

MANATEE REHABILITATION CENTRE BELIZE

Summary Report, 2022



Wildtracks
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Belize
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About Wildtracks

Wildtracks is a non-profit Belize-based conservation organization, registered in 1996. It established the Manatee Rehabilitation Centre in 2000, to address concerns of the National Manatee Working Group at the lack of manatee rehabilitation facilities in Belize. It has managed the manatee rehabilitation activities for the past 22 years under its Biodiversity Conservation Programme.

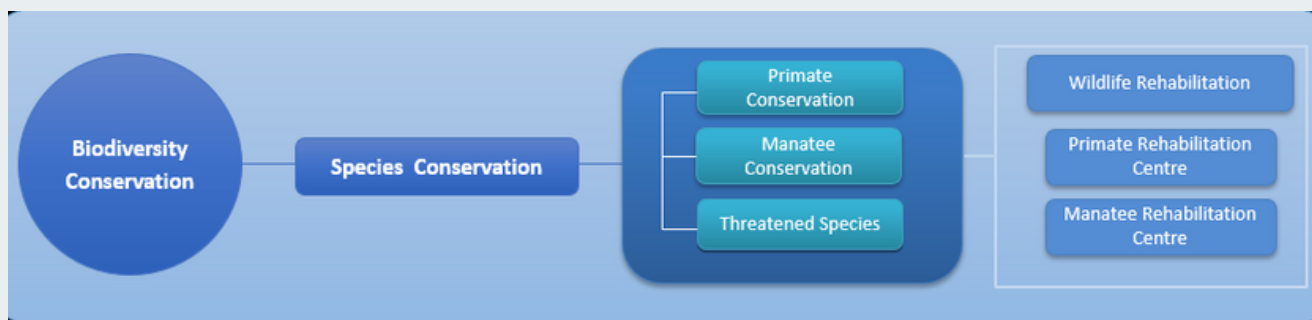
Wildtracks Guiding Framework

Wildtracks work is guided by Belize's National Biodiversity Strategy and Action Plan, particularly:

Goal C: Functional Ecosystems and viable populations of Belize's biodiversity are maintained and strengthened.

Target C3: Between 2016 and 2030, no species will become functionally extinct in Belize.

C3.3 Strengthen direct management and conservation of species.

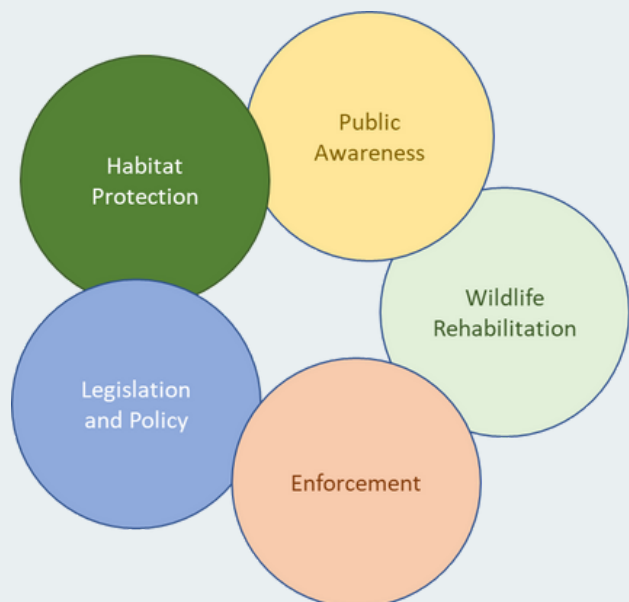


The role of rehabilitation in species conservation

Wildlife rehabilitation is one strategy in the Wildtracks Species Conservation Sub-Programme, contributing to improving species conservation outcomes in Belize.

Wildtracks combines rehabilitation with:

- assisting conservation partners to strengthen management effectiveness of key protected areas,
- ensuring manatees are taken into consideration in policy and legislation,
- improving awareness of the ways in which people can be better stewards of manatees and the marine environment.



Rehabilitation is one tool in the Wildtracks toolbox for species conservation

About Wildtracks

Providing Manatee Rehabilitation

The Manatee Rehabilitation Centre is located on the edge of the northernmost section of Shipstern Lagoon, two miles south of Sarteneja Village, in northeast Belize.

The Centre receives injured adults and orphaned manatees from across Belize, reported by the Belize public and rescued by the Belize Marine Mammal Stranding Network.

Wildtracks operates the Center under a Memorandum of Understanding with the Belize Fisheries Department.



Manatee Rehabilitation Centre Timeline

2021

Wildtracks signs Memorandum of Understanding with the Belize Fisheries Department

2020

Belize Fisheries Department takes on the mandate for manatees

2000

Manatee Rehabilitation Centre established at Wildtracks, managed under agreement with the Forest Department

1999

Wildtracks takes on rehabilitation of 'Woody' at request of the National Manatee Working Group



Problem Statement

Belize is considered the last stronghold in the region for the Antillean manatee (*Trichechus manatus manatus*). However, the population is rated as **Fair** – requiring urgent conservation action for long term viability.



700
to
1000

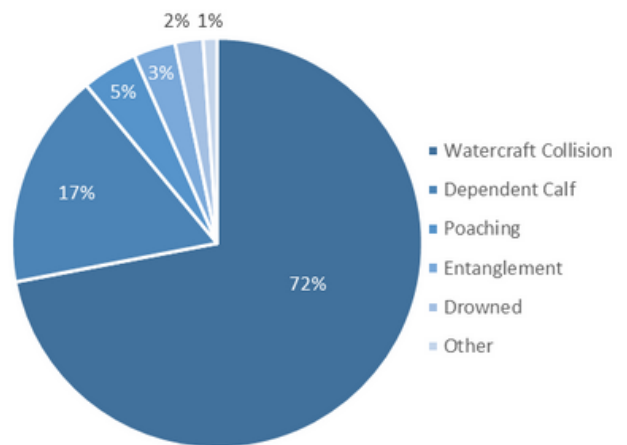
The population of manatees in Belize, estimated from 507 individuals recorded in 2012 survey

376

The number of verified strandings (dead or injured manatees or orphaned calves) reported between 1997 and 2019

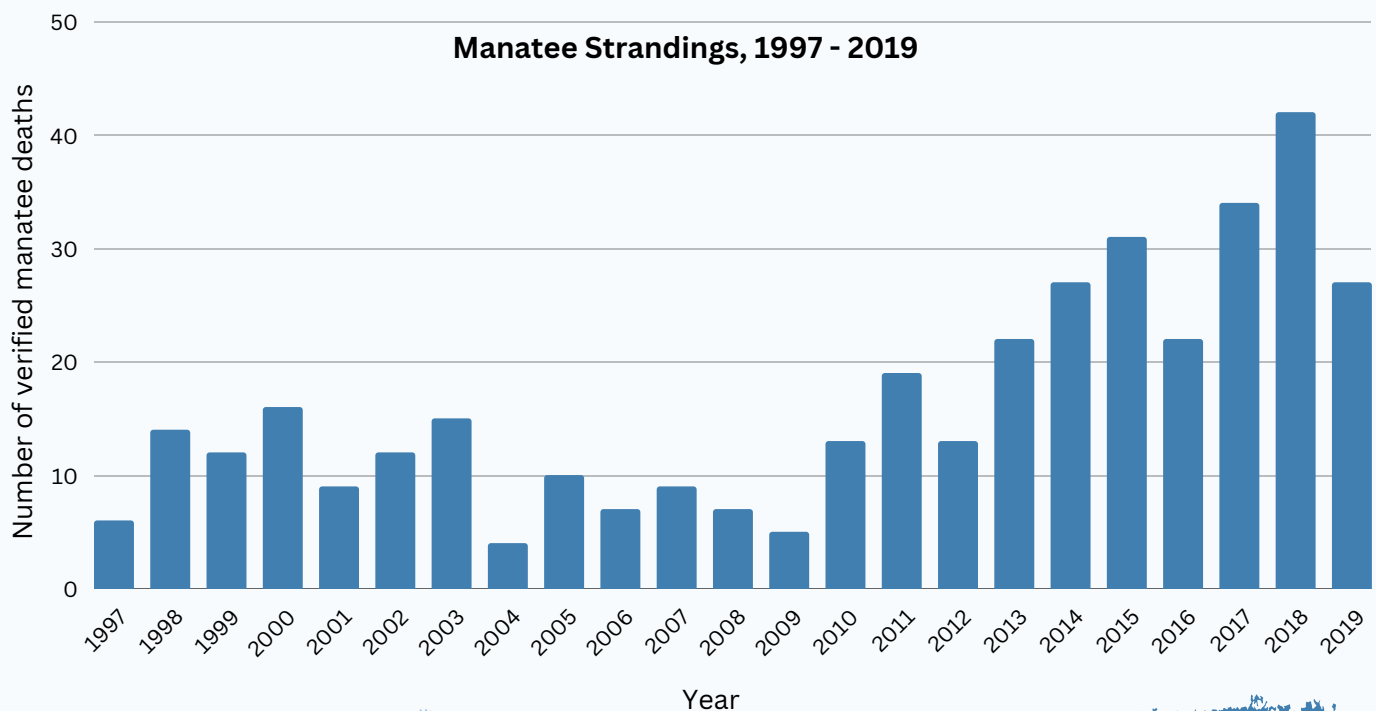
29

The number of intakes (injured or orphaned manatees) at the Manatee Rehabilitation Centre since 1999



Cause of verified strandings (n=182)

Manatee Strandings, 1997 - 2019



2022 Overview

Manatee Rehabilitation Facilities

Current facilities include:

- 1 Intensive Care Pool
- 1 Post-Intensive Care Pool
- 2 Large Rehabilitation Pools
- 1 Lagoon Enclosure
- 1 Manatee Building

Planned for 2023:

Replace Manatee Building, to include purpose-built food prep, clinic and storage areas



INTENSIVE CARE

For orphaned calves requiring 24 hour monitoring and care. Water temperature can be regulated and lights facilitate night feeds.



REHABILITATION

For manatees that have stabilized and are in ongoing rehabilitation. As they get larger and more confident, the size of pool is increased.



LAGOON ENCLOSURE

For manatees preparing for soft release - the lagoon enclosure provides a transition to life in natural ecosystems.



SOFT RELEASE

Manatees are released into the lagoon where their movements are monitored using satellite tags. Supplemental food is still provided in the early stages, but manatees are gradually shifted to supporting themselves.

2022 Inventory

2

INTAKES IN 2022

Tess
Toby

Date: 27/5/2022
Date: 20/7/2022

6

IN CARE ON 1/1/2022

Nugget
Teek
Hope
Sandy
Chikki
Callie

Lagoon Enclosure
Lagoon Enclosure
Soft Release
Soft Release
Soft Release
Soft Release

4

IN CARE ON 31/12/2022

Tess
Toby
Nugget
Teek

Large Rehabilitation Pool
Large Rehabilitation Pool
Soft Release
Soft Release

NAME	ID	1st QTR	2nd QTR	3rd QTR	4th QTR	STATUS (31/12/22)
Toby	MRP30					GOOD
Tess	MRP29					GOOD
Teek	MRP26					GOOD
Nugget	MRP24					GOOD
Sandy	MRP23					GOOD
Chikki	MRP21					GOOD
Callie	MRP20					GOOD
Hope	MRP18					GOOD

Critical Stabilizing Stable Thriving

2022 Inventory

Manatees In Care, 31/12/22



Tess

ID: MRP29

Intake Date: 27/5/2022

Rescue Location: Belize City

Estimated Age: < 2 weeks

Intake Length: 1.03 m (straight)

Intake Weight: 19.0 kg

Sex: Female

Intake Condition: Critical.

Extreme emaciation (ribs showing), dehydrated, deep, significant laceration on left side of face. Lots of small scratches on face, head, anterior of body and flippers. Respiration strong - lungs clear, but with some moisture in upper respiratory tract.

Heartbeat strong, but with brief periods of irregularity. Minor buoyancy issues resulting from GI tract gas.

Current Condition: Stable. Good



Toby

ID: MRP30

Intake Date: 20/7/2022

Rescue Location: Placencia

Estimated Age: 3 months

Intake Length: 1.19 m (straight)

Intake Weight: 31.7 kg

Sex: Male

Intake Condition: Good. Strong.

Minor topical cuts on sides, back and around nostrils. Breathing, heartbeat and eyes all good. No buoyancy issues.

Current Condition: Stable, Very Good



Soft Release

Soft Release Monitoring

The **Soft Release** site is in the northern section of Shipstern Lagoon, connected by a gate to the Lagoon Enclosure. This allows the soft release process to be gradual, with manatees able to come and go until they are accustomed to the larger lagoon. They are monitored using satellite tags, tracking their daily adventures and their ability to locate seagrass.



Nugget

ID: MRP24
Estimated Age on Intake: 3 months
Intake Condition: Critical
Current Condition: Very Good

Intake Date: 28/9/2019
Sex: Female
Soft Release Date: 2022
Age (Dec. 2022): 3 years



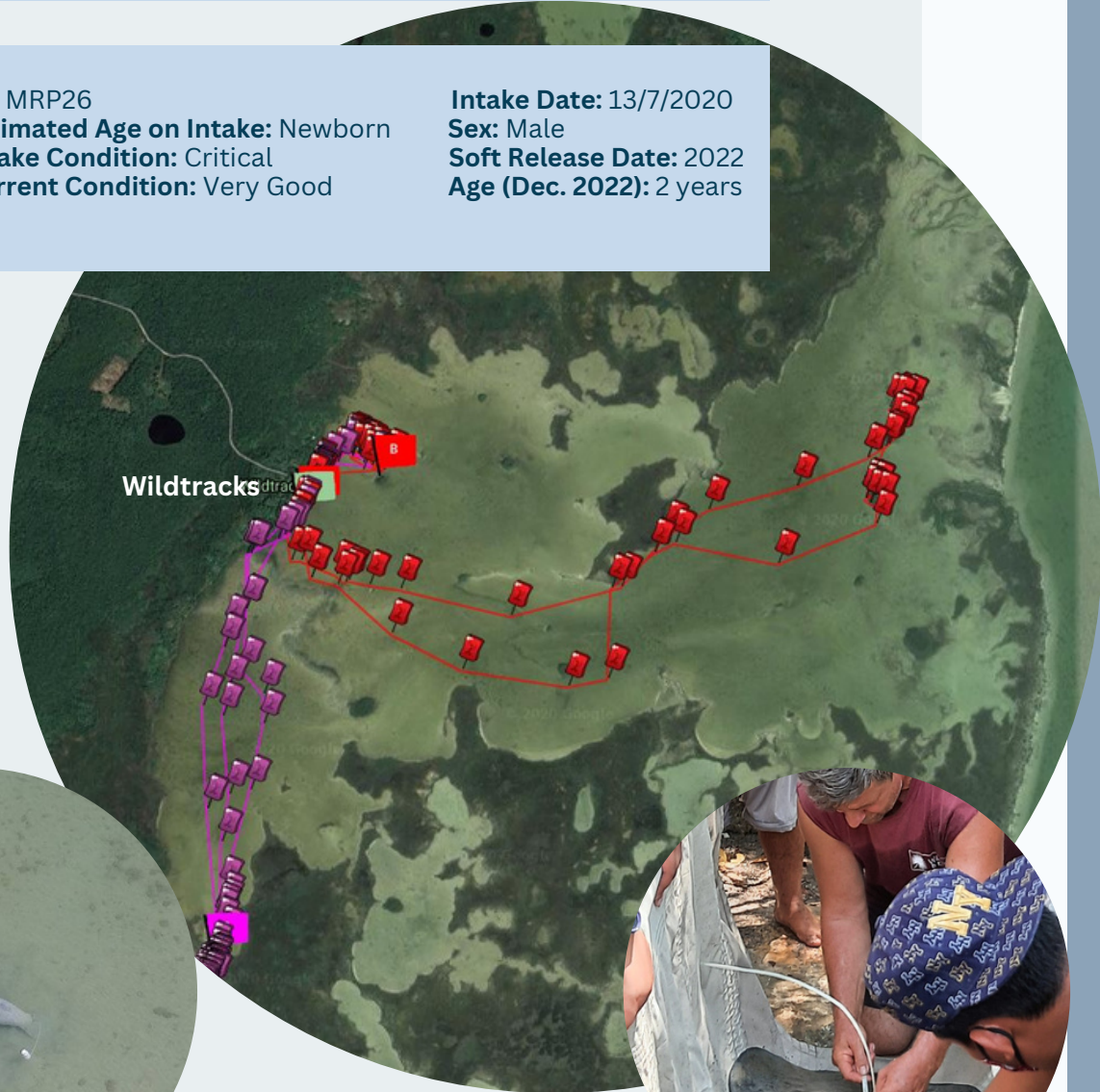
Teek

ID: MRP26
Estimated Age on Intake: Newborn
Intake Condition: Critical
Current Condition: Very Good

Intake Date: 13/7/2020
Sex: Male
Soft Release Date: 2022
Age (Dec. 2022): 2 years



Implanting pit tags



Drone surveillance



Attaching soft release satellite tracker

Soft Release

A photograph of a manatee swimming in a lagoon. The manatee is in the foreground, swimming towards the left. It is wearing a tracking collar with several yellow floats attached to it. The water is clear and blue, and the sky is visible in the background with some clouds. The overall scene is peaceful and natural.

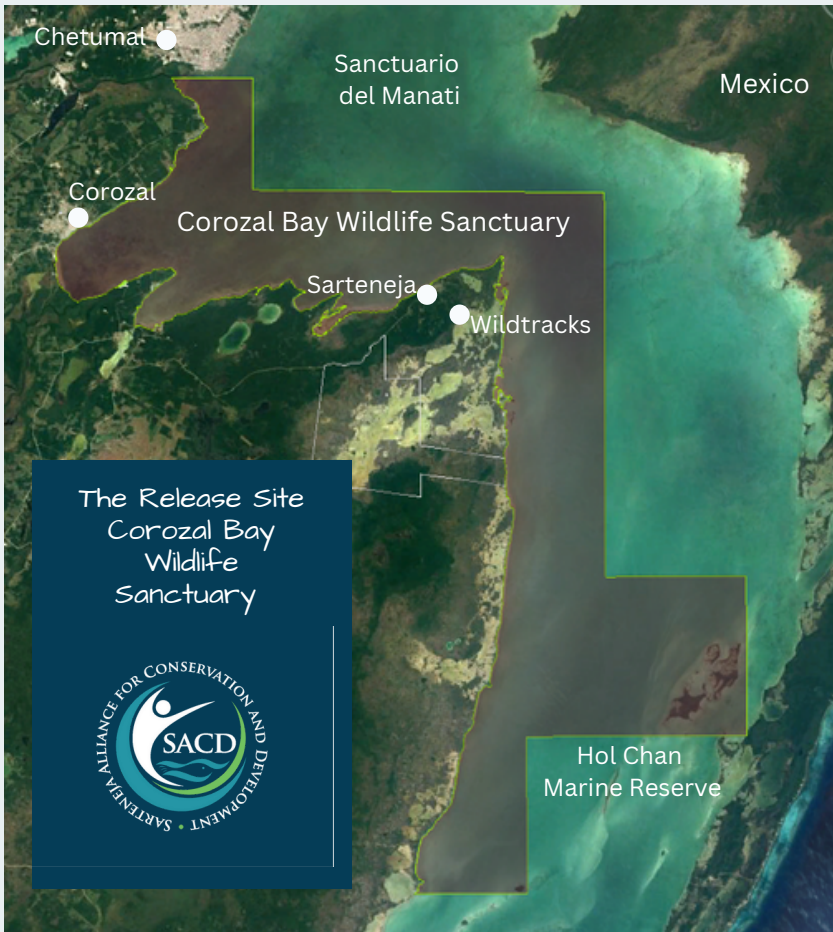
Life in Soft Release

Soft release takes time - it is important to know that each manatee is able to maintain its weight, that behaviour is as expected and to reduce human contact to zero. In early soft release, each morning starts with opening the lagoon enclosure gate to let the manatees out into the lagoon for a day of exploring and foraging on seagrass. Each is fitted with a short term satellite tracker, allowing us to keep track of their movements while they are in the soft release phase. They stay close together, moving from seagrass patch to seagrass patch until returning to the lagoon enclosure in the evening for their evening feed. This routine is important, allowing us to check on them, ensure they are doing well, and to recharge their tracker batteries once a week.

This extended period of skills acquisition during soft release period enables Wildtracks to maintain a 100% post-release survival rate through the monitored period.

Release

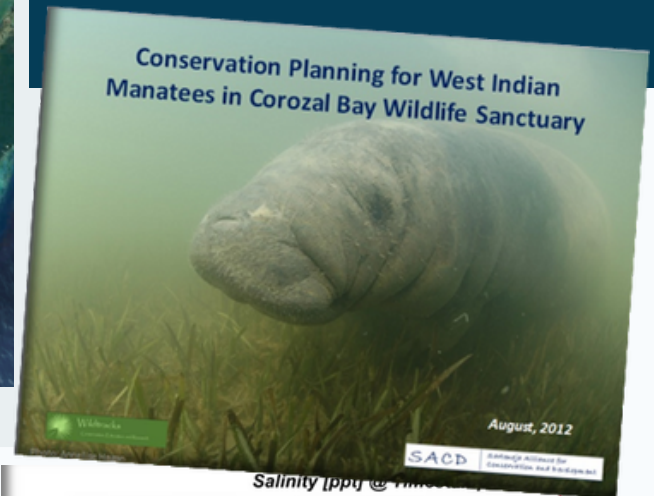
The Release Site



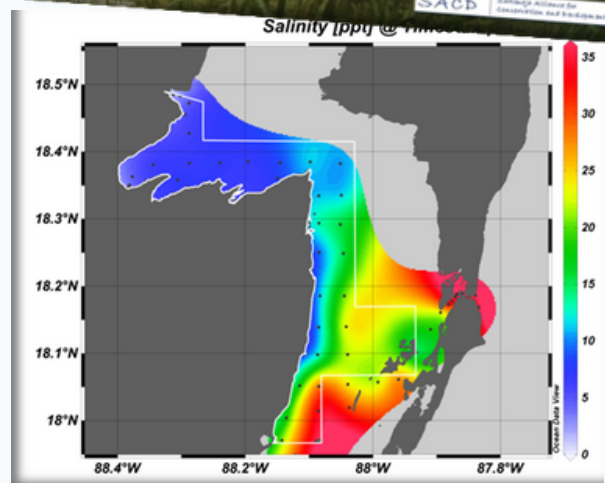
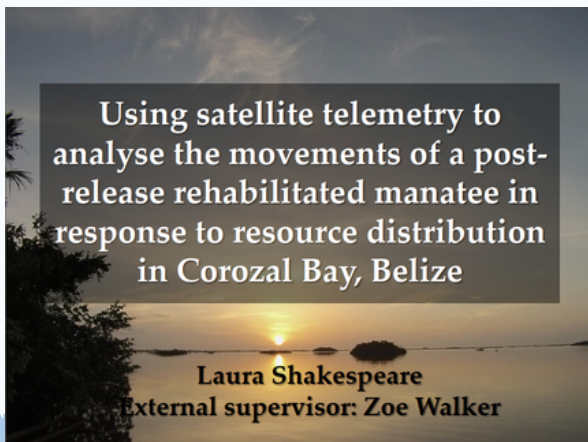
The manatees are released into **Corozal Bay Wildlife Sanctuary**, established as a national protected area because of its importance for manatees as a sheltered calving and nursery area. Corozal Bay is part of a larger **ridge to reef** seascape of connected protected areas, both in Belize and in Mexico.

Wildtracks has a long-term partnership with the **Sarteneja Alliance for Conservation and Development**, the NGO that manages the protected area. Over the years, the two organizations have worked towards ensuring the tools are in place for effective management that protects not just the manatees, but all conservation targets of the area.

Tools include seascape-level aerial surveys for consistent population counts, water quality monitoring to inform on drivers of distribution and movement of manatees, strategies for protection of manatees, and community awareness.

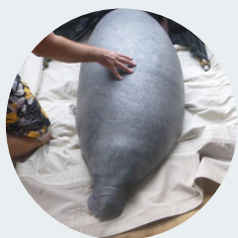


Monitoring continues post release, with satellite tracking of manatees to ensure that they are locating foraging and freshwater sites.



Release

Post Release Checkups



Khaleesi

ID: MRP13
Estimated Age on Intake: Newborn
Intake Condition: Critical
Date of Last Visual Update: 28/12/22
Current Condition: Very Good

Intake Date: 27/9/2013
Sex: Female
Year of Release: 2016
Age at Update: 9 years



Mitch

ID: MRP14
Estimated Age on Intake: 3 - 4 weeks
Intake Condition: Critical
Date of Last Visual Update: 28/12/22
Current Condition: Very Good

Intake Date: 30/6/2014
Sex: Male
Year of Release: 2018
Age at Update: 8 years



Lucky

ID: MRP14
Estimated Age on Intake: 8 weeks
Intake Condition: Critical
Date of Last Visual Update: 28/12/22
Current Condition: Very Good

Intake Date: 17/7/2014
Sex: Male
Year of Release: 2018
Age at Update: 8 years



Hope

ID: MRP18
Estimated Age on Intake: Newborn
Intake Condition: Critical
Date of Last Visual Update: 31/12/22
Current Condition: Very Good

Intake Date: 7/8/2016
Sex: Female
Year of Release: 2021
Age at 31/12/2022: 6 years



Sandy

ID: MRP23
Estimated Age on Intake: 3 - 4 weeks
Intake Condition: Critical
Date of Last Visual Update: 28/12/22
Current Condition: Very Good

Intake Date: 7/8/2019
Sex: Male
Year of Release: 2021
Age at 31/12/2022: 3 years



Wildtracks - Keeping the 'Wild' in Wildlife



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