovery of sharks and rays.*

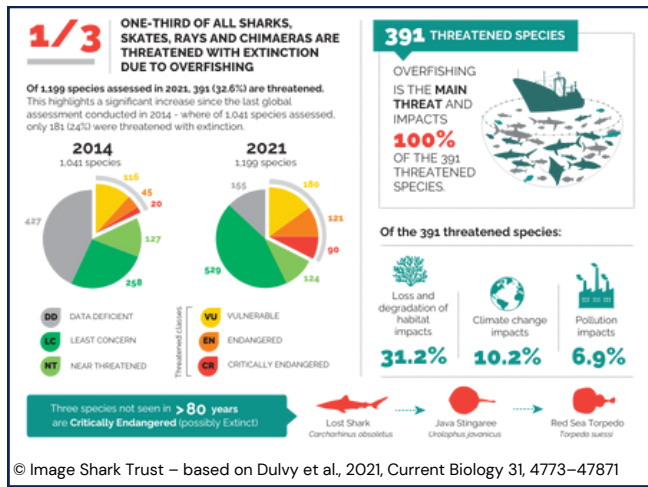
Though global shark conservation has made great strides in recent years, there is much that needs to be done. This team has increased its capabilities, strengths, and opportunities for collaboration and partnership through implementation of our previous conservation program plans.

With a broad species focus, this new 5-year plan capitalizes on where the AZA community is best positioned to produce the most meaningful impacts on the conservation of sharks and rays. We will remain flexible and intentional about focusing on taxa-specific programs, projects, and partnerships that align with objectives outlined in this plan, and work to advance research and conservation for both in situ and ex situ populations. Our plan positions AZA, alongside diverse internal and external stakeholders in global shark conservation, as influential advocates for science-based shark conservation, and empowers and equips our partners to bring their unique strengths to a collaborative effort for elasmobranch conservation and research.

Efficient and effective facilitation of the planning process following the [IUCN Conservation Planning Specialist Group Model](#) ensured that we produced a concrete plan to address the most pressing conservation threats, and maximize all available resources, to safeguard sharks and rays against extinction threats and support efforts to recover populations.

# Conservation Target & Status of Taxa

Sharks and their relatives, skates and rays (*Class: Chondrichthyes, Subclass: Elasmobranchii*), form one of the most fascinating and charismatic groups of marine wildlife. Globally, there are over 1200 species reflecting a huge diversity in biology, behavior and habitat. Though they face anthropogenic challenges common to all wildlife, the overwhelming threats are from destructive fishing practices. Inadequate governance and ineffective fisheries management are depleting populations across the world's ocean.

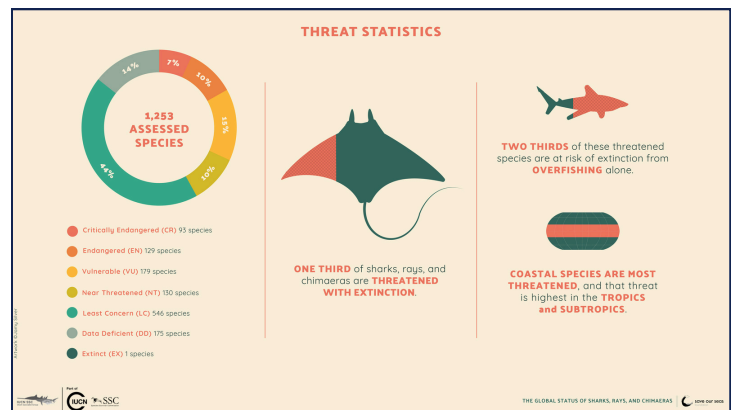


The 2014 [IUCN Red List](#) of Threatened Species for sharks and rays estimated that one-quarter of sharks and rays were at risk of extinction.

A 2021 reassessment, released by the Global Shark Trends Project, increased the percentage to over one-third of species, and listed 90 species listed as critically endangered species.

Since these reports were released, much has happened in the world of shark conservation in the areas of research, policy, and collaboration to address the emerging threats and changing marine ecosystem.

In December 2024, a new [IUCN Global Status of Sharks and Rays Report](#) was released that updated these assessments to 1,253 species assessed, with current data indicating that **2/3 of threatened species are at risk of extinction due to overfishing alone.**



# Conservation Target & Status of Taxa

*continued*

*This Conservation Program Plan details how we can use AZA institutions' unique position, access and knowledge base to engage in the global collaborative effort to secure a positive future for sharks and rays through a science-based approach to conservation.*

The SAFE Shark and Ray program adopts a holistic approach to the conservation of all 1200+ shark and ray species, supporting and integrating with the goals of science-based conservation. Species-specific initiatives will be encouraged and incorporated into the program, and will be conspicuously linked to the wider goals.

The broad species focus adopted by this program plan necessitates a focus on where the AZA community can best produce a meaningful impact on the conservation of shark and ray species. The target is to establish AZA as an influential advocate for science-based shark conservation.

SAFE Shark and Ray partners are empowered and equipped to bring their unique strengths to this collaborative, while building upon:

- The unique connection with, and influence on, a broad group of non-specialist public audiences to deliver credible communication of shark conservation priorities and solutions.
- The wealth of experience caring for a diversity of sharks in a human-care setting to provide invaluable veterinary skills, techniques and datasets that produce positive outcomes for animals in in situ and ex situ research and conservation.
- The respect and position within wider communities to promote targeted behavior change actions with key stakeholder groups and audiences.



# Threats

## Overfishing

Overfishing is the primary threat for all threatened species and is the only threat for two-thirds of these species. Many species of sharks and rays are targeted for their meat and fins in commercial, artisanal, and subsistence fisheries. Others are caught incidentally in fisheries for bony fishes or other taxa that exhibit faster life histories that enable them to better withstand fishing pressures. While some non-target species are retained in significant numbers for international trade, other incidentally caught species may be kept for their meat for local consumption, or their fins for sale in international markets. Other uses include animal feeds, skins and other body parts made into apparel and accessories, liver oil for pharmaceuticals, and biodiesel fuel.

Shark and ray fisheries operate at local, national, regional and international scales and support complex global markets as well as local community economies. Effective conservation requires coordinated action on a global scale.

### Overfishing is exacerbated by:

#### 1. Lack of Species and Population-Specific Data

Many government agencies and non-governmental organizations are involved in ongoing study of patterns of shark diversity, abundance, threat, and conservation solutions.

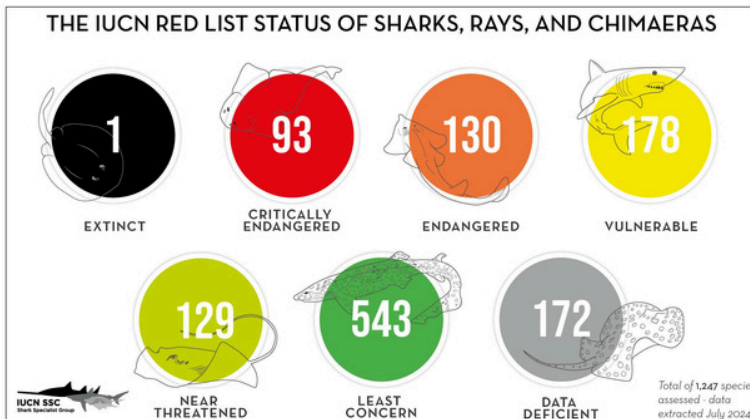
The July 2024 Assessment from the IUCN Red List of Threatened Species identifies that of 1247 species, 172, or 14%, are data deficient.

#### 2. Need for Policy and Legislation

Policy initiatives involving species and habitat protection, fisheries management and trade regulation play a vital role in shark and ray conservation.

However, there is a lack of appropriate policy and legislation for, and implementation of, effective management measures such as population-level take limit quotas, and marine protected areas.

The United States National Oceanic and Atmospheric Administration (NOAA) and international agencies have historically recommended a variety of domestic and international policy and regulatory actions to achieve sustainable shark populations, however adoption and implementation of many of these is still inadequate.



*We have developed a robust area of work to influence conservation policy through our goals, objectives, and actions listed in the **Implementation Strategy***

# Threats

## *continued*



### **3. Habitat Loss and Degradation**

The loss of habitat, such as mangroves and estuaries which are critical nursery areas, to residential and commercial development, agriculture, aquaculture, and natural system modifications, like dams or dredging, worsen the impacts of overfishing in nearly one-fifth of species.

### **4. Climate Change**

Anthropogenic climate change through the burning of fossil fuels threatens 10% of shark and ray species with extinction and exacerbates overfishing and habitat loss through two mechanisms. Effects of climate change are rapidly degrading coral reef ecosystems due to increased sea surface temperatures and subsequent decreases in coral cover from bleaching and disease. Further, many temperate species are declining in the equatorward portion of their range because it is less ecologically suitable due to higher water temperatures.

### **5. Pollution**

Pollution from a wide variety of both point-source and non-point sources can be a non-lethal stressor that compounds other threats.

Effective, science-based, inclusive and accessible communication can be a powerful ally to shark and ray conservation efforts. It's vital to engage a broad cross section of public audiences in the priorities for contemporary conservation and the vital role of science, policy advocacy and sustainable fisheries management. As trusted messengers for conservation solutions for the general public, our program is uniquely situated to capitalize on our massive audiences to influence positive behavior change to benefit elasmobranch conservation.

### **6. Misaligned Public Attitudes**

Media portrayals of sharks are subject to exaggeration and misrepresentation. Negative human/shark interactions, with a focus on a narrow group of species, influence the wider public perception of the taxa. Popular shark documentaries frequently focus on a limited and unrepresentative scope of research methods and professional diversity.

Though the impact of this representation on public attitudes about shark conservation is unproven, it is widely anticipated to be a factor in engaging support for conservation efforts.

Recently, attention has turned to the media portrayal of conservation solutions for sharks and rays. However, research has identified a mismatch between scientists' recommended approaches to shark conservation and the reporting of more values-based campaigns.

*Our focus in this conservation program plan on "Living with Sharks" uses proven methodologies from IUCN and current social science research to identify emerging conflicts, engage communities and develop communication strategies around human/shark interactions. These tactics foster coexistence with predatory marine wildlife and prevent the potential roll-backs of shark protection measures.*

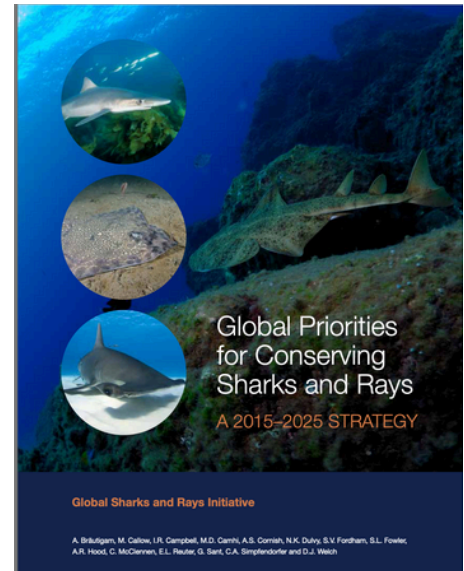
# Recovery Plan

The 2022–2024 SAFE Shark and Ray Conservation Program Plan is aligned with the Global Priorities for Conserving Sharks and Rays: A 2015–2025 Strategy, published by the Global Shark and Ray Initiative (GSRI). While soon to be completed, the Strategy’s goal is stated as, “By 2025, the conservation status of the world’s sharks and rays has improved – declines have been halted, extinctions have been prevented, and commitments to their conservation have increased globally.” GSRI’s ambitious goal is yet to be fully realized, and therefore this program plan will continue to align with the 2015–2025 Strategy, where feasible.

Our 2025–2029 SAFE Shark and Ray Conservation Program Plan also aligns with, and complements the strategies of, other international organizations including the [IUCN Species Survival Commission Shark Specialist Group](#), the [Shark Conservation Fund](#), [American Elasmobranch Society](#), and [Save Our Seas Foundation](#).

We will also continue to align this work with the [Kunming–Montreal Global Biodiversity Framework](#) and its goal of halting species extinction by 2030 and achieving recovery by 2050.

Our plan will build on, and further define, existing partnerships and projects; incorporate new and diverse groups of stakeholders as identified through the planning process; and outline specific funding criteria for the life of the plan.



**THE BIODIVERSITY PLAN**  
For Life on Earth

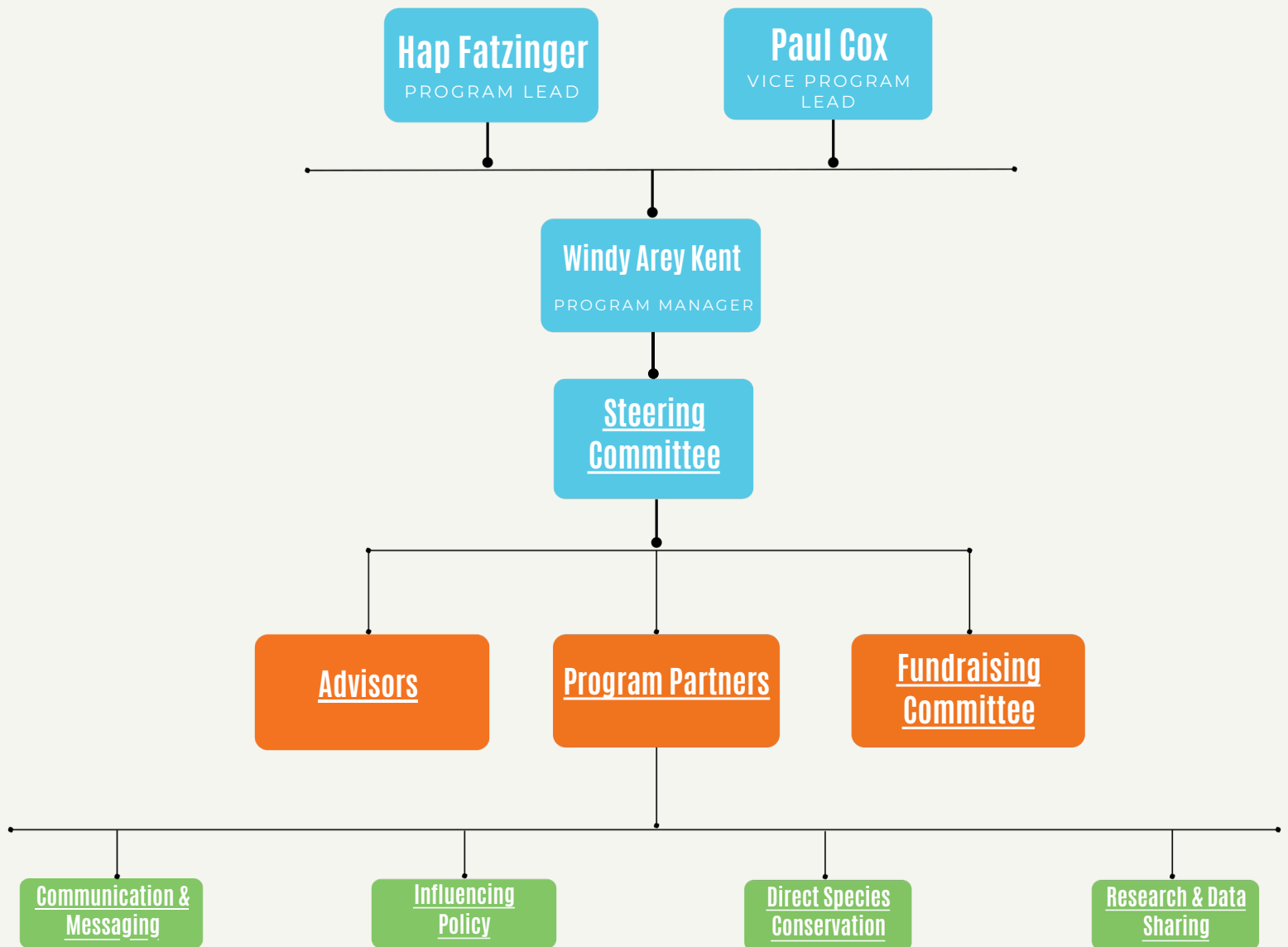
*Our SAFE Program Vision: By 2035, we have built diverse partnerships to deliver effective action for the conservation and recovery of sharks and rays.*



# Operational Structure



## 2025 ORGANIZATIONAL CHART



For the required contact list in each category, **click the hyperlink** in the associated box, or see [Appendix A](#).

# Pillars of Work



## 1

### Research & Data Sharing

- Expanding our networks beyond AZA and SAFE partners to include other zoological associations and in situ researchers
- Creating a structure for monitoring elasmobranch research priorities
- Increasing data sharing for greater impact
- Advancing elasmobranch science, health, and in situ and ex situ care and husbandry

## 2

### Direct Species Conservation Action

- Understand the science and strategies for breeding, reproduction and reintroduction
- Better defining what conservation and recovery looks like for elasmobranchs
- Better coordination and collaboration with other AZA-shark conservation programs to identify species in need and maximize resources

## 3

### Influencing Conservation Policy

- Empowering expertise within zoos and aquariums to advocate for policy and management processes
- Expanding, engaging and aligning with international partners to leverage our influence and impact
- Aligning with partners to address global shark trade and communicate demand issues
- Coordinating global efforts on international fisheries policies

## 4

### Communications & Messaging

- Expanding audiences and representation, including internationally
- Developing audience-specific messaging and tools
- Promoting collective conservation action for elasmobranchs
- Sharing of best practices to increase communication between partners
- Coexisting with sharks to minimize human/wildlife conflict

# Objectives & Actions

To allow for flexibility within this document, and to enable the reader to easily follow the plan, we have included the Objective and Action Tables in the [Implementation Strategy](#) section.

Our team worked with a diverse group of global participants to develop these objectives and action tables. We followed the IUCN Species Survival Commission [Conservation Planning Specialist Group](#) process and conducted a series of six in-person and virtual workshops from February–August, 2024.



## Plan Reviews

The SAFE Shark and Ray program recommends that in addition to review by the AZA Wildlife Conservation Committee, this Conservation Program Plan receive reviews from the following:

- Aquarium Affairs Committee
- Conservation Education Committee

# Status of Taxa within AZA



Elasmobranchs are common in AZA-accredited facility animal populations because of their continued conservation significance as critical to healthy marine ecosystems globally, and guests' growing fascination with sharks and rays.

Elasmobranchs are under the purview of the Marine Fishes Taxonomic Advisory Group (MFTAG) (all shark and marine ray species) and Freshwater Fish Taxonomic Advisory Group (FFTAG) (freshwater ray species). The 2022–2024 SAFE Shark and Ray Program Plan reported 12 species managed as Species Survival Programs (SSPs) within their respective TAGs. Since then, AZA reimaged SSPs in collaboration with TAGs and the Wildlife Conservation Committee, and decreased the number of species collaboratively managed by both the MFTAG and FFTAG to four programs:

- zebra shark, *Stegostoma tigrinum* [Signature SSP]
- spotted eagle ray, *Aetobatus narinari* [Signature SSP]
- sandtiger shark, *Carcharias taurus* [Provisional SSP]
- white-blotched river ray, *Potamotrygon leopoldi* [Provisional SSP]



**SHARKS & RAYS**  
AZA SAFE PROJECT

Regional Collection Plans (RCP) for both taxon advisory groups are scheduled for publication in late 2024. The most current species data across taxa is below and sourced from the Freshwater Fishes Regional Collection Plan (RCP) in 2017, and the Marine Fishes RCP (2019):

Representing:	FFTAG	MFTAG
Individuals	538	4598
Species	10 (plus 3 unconfirmed/hybrid)	99
Orders	1	11
Families	2	21
Genus	3	53

Many sharks and rays require advanced husbandry and veterinary care, a sophisticated life support infrastructure, a planned financial investment, and in some cases, complex habitat square footage for successful long-term care. These needs require thoughtful planning and a strong financial commitment. The increase in the number of species illustrates the importance of sharks and rays to the conservation and environmental education missions of AZA member facilities and illustrates continual improvement in husbandry and understanding of species biology.

There are currently 271 unique chondrichthyan species entered in the SAFE Shark and Ray International Census of Chondrichthyans in Human Care (Chondro Census), representing 247 facilities across 55 countries – including AZA facilities. **This represents an 18% increase in facilities participating in the Census since 2020.**

# Conservation & Stakeholder Engagement

Many organizations are committed to working collaboratively with SAFE Shark and Ray to elevate and amplify shark conservation now, and in the future. The SAFE program has benefitted greatly from increased participation from program partners. Over the past 3 years we:

- Increased the number of organizations, NGOs and businesses that became [program partners](#) by **62%**
- Grew the number of partners contributing time and resources to projects and programs
  - **12** organizations in leadership roles for SAFE projects
  - **52+** organizations that are actively engaged in SAFE projects
- Expanded our roster of partner and non-partner organizations contributing financially to SAFE Shark and Ray
  - As of publication, 29 organizations contributed over \$325,000 to the program
- Increased participation in Shark & Ray Awareness Day by **140%** over the three year plan (see next section for details)
- Increased global participation in projects
  - Added **4** Regional Coordinators and **2** Vice Chair positions to the Chondro Census
  - Secured international representation on the [Best Practices for Elasmobranch Handling Events](#) Working Group
  - Garnered international interest from World Association of Zoos and Aquarium colleagues to engage with the [Sustainable Feed Project](#) moving forward
  - Achieved global participation in [Shark & Ray Awareness Day](#)

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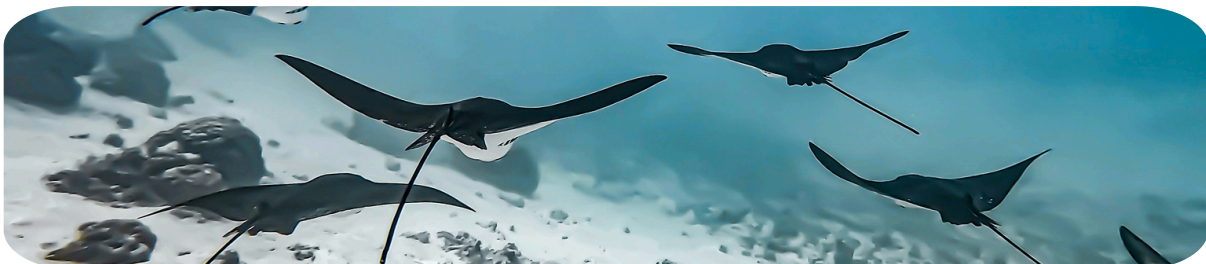
Funding partners

140%

INCREASE in participation in Shark & Ray Awareness Day

65+

Partners, Contributors & Funders



# Progress & Success

- Established and funded a full-time **Conservation Program Manager**.
- Successfully **achieved annual fundraising goals** to support projects and personnel, including receiving two AZA Conservation Grant Fund awards; partners hosting numerous fundraising events for SAFE; and support from businesses and individuals.
- Developed a **Best Practices for Elasmobranch Handling Events** resource, which includes digital and printed reference materials with an app prototype rolled out at the 2024 Annual Conference.
- The **Elasmobranch Blood Project** successfully collected 110 samples from partners to establish blood reference intervals for elasmobranchs. Cownose rays are completed and additional species are in progress including whitespotted bamboo sharks, brown banded bamboo sharks, Atlantic stingrays and yellow stingrays.
- Managed, maintained and increased participation in the **International Census for Chondrichthyans in Human Care** and increased volunteers to support the implementation globally.
- In partnership with the Aquarium Conservation Partnership, launched the **Sustainable Feed Project** to assess the sustainability of seafood fed as animal feed in our operations. 55 organizations participated with 10 of those organizations supporting a pilot Business Commitment to “feed sustainable” seafood to animals in our care.
- Worked with the AZA Conservation team to evaluate shark research and conservation project data from the 2021 and 2022 Annual Report on Conservation and Science (ARCS) database, and develop a queryable **list of elasmobranch research projects** in AZA organizations to share broadly with the in situ research community.
- **Hosted a Symposium** at the 2024 annual meeting of the American Elasmobranch Society (AES) titled ‘Contributions of Aquariums to Elasmobranch Research’ highlighting the unique and important elasmobranch research efforts conducted and led by aquariums, and to promote increased collaboration between the field research and aquarium communities.
- Increased support for AZA aquatics community at **CITES Conference of the Parties (COP 19)** by promoting and supporting the inclusion of an AZA Aquatics Expert for the AZA COP team.
- Created social media platforms for SAFE and distributed a monthly newsletter to ~400 subscribers.
- Completed a **formal evaluation of our Messaging Framework** to identify and address barriers to partner integration, and their areas of need, and delivered 5 virtual and in-person training sessions for AZA members focusing on the evaluation outcomes.

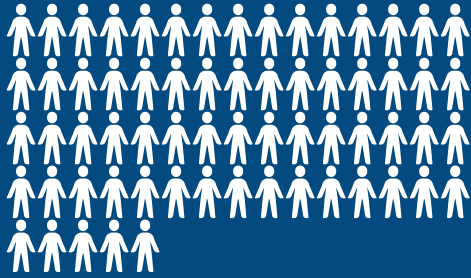
# 2022-2024 SAFE Shark and Ray Conservation Program Plan

# Highlights

at a glance

LAUNCHED SAFESHARKS.ORG  
WITH 26,500 UNIQUE  
VISITORS SINCE JUNE 2022!

# 65



PROGRAM PARTNERS, FUNDERS  
& CONTRIBUTORS



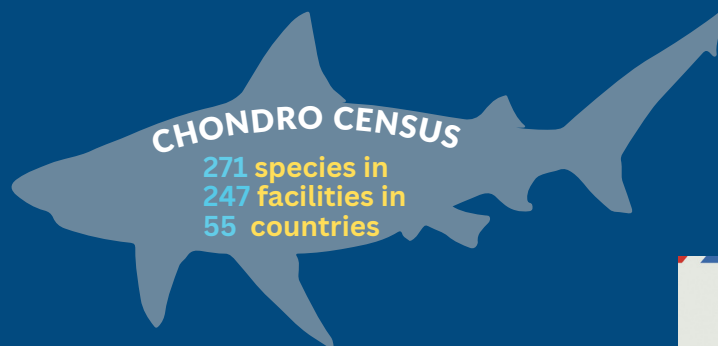
# 54+

PARTNERS CELEBRATED



# 11

SUDS FOR SHARKS  
FUNDRAISERS  
GENERATING  
\$17,500+!



# \$52,643

awarded through the AZA

# CONSERVATION GRANT FUND

# 5

Joint policy  
support letters  
delivered

# Public Awareness Activities

A cornerstone of the SAFE Shark and Ray Conservation Program Plan is messaging and communications. Beyond our focus on *what* messaging we share with our partners and stakeholders, we make deliberate and intentional efforts around *how* those messages are shared with our diverse and various audiences.

The [SAFE Shark and Ray Messaging Framework](#) was developed in consultation with a cross-section of the shark science community under the first SAFE Shark and Ray Conservation Program Plan, and links to the priorities outlined by global scientists working on shark research and conservation.

The goals are to:

1. Shift the damaging narrative by unifying conservation messaging around elasmobranchs
2. Incorporate the the latest social science research to create content meaningful for our diverse audiences
3. Maximize the positive impacts for sharks and rays in the wild by engaging audiences in conservation action



The SAFE Shark and Ray 2022–2024 Program Plan’s focus was on implementation and adoption of the Framework within our partner organizations, and evaluating the effectiveness of the tools with partners and social scientists. We have begun training partners on how to incorporate and integrate the Framework to maximize and measure impact with in-person and online audiences.

The focus and goal in the 2025–2029 Conservation Program Plan is to continue to assess, refine and grow the adopters of the Messaging Framework, including internationally. We are identifying and addressing needs and barriers for our partners, as well as how we can best train them to effectively implement the available tools and resources.

*We will include more international partners, and engage a variety of disciplines within the AZA community to incorporate the Framework including exhibits/design professionals, animal care staff, and social media, public relations and marketing teams.*

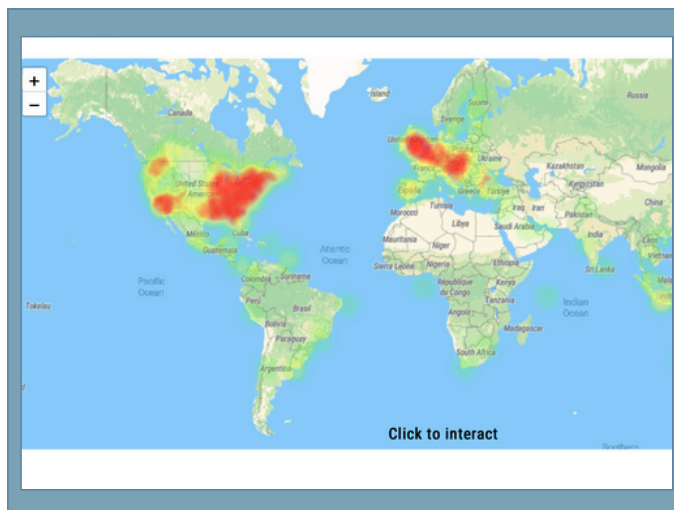


# SHARK & RAY 14 JULY AWARENESS DAY

Our signature event, Shark & Ray Awareness Day, occurs annually on **July 14th**. We have seen steady growth in the partners and non-partners engaging their audiences in-person and online, over the 2022–2024 SAFE Shark and Ray Program Plan. Our goal is to continue to grow engagement with audiences over the next 5 years.

Some highlights from the past three years include:

- A **140% increase** in on-site events hosted by partners and non-partner organizations, from 23 events reported in Year 1 to 55 events reported in Year 3.
- **1700 posts** using 2024 Shark & Ray Awareness Day hashtags over a 3-day period on Instagram.
- Exponential increase in Fundraising for SAFE during Shark & Ray Awareness Day with partner and non-partner organizations raising funds for SAFE using our online donation portal.
- **International participation** in an online quiz posted for Shark & Ray Awareness Day in Years 1 and 2.



The 2024 Shark & Ray Awareness Day Toolkit was downloaded from our website **1142 times**  
– A **53% increase over 2023!**



# We thank you for your ongoing support of our program

*We are working collaboratively to coordinate conservation action across zoos, aquariums and a global network of partners to increase knowledge, support research, create a powerful narrative and engage audiences in positive actions for sharks and rays.*



## Acknowledgements

The SAFE team would like to thank each of the following for helping us to create this plan:

- IUCN Conservation Planning Specialist Group, especially Jamie Copsey, for leading us through this planning process
- Katelyn Herman, Windy Arey Kent, Lauren Switters-Bauby, and Ashley Kidd for facilitation support
- The SAFE Steering Committee
- 45+ workshop participants for spending many hours to create this robust plan
- AZA Conservation Team
- Hap Fatzinger and Paul Cox for their leadership through this process and beyond



# Contact Lists

SAFE Shark and Ray Leadership & Steering Committee							
Hap Fatzinger, Division Director	NC Aquariums	3125 Poplarwood Court	Raleigh	NC	27604	910-622-4621	Program Lead
Paul Cox, CEO	Shark Trust	4 Crykes Court, The Millfields	Plymouth	UK		44-1752-672020	Vice Program Lead
Windy Arey Kent, Conservation Program Manager	SAFE Shark and Ray		New Bern	NC		252-670-8252	Program Manager
Dr. Steve Kessel, Director of Marine Research	Shedd Aquarium	1200 S Lakeshore Drive	Chicago	IL	60605	312-692-3191	Steering Committee
Beth Firchau, AZA SAFE Coral Program Manager	Conservation Coordination, LLC		Portsmouth	VA		757-434-0745	Steering Committee
Matt Seguin, Registrar/Animal Resource Officer	Mote Marine Laboratory and Aquarium	1600 Ken Thompson Parkway	Sarasota	FL	34236	941-388-4441 ext. 678	Steering Committee
Hans Walters, Curator/Field Scientist	WCS/New York Aquarium	602 Surf Avenue	Brooklyn	NY	11224	718-265-2666	Steering Committee
Kelli Cadenas, Curator	SEA LIFE Orlando	8449 International Drive	Orlando	FL	32819	443-934-0888	Steering Committee
Kelly Link, Associate Curator, Fish and Invertebrates	Georgia Aquarium	225 Baker Street NW	Atlanta	GA	30313	404-518-4000	Steering Committee
Riley Pollom, Species Recovery Program Manager	Seattle Aquarium	1483 Alaskan Way, Pier 59	Seattle	WA	98101	317-966-9593	Steering Committee
Steve Lacy, Chief Animal Program and Conservation Officer	Virginia Aquarium	717 General Booth Blvd.	Virginia Beach	VA	23451	(757) 385-0326	Steering Committee

SAFE Shark and Ray Advisors			
Dr. Lisa Hoopes	Georgia Aquarium	lhoopes@georgiaaquarium.org	IUCN Shark Specialist Group Aquarium Working Group
Jennie Janssen	National Aquarium	jjanssen@aqua.org	International Census for Chondrichthyns in Human Care
Tony Neiman	TRACKS Data Solutions	tony@trackssoftware.com	Digital Management
Sonja Fordham	Shark Advocates	sonja@sharkadvocates.org	Policy and Advocacy
Dr. Gavin Naylor	University of Florida	gnaylor@flmnh.ufl.edu	Elasmobranch Genomics
Dr. Linda Penfold	South-East Zoo Alliance for Reproduction and Conservation	linda.penfold@sezarc.com	Reproductive Advisor
Jill Arnold	ZooQuatic Laboratory, LLC	jarnold@zooquaticlab.com	Elasmobranch Blood Project
Dr. Rob Jones	The Aquarium Vet	rob@theaquariumvet.com	Elasmobranch Veterinary Health
Paula Carlson	Dallas Zoo and Aquarium	paula@dwazoo.com	Marine Fish Taxon Advisory Group Chair
George Brandy	Houston Zoo	gbrandy@houstonzoo.org	Freshwater Fish Taxon Advisory Group Chair

SAFE Shark and Ray Fundraising Committee		
Hap Fatzinger	NC Aquariums	hap.fatzinger@ncaquariums.com
Windy Arey Kent	SAFE Shark and Ray	windykent@safesharks.org
Paul Cox	Shark Trust	paul@sharktrust.org

SAFE Shark and Ray Working Group Leads							
<b>Communications &amp; Messaging</b>							
Kelli Cadenas	SEA LIFE Orlando	8449 International Drive	Orlando	FL	32819	443-934-0888	
Paul Cox	Shark Trust	4 Crykes Court, The Millfields	Plymouth	UK		44-1752-672020	
<b>Influencing Conservation Policy</b>							
Paul Cox	Shark Trust	4 Crykes Court, The Millfields	Plymouth	UK		44-1752-672020	
Steve Lacy	Virginia Aquarium						
<b>Research &amp; Data Sharing</b>							
Beth Firchau	Conservation Coordination, LLC		Portsmouth	VA		757-434-0745	
Dr. Steve Kessel	Shedd Aquarium	1200 S Lakeshore Drive	Chicago	IL	60605	312-692-3191	
<b>Direct Species Conservation Action</b>							
Riley Pollom	Seattle Aquarium	1483 Alaskan Way, Pier 59	Seattle	WA	98101	317-966-9593	
Hap Fatzinger	NC Aquariums	3125 Poplarwood Court	Raleigh	NC	27604	910-622-4621	



# Partner Contact List

AZA Organizational	Organization Contact	Title	Email
Abel Conservation LLC	Grant Abel	Owner	grant@abel.hk
Adventure Aquarium	Alicia Longo	Collections, Conservation & Development Coordinator	alongo@adventureaquarium.com
Aquarium Conservation Partnership	Kim McIntyre	Executive Director	kmcintyre@mbayaq.org
Aquarium of the Americas - Audubon	Caroline Emch-Wei	Senior Aquarist	cemch-wei@auduboninstitute.org
Aquarium of the Niagara	Katherine Jones	Director of Education and Conservation	kjones@aquariumofniagara.org
Aquarium of the Pacific	Sara Lesser	Education Supervisor	slesser@ibaop.org
Atlantis Dubai	Robert Bennett	Manager, Lost Chambers Aquarium	robert.bennett@atlantisdubai.com
Birch Aquarium at Scripps Institute of Oceanography	Brent Fish	Aquarist	bgfish@ucsd.edu
Cabrillo Marine Aquarium	Julianne Passarelli	Education and Collections Curator	Julianne.passarelli@lacity.org
California Science Center	Albert Chang	Aquarist	achang@californiasciencecenter.org
Columbus Zoo and Aquarium	Becky Ellsworth	Curator, Shores region	becky.ellsworth@columbuszoo.org
Conservation Coordination	Beth Firchau	SAFE Coral Project Coordinator	conservationcoordination@outlook.com bfirchau@aza.org
The Dallas World Aquarium	Paula Carlson	Director of Husbandry	paula@dworld.org
Discovery Cove	Denise Swider	Curator of Fishes and Birds	Denise.Swider@DiscoveryCove.com
Florida Aquarium	Debbl Stone	Senior VP of Engagement and Learning	dstone@flaquarium.org
Georgia Aquarium	Kelly Link	Associate Curator, Fish and Invertebrates – Sharks	klink@georgiaaquarium.org
Jacksonville Zoo and Gardens	Matt Seguin	Youth Programs Specialist	daym@jacksonvillezoo.org
Jenkinson's Aquarium	Danni Logue	Animal Welfare Program Coordinator	danni.logue@jenkinsons.com
Kansas City Zoo	Stuart Clausen	Aquatics Curator	stuartclausen@fotzkc.org
Loveland Living Planet Aquarium	Ari Fustukjian	Vice President of Zoological Operations	ari.f@livingplanetaquarium.org
Maritime Aquarium at Norwalk	Sandi Schaefer-Padgett	Senior Aquarist	sschaefer@maritimeaquarium.org
Minnesota Zoo	Abigail Tatreau	Aquarist	abigail.tatreau@state.mn.us
Mississippi Aquarium	Alexa Delaune	VP of Veterinary Services and Research	adelaune@msaquarium.org
Mote Marine Laboratory and Aquarium	Matt Seguin	Curator of Husbandry and Records	mattseguin@mote.org
Mystic Aquarium	David Cochran MaryEilen Mateleska	Director of Fish and Invertebrates	dcochran@mysticaquarium.org mmateleska@mysticaquarium.org
National Aquarium	Jennie Janssen	Assistant Curator of Blue Wonders	jjanssen@aqua.org
New England Aquarium/Anderson Cabot Center for Ocean Life	Sarah Tempesta	Manager, Interactive Exhibits	stempesta@neaq.org
Newport Aquarium	Jen Hazeres	Senior Biologist	jhazeres@newportaquarium.com
North Carolina Aquarium at Fort Fisher	Brittany Evans	Special Events Coordinator	brittany.evans@ncaquariums.com
North Carolina Aquarium at Pine Knoll Shores	Emily Fessler	Education Curator	emily.fessler@ncaquariums.com
North Carolina Aquarium at Roanoke Island	<i>Vacant</i>		
OdySea Aquarium	Lance Ripley	Curator of Animal Care	lripley@odyseaaquarium.onmicrosoft.com
Oregon Coast Aquarium	Kerry Carlin-Morgan	Director of Education	kerry.morgan@aquarium.org
Phoenix Zoo	Bradley Lawrence	Animal Curator	blawrence@phoenixzoo.org
Ripley's Aquarium - Myrtle Beach	Stacia White	Asst. Director of Husbandry	sweaver@ripleys.com
Riverbanks Zoo & Garden	Kendra Bottini	Aquarium Curator	kbottini@riverbanks.org
S.E.A Aquarium/Resorts World Sentosa	Dr. Luis Carlos Neves Salam Marikan	Assistant VP Marine Zoological Operations Population Sustainability Manager	luis.ccan@RWSentosa.com abdussalam.akm@RWSentosa.com
SEA LIFE Arizona	Julie Toma	Aquarium Curator	julie.toma@sealifeus.com
SEA LIFE Charlotte-Concord	Lori Semple	Aquarist	lori.semple@merlinentertainments.biz
SEA LIFE Grapevine	Alyssa Murphy Karen Rifenbury	Aquarist Curator	alyssa.murphy@sealifeus.com karen.rifenbury@sealifeus.com
SEA LIFE Kansas City	Kayla Leyden	Curator	kayla.leyden@merlinentertainments.biz
SEA LIFE Orlando	Kelli Cadenas	Curator	kelli.cadenas@merlinentertainments.biz
SEA LIFE Michigan	Amanda Arndt	Aquarist and Lab Manager	Amanda.Arndt@merlinentertainments.biz
SEA LIFE Minnesota	Becky Duchild	Curator	rebecca.duchild@merlinentertainments.biz
SEA LIFE New Jersey	Richard Weddle	Curator	richard.weddle@merlinentertainments.biz
SEA LIFE San Antonio	Nick Ireland	Curator	nicholas.ireland@merlinentertainments.biz
Seattle Aquarium	Riley Pollom	Species Recovery Program Manager	r.pollom@seattleaquarium.org
Seneca Park Zoo	David Hamilton	General Curator	dhamilton@monroecounty.gov
Shark Reef Aquarium at Mandalay Bay	Candice Marcos	Education Manager	canmarcos@mandalaybay.com
Shark Trust	Paul Cox	CEO	paul@sharktrust.org
Shedd Aquarium (John G.)	Dr. Steve Kessel	Director of Marine Research	skessel@shedd Aquarium.org apulver@shedd Aquarium.org
SEZARC	Linda Penfold	Executive Director	linda.penfold@sezarc.com
Tennessee Aquarium	Kyle McPheeters	Husbandry	kgm@tnaqua.org
Texas State Aquarium	Rita Stacy Vondra	Chief Conservation and Science Officer	rstacey@txstateaq.org
Turtle Back Zoo	Jillian Fazio	Director	jfazio@parks.essexcountynj.org
Virginia Aquarium and Marine Science Center	Skylar Snowden	Senior curator of Fishes, Inverts, and Herpetology	sksnowden@virginiaaquarium.com
WCS/NY Aquarium	Hans Walters	Animal Supervisor and Field Scientist	hwalters@wcs.org
Wonders of Wildlife	Ben Houghton	Curator of Life Sciences	brhoughton@wondersofwildlife.org
Zoo Tampa	Kathryn King	Supervisor of Animal Care - Aquatics	kathryn.king@zootampa.org
<b>Non-AZA Institutions, conservation partners/affiliates.</b>			
The Word Factory	Margot Lester	Owner	margot@thewordfactory.com
Wands and Wishes Occassions	Caroline Kauffman	Owner	caroline@wandsandwishesoccasions.com
Sharks 4 Kids	Jillian Morris	President	jillian@sharks4kids.com
Myrtle Beach Shark Teeth	Charles Shelton Jr.	Owner	sheltonmusicians@hotmail.com

# 2022-2024 PROJECT SUMMARY

## RESEARCH AND CONSERVATION

**Elasmobranch Blood Project** - This area of research has garnered significant engagement, receiving 110 blood samples from partner organizations for analysis. A filter has been created allowing TRACKS animal management software users to easily access and export data they would like to contribute to the project. Four volunteers have begun the process of organizing the raw data into Excel sheets to be analyzed. The first publication to result from this project is in preparation and will include reference intervals for cownose rays from multiple institutions.

**Chondro Census** - This database of elasmobranchs in human care settings currently contains entries of 71 species entered from 247 facilities in 55 countries. The program's leadership recently expanded to sign on two, new Vice Chairs to help maintain and grow program participation from facilities around the world. They will spearhead the project's participation recruitment and continue building the network's strength and cohesiveness.

**Best Practices in Handling and Welfare Group** - This team made significant strides towards their goals of developing resources for in situ and ex situ practitioners, and has logged 1500+ hours of staff time to date. Decision trees have been developed and 20 supporting documents created to guide users through evaluation of elasmobranch handling events. An app is being developed to be beta tested by users in 2025.

**Conservation Network Catalog** - Working with AZA staff in "mining" 2021 and 2022 ARCs reporting data, the SAFE team has created a google document that outlines elasmobranch research within the AZA-community. We are currently working on 2023 data and will publish this document for open access on the SAFesharks.org website. Our goal is to connect the in-situ research community with current ex-situ projects, so that both can learn from each other, as well as share data and best practices to benefit sharks and rays in human care, as well as in the wild.

## SUSTAINABLE FISHERIES

With the Aquarium Conservation Partnership, and in collaboration with Seafood Watch and FishChoice, we launched the Sustainable Feed Project. To date, this project has engaged 55 AZA-member organizations to enter their feed procurement data into the My Assessment Tool, as well as take a sustainability survey. We are launching the Pilot "Business Commitment" with 10 organizations in October 2024.

## COMMUNITY CONNECTIONS

Annually, we have celebrated Shark and Ray Awareness Day with 85+ partners and contributors hosting in-person and online events. We have increased participation each year, and also engaged partners in hosting Suds for Sharks fundraising events for the program. The team produced a Messaging Audit for educators and communicators to evaluate their current shark conservation messaging, and are working with external evaluators to assess current engagement and recommend future actions. We successfully launched, and regularly maintain, the "action hub", SAFesharks.org. We are active on social media, including Facebook and Instagram, and have ~400 subscribers to our digital newsletter to share regular program updates and information.

## COMMUNITY CONNECTIONS CONTINUED

We also utilize several AZA Network communities for content and information sharing, as well as publish yearly reports and other digital resources. Our team has delivered over 25 presentations over the past 2 years at local, regional, national, and international conferences and events. The **Diversifying Shark Media** project began with an exploratory workshop with a variety of contributors having inclusion, media, and communication expertise that was delivered as part of the Sharks International 2022 digital event. These recommendations were included as part of an [op-ed written](#) by Dr. David Shiffman about a recent publication on representation issues surrounding Shark Week. As part of our ongoing commitment to diversity issues, the SAFE team also sponsored the 2023 Minorities in Shark Science event held at the National Aquarium.

## INTERNATIONAL ENGAGEMENT

**Policy** - This group has solicited and delivered on five joint policy letters that align to SAFE Shark and Ray conservation objectives. In partnership with the Aquarium Conservation Partnership (ACP), we produced and submitted these letters that collectively engaged the support of 84 AZA institutions. Additionally, 2023 saw the first engagement of program partners in the Shark Trust’s Big Shark Pledge, a public engagement campaign to gain support for high seas shark fisheries management. **IUCN Conservation Planning Workshops** - SAFE Shark and Ray provided \$50,000 in funding support, along with SAFE representation, for two strategy and conservation planning workshops in 2023; the ReShark workshop in Seattle and the Shark Ray 360 workshop in Chicago. The SAFE team also now has a trained facilitator to help with the IUCN CPSG planning process in the future.

**CITES** – SAFE Shark and Ray partner representatives from the Georgia Aquarium attended COP19 to participate as an aquatics expert to provide a direct connection to our work and the AZA CITES Team.

## FUNDRAISING AND ADVANCEMENT

SAFE leadership held an advancement workshop in 2022 to develop fundraising strategies, and consulted with partners on how to recognize, acknowledge, and solicit for financial program support. We have been able to raise all the necessary funds to meet our goals; however, with new AZA projects launching around elasmobranch conservation, we know the competition for these funds will increase and we will need to continue to identify new funding streams for the program. We have also been successful in securing two AZA Conservation Grant Fund awards for the program, the first in 2021 and the other in 2023.

## ANNUAL REPORTS AVAILABLE

### [Year One Report](#)



### [Year Two Report](#)



### [Year Three Report](#)



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# Implementation Strategy