



SEAL HEALTH *Workshop*

29 July 2025



CITY OF CAPE TOWN
ISIXEKO SASEKAPA
STAD KAAPSTAD



forestry, fisheries
& the environment
Department:
Forestry, Fisheries and the Environment
REPUBLIC OF SOUTH AFRICA



WORKSHOP REPORT

Report on the proceedings of the workshop convened by the City of Cape Town, the Two Oceans Aquarium Foundation, and the Department of Forestry, Fisheries and the Environment on 29 July 2025. This Seal Health Workshop was a follow-up to the workshop that took place in July 2024 in response to the Cape fur seal rabies outbreak and an increase in incidences of conflict between humans and seals.

August 2025

Workshop facilitation and reporting
by Infinity Environmental for
the City of Cape Town

 **Infinity**
Environmental

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Acronyms

CCT	City of Cape Town
DFFE	The Department of Forestry, Fisheries and the Environment
SANParks	South African National Parks
SOP	Standard Operating Procedure
TOAF	Two Oceans Aquarium Foundation

Workshop convened by the Department of Forestry, Fisheries and the Environment and the City of Cape Town Coastal Management in partnership with the Two Oceans Aquarium Foundation.

Citation: City of Cape Town. 2025. Report on the proceedings of the Seal Health Workshop convened in response to the Cape fur seal rabies outbreak. SA Agulhas II, 29 July 2025, Cape Town, South Africa.

1. BACKGROUND

The Two Oceans Aquarium Foundation, the City of Cape Town and the Department of Forestry, Fisheries and the Environment convened a Seal Health Workshop on 29 July 2025, involving stakeholders and experts from around the country and involving veterinarians, managers, ecotourism operators, regulators and scientists.

The workshop was conceived as a follow-up to the workshop held in Cape Town on Tuesday 23 July 2024 and Wednesday 24 July 2024, which focused on inaugural changes in Cape fur seal behaviour and determining which management strategies and actions were appropriate in the wake of the rabies outbreak.

The July 2025 workshop was convened to engage on and revisit the action items discussed in the first workshop. This document contains summaries of the presentations and discussions from the workshop on Tuesday, 29 July 2025.

Action items from the July 2024 workshop (see City of Cape Town, 2024) included:

1. **Communication:** Develop and disseminate standardised communication materials on rabies in seals, including public information and beach signage. (material from Department of Health / Rabies Advisory Group, with implementation by municipalities and all other entities involved)
2. **Permitting:** Apply for or update TOPS permits to include provisions for euthanizing seals suspected of rabies. (Municipalities, Cape Nature, SANParks, other relevant entities, with support from DFFE)
3. **Vaccination:** Draft an SOP outlining the procedure for vaccinating seals, including dosage and injection site, and tagging of vaccinated animals. (Two Oceans Aquarium)
4. **Surveillance:** Coordinate with the Provincial Coastal Coordinating Committee to circulate structured responses for disease surveillance in districts. (City of Cape Town)
5. **Research:** Pursue funding opportunities for long-term research on rabies prevalence in seal populations and other disease baselines. (Research Entities, DFFE)
6. **Vaccination Efficacy:** Conduct a study to test the efficacy of rabies vaccination in captive seals, and some wild habituated seals, all covered under a section 20 permit. (Two Oceans Aquarium)
7. **Euthanasia decision-makers:** Confirm and update a list of officials trusted to make determinations on euthanasia in terms of the case definition. (Municipalities, DFFE, Conservation agencies)
8. **Sampling SOP:** A standardised protocol for the sampling and storage of specimens of euthanised animals must be developed and disseminated. (State veterinarian with input from other experts as required)



In-person workshop attendees on Tuesday, 24 July 2024



Workshop attendees on Tuesday, 29 July 2025

2. ATTENDEES

A wide range of key stakeholders including government, non-government organisations, academic institutions and businesses participated in the workshop. A full attendance list is included in Annexure A. Organisations represented included:

Organs of state

- o Department of Forestry, Fisheries and the Environment
- o Department of Agriculture, Land Reform and Rural Development: Animal Health
- o City of Cape Town
- o SANParks: Scientific Services
- o SANParks: Veterinary Wildlife Services
- o Cape Nature

Non-governmental organisations

- o Afrivet Technical and Training Services
- o Australia Zoo Wildlife Hospital
- o Cape of Good Hope SPCA
- o Cape Radd
- o Hartenbos Animal Hospital
- o Hout Bay Seal Rescue Centre
- o False Bay Veterinary Clinic
- o Ocean Conservation Namibia
- o Two Oceans Aquarium Foundation
- o Tygerberg Animal Hospital
- o Sea Search Research and Conservation
- o South African Environmental Observation Network
- o South African Marine Strandings
- o Shark Spotters
- o Stranded Marine Animal Rescue Team (S.M.A.R.T)

Academic and research institutions

- o Bayworld Museum
- o Friedrich-Loeffler Federal Research Institute for Animal Health
- o Monash University
- o Mouse-free Marion Project
- o MSD Animal Health Research
- o Oceans Research Institute
- o South African Association for Marine Biological Research
- o South African Polar Research Infrastructure
- o University of Pretoria
- o University of Melbourne / Zoos Victoria
- o Wildlife Forensic Academy

Ecotourism operators

- o Animal Ocean
- o Dive Team Simons Town
- o Offshore Adventures Plettenberg Bay
- o Pisces Dive Centre

3. WORKSHOP NOTES

3.1 Update on confirmed rabies cases in Cape fur seals

Dr Lesley van Helden (Western Cape Government: State Veterinarian)

The presentation provided an update on confirmed rabies cases in Cape fur seals. Two of the most common questions the public asks are: (1) How many cases of rabies have there been? and (2) How did Cape fur seals get rabies?

There have been 81 confirmed rabies cases since 2022, in South Africa and Namibia, with the majority of cases being from the Western Cape. There have been 28 confirmed rabies cases in Cape Town, primarily due to people reporting seal carcasses on the beach or people reporting seals exhibiting unusual behaviour.

Initially, testing was done opportunistically on carcasses to determine the extent of the outbreak, but there are so many carcasses that it is not feasible to test them continuously. Therefore, testing is only conducted when the state veterinarian has a reasonable suspicion of rabies based on history and/or clinical. It is important to note that no conclusions about the prevalence of rabies can be drawn from the available data because the samples currently being tested are not a representative sample of the population. Testing is a mandate from the state with suspected rabies; it is solely to monitor and not to conduct research. The state is using taxpayers' money to control diseases and not to conduct research.

Preliminary phylogenetic analysis has revealed that Cape fur seals are infected with the canid biotype of rabies, which has previously established itself in other animals (including black-backed jackals and bat-eared foxes). The most closely related rabies virus identified was that found in a black-backed jackal from Namibia. It is therefore hypothesised that a spill-over event likely took place in Namibia, whereby a black-backed jackal came into contact with a Cape fur seal. This type of spill-over event has likely taken place more than once, as it typically takes a few tries for this virus to establish itself into a new maintenance host. We know that seals can infect other species, as was seen in Fish Hoek when a dog was bitten by a Cape fur seal and contracted rabies.

In terms of management, victim species (i.e., endangered mammals, dogs, cats and other strategic groups that include elephant seals) must be protected through individual vaccinations. People working in close contact with Cape fur seals must be vaccinated every two – three years and make use of the correct personal protective equipment. Post-exposure via broken skin or mucous membrane, the wound must be washed with soap and water (or any other liquid available) for around 15 minutes. The victim must be taken to a facility and receive a rabies vaccination and treatment. Section 20 permits are required for those who plan to collect samples from seal carcasses; no one is allowed to take an animal from the land it has died on or cut into a carcass unless authorised with a permit or by a State veterinarian.

3.2 Cape Town's response protocol

Arne Purves (City of Cape Town)

The case definition and the City of Cape Town response plan were put in place in 2024 following the first Seal Workshop. Hotspots on the coastline inform the City of Cape Town's response. The response plan currently in place includes:

- A euthanasia SOP and contact list of responders
- Rapid response plan for holidays and events
- PPE protocols
- Collection and disposal protocol

The City of Cape Town is undertaking ad hoc colony surveillance and looking for physical signs and specific movements that indicate a Cape fur seal has rabies. Surveillance of the colonies has shown that rabies is prevalent in younger seals. The City has a Threatened or Protected Species (TOPS) Permit in terms of NEMBA (Act 10 of 2004) for this work they are undertaking. City of Cape Town staff in close contact with seals have been vaccinated and make use of the correct (PPE). However, additional equipment and enforcement are required, with education and awareness being critical for the public.

3.3 Southern Cape experience and lessons learnt

Chanel Visser (Cape Nature), Dr Greg Hofmeyr (Bayworld), and Dr Anthony Creighton (Hartenbos Animal Hospital and SMART)

Southern and Eastern Cape have three seal colonies namely, Seal Island, Robberg and Black Rocks. Mossel Bay has had 8 positive cases, a suspected case in Kenton on the Sea, and Plettenberg Bay has had 14 suspected cases (5 positive, 2 negative).

The following critical actions were determined:

1. Clear the area: Instruct the reporter or person on site to clear the area of people.
2. Observations: Instruct the reporter or person on site to collect observations (videos, photos, descriptions - all necessary for making a decision).
3. Carcass: Instruct the reporter or person on site that the carcass will be hazardous and must be secured.
4. Authorities: Inform authorities who will make a decision concerning euthanasia, so they are on standby.
5. Marksman: Inform the marksman, so that he/she is on standby.

Only once this is done, do we then:

1. Send first responders to the site immediately
2. Organise the responding team
3. Notify the state vet
4. Notify the municipality and/or other local authorities

Proactive measures started with a series of six workshops in the following centres:

- Mossel Bay
- Plettenberg Bay
- Jeffreys Bay - St Francis Bay
- Gqeberha / PE
- Port Alfred

- East London.

At these we discussed putting plans in place for the following. We have put in place practical measures under all of these points.

1. What to do when a live seal comes ashore - how to assess and who responds
2. Determining if the seal could be rabid
3. Euthanasia
4. Collection of samples
5. Disposal of carcasses
6. Protecting responders: vaccinations, equipment, PPE
7. Training of responders (info sessions)
8. Public communication: (talks, articles in the news, signboards, posters)
9. Monitoring of colonies

The suspected case at Kenton-on-Sea tested negative. We have since had another case near (actually on the Tuesday of the workshop) of a seal at Hamburg near East London, that also tested negative.

The Plettenberg bay task team currently has a response time 1.5 hours, but task teams with marksmen are required in different areas to ensure an adequate response time. South African Police Service officials are currently used as marksmen because they know the law regarding discharging a firearm in public area. However, SAPS are only issued handguns that are suitable in these circumstances. Euthanasia would be more efficient with the correct firearm and ammunition, for example shotguns with buckshot or professional hunters with rifles.

3.4 West Coast experience and lessons learnt

Pierre De Villiers (Cape Nature)

Hotspots on the West Coast have been identified and marksmen have been identified in certain areas. It is essential that euthanasia in colonies is proactive, and that marksmen are on standby in more rural areas such as Lamberts Bay.

The key lessons learnt over the last year were:

- Standard operating procedures are essential
- Active feedback from specialists and vets is needed
- Reaction times are important for control
- How to get information out to the public
- We recommend a rabies advisory group is formed
- There is potential for more sampling on the west coast
- Dead seals are removed by municipalities
- There are not high positive rates, perhaps because there is no one actively looking as there is not enough capacity
- We need to prepare for the holidays in December when there are a lot of tourists

The Animal Protection Act (Act 71 of 1962) speaks to animal welfare and guards against cruelty to animals, which includes unnecessary suffering. Section 5 speaks to the destruction of an animal in the case of severe injury or disease by a police officer, veterinarian or a member of the public.

Section 5 (5) states: *"It shall be a defence to an action brought against any person arising out of the destruction of an animal by him or with his authority, to prove that such animal was so severely injured or so diseased or in such a physical condition that it would have been cruel to have kept it alive, and that to summon a police officer or follow the procedure prescribed in this section would have occasioned unreasonable delay and unnecessary suffering to such animal"*

The Animal Diseases Act (35 of 1984) classifies rabies as a controlled animal disease and according to Section 11 (2) of the Act states *"A veterinarian or any other person who finds the incidence or suspected incidence of any controlled animal disease in any animal or progeny or product thereof, shall immediately report such incidence to the director"*.

3.5 Current state in Namibia

**Naude Dreyer (Ocean Conservation Namibia) and
Dr Frank Busch (Friedrich-Loeffler-Institute)**

The Namibian Ministry of Fisheries and Marine Resources does not have the authority or any extra vehicles to survey the coastline and the Directorate of Veterinary Services are not mobile and do not have the opportunity to sample any deceased seals or seals displaying clinical signs of rabies. Moreover, the seal colonies on the coastline of Namibia are very large ranging from a few thousand to 200 000 individuals, and are far from towns, therefore the chances of finding a rabid seal are low. Compared to the Western Cape Province in South Africa, the potential for human-seal conflict is much lower.

Interactions between other species and Cape fur seals on the beach, for example lions feeding on seals along the coastline needs to be investigated. Tourism guides working in the area must be briefed on the current issues and operating procedures required in the event a rabid seal is encountered.

Germany's Federal Research Institute for Animal Health, the Friedrich-Loeffler-Institut (FLI), is collaborating with Namibia's Ministry of Agriculture, Fisheries, Water and Land Reform (MAFWLR) and the University of Namibia (UNAM) under a One Health-focused Global Health Protection Programme (GHPP) in Namibia.

Apart from zoonotic disease research in livestock and wildlife, collaborative research in Namibia also includes the investigation of seal mortalities, conducted in close collaboration with the Directorate of Veterinary Services (DVS), supported by a wide range of partners, including colleagues from the Department of Fisheries, UNAM and OCN. Under this collaboration, seal health will be assessed through sample collection during the Namibian seal harvesting season.

3.6 Rabies Surveillance

Dr Tess Gridley (Sea Search)

Surveillance conducted and preliminary data collected by Sea Search does not show the actual prevalence or transmission rate of the rabies virus in the Cape fur seal population. Sufficient data is required to determine the actual number of rabies cases; however, it is logistically difficult due to the lack of personnel, high costs and exposure risk.

Visual surveillance is an option to identify rabies in colonies; however this is also logistically difficult and rabid seals do not always display aggressive behaviour or have extreme abnormal movements.

Rapid seals may only have a subtle change in behaviour; although it is important to note that other Cape fur seals will notice the change and keep away from rabid seals.

Community engagement and awareness is essential for the public, for example, an online incident reporting system has been developed where individuals fill out the questionnaire about their experience with a potentially rabid seal. This questionnaire will allow the team to quantify seal behaviour and for coordinated reporting ([Sea Search Research & Conservation - YouTube](#)).

Systematic carcass surveying has been conducted by the Sea Search team, with preliminary results indicating a roughly equal sex ratio, with the proportion of positive cases increasing with age. However, it is not clear if this sort of work is being done by others despite it being essential. The correct sampling methodologies need to be determined to ensure correct accurate results from systematic this systematic sampling.

3.7 Vaccinations of elephant seals and Cape fur seals

***Dr Ilse Jenkinson (Two Oceans Aquarium Foundation), Dr Brett Gardner (University of Melbourne)
and Martine Viljoen (Two Oceans Aquarium Foundation),***

An update on Cape fur seal vaccinations and associated challenges was provided. Currently, vagrant seals (e.g., southern elephant seals) are being vaccinated and target vaccinations of Cape fur seals is being undertaken.

Difficulty exists in vaccinating wild seals as individuals may disperse before a booster can be administered. Compared to habituated seals that can typically be vaccinated twice, receiving both an initial dose and a booster. Vaccination of seals remains a complex undertaking, with important differences between habituated and wild animals.

The vaccination of habituated and wild Cape fur seals is in part intended to protect the habituated seals from rabies and therefore people in areas of frequent human-seal contact, but also, to generate serological data as evidence to understanding how well the seals respond to conventional rabies vaccinations. This data will then be used to inform rabies modelling efforts and may ultimately assist with the development of future novel vaccine use in pinnipeds.

Several challenges complicate this work. These include the difficulties of working in variable coastal environments, unpredictable seal behaviour and the need for reliable individual identification through tagging or photography. Locating individuals for required boosters is especially challenging, particularly for wild seals. In addition, limited public awareness, shortages of funding and trained personnel, and insufficient tracking data for Southern elephant seals all present ongoing obstacles.

At present, the approach is to vaccinate every southern elephant seal that hauls out, tagging individuals where possible and administering a follow-up booster. Habituated Cape fur seals continue to receive vaccinations and boosters indefinitely, while only a small study sample of wild Cape fur seals is currently being vaccinated, with no plans to continue this

indefinitely. The broader goal is to one day develop a colony-level vaccination strategy, though this is not yet feasible with existing resources and tools.

Until then, the vaccination programme for Cape fur seals and other vagrant seals remains a targeted effort designed to reduce risk and build vital immunological knowledge. In the broader fight against rabies, however, the most effective preventative measure remains the vaccination of domestic pets, particularly dogs, which continue to serve as the primary carriers in many transmission chains.

3.8 Elephant seals: Are we seeing an increase in visits?

Dr Liezl Pretorius (Mouse-Free Marion Project and University of Pretoria), Yinhla Shihlomule (South African Polar Research Infrastructure), Mduduzi Seakamela (DFFE), and Dr Greg Hofmeyr (Bayworld)

Southern elephant seals haul out on islands of the Southern Ocean, to breed, moult and to rest. Only adults take part in the breeding season, which is from mid-August - November for males, and September - November for females. Males may be ashore for up to three months, and females for a month. All elephant seals moult annually hauling out from a month from November - March, with older animals and adult males hauling out later in the year. The so-called resting haulout takes place in the autumn and winter.

Between haulouts, elephant seals spend many months at sea, travelling hundreds or thousands of kilometres to foraging areas. They normally show fidelity to the island where they were born, returning for haulouts. However, elephant seals also travel further afield, and vagrants have been recorded all southern hemisphere continents, and various islands.

Vagrants to the South African coast have been recorded since 1913. Records of these haulouts over the past few decades have been kept by DFFE and Bayworld, with a full set of information being recorded for each. There has possibly been an increase in reports since 1985. Reports of vagrants have increased since 1985, with a further rise in visitations noted after the COVID-19 pandemic. Haulouts of vagrants increase in the spring and summer, with a peak in November. Visitations have been particularly frequent in Mossel Bay.

Unlike other species of vagrant seals to the South African coast, elephant seals seem to be very social and occasionally haul out at Cape fur seal colonies. During the moult, these haulouts can last up to a month or longer.

The Prince Edward Islands support the closest colony to South Africa, being some 2000 km away. Annual pup production of this population is around 1000, with an estimated total population of several thousand. Almost all pups (approx. 700 annually) born on the largest island in the group, Marion Island, are tagged annually. However, none of these animals have been recorded on the South African coast. Where possible, vagrants to the South African coast are given individually identifiable flipper tags. In addition, three vagrants have been fitted with satellite tags, which allowed their movements to be followed post release from rehabilitation. All returned to the Southern Ocean. Southern elephant seals tagged on Marion Island are colour-coded by year, although tags are often lost during moulting or while foraging. Vagrants that come ashore in a compromised state are sometimes taken in for rehabilitation, with initial assessments guiding care and monitoring.

With an increase in vagrant Southern elephant seals observed along the South African coastline, it is important for first responders to be able to do a quick, initial, non-invasive (health) assessment of these animals. This initial assessment will provide important baseline information for the evaluation and possible disease sampling of the animal going forward. It will also allow for better communication between the different parties involved in the management of the animal, as everyone can be informed about the status of the animal from the start.

There are a few basic things that can be assessed from a distance and within a relatively short period of time, with minimal disturbance to the animal:

1. Age class: black pup, weaner, yearling, sub-adult, adult
2. Sex
3. Body condition score (rough guide, score out of 5)
4. Breeding stage (adults)
5. Moulting stage
6. Reactivity / behaviour
7. Mouth assessment
8. Eyes
9. Nose
10. Faeces
11. Wounds
12. Other abnormalities / anomalies to look for - external parasites
13. Any uncertainties

3.9 Ecotourism: Cape Town experience

Steve Benjamin (Animal Ocean)

Following the discovery of rabies in Cape fur seals, Animal Ocean, a dive centre in Hout Bay, implemented mitigation measures to prevent conflict between humans and seals. These mitigation measures included taking smaller groups out to snorkel or cancelling the trip if there had been instances of seal attacks in the area.

Following the Seal Workshop in 2024 it was decided that Animal Ocean would no longer offer seal snorkelling and change their overall approach to ocean safaris rather than in-water activities. The decision to change direction was based on the risk of injury to staff and guests, trauma, bacterial infections, and lack of specific permit structure. Additionally, there was not and still are not practical alternative methods to safely snorkel with seals.

Animal Ocean was rebranded, and their marketing was redesigned to manage the risk of rabies, as kelp forest snorkelling and ocean safaris are now offered to guests, with no Cape fur seal snorkelling. Guests are still informed of the risks associated with snorkelling, and groups are kept small to manage individuals and avoid the seal colonies. Any animals suspected to have rabies, that are seen during snorkelling or ocean safaris are reported. All Cape Town ecotourism operators have stopped offering any seal related activities, this had led to reduced clients because people are weary of seals. Therefore, tourists are choosing to do other activities.

3.10 Ecotourism: Plettenberg Bay experience

Jaco Kruger (Offshore Adventures)

Plettenberg Bay dive centre, Offshore Adventures, continues to operate and offer seal snorkelling. The Seal snorkel and diving operators' association NPC Plettenberg Bay has updated their code of

conduct to include rabies safety measures and protocols. The SOPs have been standardised to include mitigation measures and a Rabies and Wildlife reporting form.

Emphasizing the importance of rabies awareness and safety protocols for Offshore Adventures and Seal Snorkel & Dive Operators. Highlighting the need for a strict code of conduct, full transparency with clients, and comprehensive medical backup, including immediate wound care and access to post-exposure prophylaxis. They stress the vital partnership with CapeNature's Rapid Rabies Response Unit in Plettenberg Bay, ensuring swift and effective responses to wildlife incidents. Overall, underscoring the collective responsibility to prioritize safety, environmental respect, and professionalism to ensure memorable, responsible, and safe adventures for all.

3.11 Research and new tools: Thermal drones and seal health

Adam Yaney-Keller (Monash University)

Research is being conducted whereby thermal drones are being used to identify seal entanglement. Thermal drones can reveal heat anomalies at the site of entanglement wounds due to inflammation, revealing difficult to see entanglements better than standard colour imagery.

There may also be an opportunity to use drone imagery to identify rabies in seal colonies. This is because of seal behaviour when there is a rabid animal in the colony, for example, the colony usually keeps space between them and the rabid seal which is quite easy to identify from the air. If a seal has bite wounds from a rabid seal, that may also be quickly identifiable through similar heat anomalies of inflammation.

3.12 Discussion Points

Facilitated by Jeremy Rose (Infinity Environmental)

A discussion was facilitated by Jeremy Rose. The initial discussion focused on improving the response to rabies through public information and awareness.

Communication with the public can be difficult because if an area is widely described as having rabies there may be socio-economic impacts due to a decrease in tourism. However, it is not necessarily safer as there is risk all along the coastline. Conversely, if there has been an active case in an area and there has been euthanasia, notifying the public is a good management tool. Limited communication with the public can cause a lack of trust. Transparency with the public about animal welfare and rabies cases in certain areas can help with awareness.

There has been an increase in incidents between the fishing industry and Cape fur seals, with individuals reportedly killing seals again in response to the announcement of rabies. In this case the Department of Forestry, Fisheries and the Environment needs to compile permit conditions for commercial and recreational fishing permits. There has also been a rise in apparent traditional uses of seals (e.g., skinning seals for traditional healing), mostly near Baden Powell Drive. This poses a significant threat to people, which may be avoided through communication and awareness.

A proactive approach to communication is important despite journalists focusing on the statistics. Communication to the public must include the following:

- Clinical signs of rabies
- Vaccinations and boosters for individuals and their pets
- How rabies is transmitted

- Procedures to follow if you encounter a seal
- Procedures to follow if you are scratched or bitten by a seal.

Active sampling and surveillance must be done but needs to be conducted according to the SOP to ensure the safety of the individuals involved. It is believed that the current SOPs may not effectively cover safe sampling methods. Moreover, sampling methodologies need to be standardised and validated (i.e., which part of the brain is used for necropsy). Sea Search has conducted systematic sampling of seal carcasses and done surveillance along the Western Cape Coast, but establishing a baseline of the current status in Cape fur seal colonies is required. Surveillance with a proper sampling design is essential to provide an accurate baseline of the status of rabies in the seal population. Modelling the disease can be a valuable tool to predict the spread of rabies in the population, for which additional data is required. There is potential for funding from the City of Cape Town for sampling and modelling.

Collaboration between organs of state, non-governmental organisations and researchers is essential to progress. Therefore, it was recommended that a yearly progress review should be done.

3.13 Items requiring further actions

1. Active surveillance

Modelling of the epidemiology is recommended to help predict the spread of rabies in the population. Additional data is required, and targeted sampling with a proper sampling design is essential to provide an accurate baseline of the status of rabies in the seal population.

2. Permits

Clear communication is required with regards to Section 20 permits as researchers are unable to sample without a permit. This is an ongoing item to be addressed by DFFE as required.

3. SOP updates

Standard operating procedures must be updated to incorporate new findings and experiences since the last workshop (DFFE, CCT, SANParks and other government entities)

4. Safety measures for personnel

Rabid seals may not be aggressive, and researchers and samplers or any other individual in close contact with Cape fur seals must be aware of this to ensure safety.

5. Efficient euthanasia methods and marksmen

Sharing information (i.e., euthanasia methods and potential marksmen) between regions to improve current euthanasia methods. Engage with the relevant authorities regarding euthanasia in public areas.

6. Communication with the public

Communication with the public to prevent rabies transmission and ensure public safety (CCT and DFFE).

7. Safe and efficient sampling methodologies

Sampling by the authorities or systematic sampling conducted by other entities must be done safely using the correct PPE and techniques. Communication between the correct authority

(Western Cape Government: State Vet) and other entities is recommended for safe and efficient sampling.

4. ATTENDANCE REGISTER

Name	Organisation
Abel Banda	Hout Bay Seal Rescue
Abuyiselwe Nguna	South African Environmental Observation Network
Alicia Cloete	Department of Agriculture, Land Reform and Rural Development
Alison Kock	South African National Parks
Ansulize Van Helden	Western Cape Government
Anthony Creighton	Hartenbos Animal Hospital and SMART
Arariky Shikongo	Ocean Conservation Namibia
Arne Purves	City of Cape Town
Brett Gardner	University of Melbourne / Zoos Victoria
Caryl Knox	South African Association for Marine Biological Research
Chanel Hauvette	Cape Nature
Claire Taylor	Two Oceans Aquarium Foundation
Daniel Jegels	
David Zimmerman	South African National Parks
Didi Claassen	Afrivet Technical and Training Services
Dorothy Breed	City of Cape Town
Eliam Amos Lipenga	Hout Bay Seal Rescue
Enrico Gennari	Oceans Research Institute
Faith Tseriwa	Two Oceans Aquarium Foundation
Frank Busch	Friedrich-Loeffler Federal Research Institute for Animal Health
Greg Hofmeyr	Bayworld
Greg Simpson	Wildlife Forensic Academy
Gregg Oelofse	City of Cape Town
IlLana Nel	Hout Bay Seal Rescue
Ilse Jenkinson	Two Oceans Aquarium Foundation
Jaco Kruger	Offshore Adventures
Jan De Bruyn	Dive Team Simonstown
Jason Boswell	Film crew
Jennie Hewlett	University of Pretoria
Jeremy Rose	Infinity Environmental
Jo Munnik	Film crew
Johann Kotze	MSD Animal Health
Jon Friedman	Cape of Good Hope SPCA
Laura Du Toit	Two Oceans Aquarium
Lesley Van Helden	Western Cape Government
Liezl Pretorius	The Mouse-Free Marion Project and University of Pretoria
Luca Mendes	False Bay Veterinary Clinic
Martine Viljoen	Two Oceans Aquarium Foundation
Matshidisho Malatji	Department of Forestry, Fisheries and the Environment
Mduduzi Seakamela	Department of Forestry, Fisheries and the Environment
Megan Maroen	Department of Forestry, Fisheries and the Environment
Mel Boots	Australia Zoo Wildlife Hospital
Meredith Thornton	SA Marine Strandings
Mike Barron	Cape Radd
Mike Meÿer	Department of Forestry, Fisheries and the Environment (Retired)
Mike Nortje	Pisces Dive Centre
Naude Dreyer	Ocean Conservation Namibia
Nic Bothma	Film crew
Nicole Keiswetter	Sea Search

Name	Organisation
Olivia Murgatroyd	Infinity Environmental
Pierre de Villiers	Cape Nature
Rachel Probert	Sea Search and the University of Cape Town
Ralph Kelly	South African National Parks
Sabelo Roman	South African National Parks
Samantha-Lee Sivewright	Animal Ocean
Sarah Waries	Shark Spotters
Sasha Dines	Sea Search
Simon Elwen	Sea Search
Stefanie de Graaff	Veterinary nurse
Stephen Lamberth	Department of Forest, Fisheries and the Environment
Steve Benjamin	Animal Ocean
Tess Gridley	Sea Search
Trevor Rodney	SPCA
Vivien Malan	Western Cape Government
Willemien van Wyk	Tygerberg Animal Hospital
Yinhla Shihlomule	University of Pretoria and South African Polar Research Infrastructure

5. ANNEXURES: PRESENTATIONS

1. Update on confirmed rabies cases

Dr Lesley van Helden (State Veterinarian, Western Cape Government)

2. Southern Cape experience and lessons learnt

Chanel Visser (Cape Nature), Greg Hofmeyer (Bayworld), and Dr Antony Creighton (Hartenbos Animal Hospital and SMART)

3. West Coast experience and lessons learnt

Pierre De Villiers (Cape Nature)

4. Current state in Namibia

Naude Dreyer (Ocean Conservation Namibia) and Dr Frank Busch (Friedrich-Loeffler-Institute)

5. Vaccinations of Elephant Seals and Cape Fur Seals

Dr Ilse Jenkinson (TOAF), Martine Viljoen (TOAF) and Brett Gardner (University of Melbourne and Zoos Victoria)

6. Elephant Seals: Are we seeing an increase in visits?

Dr Liezl Pretorius (Mouse-Free Marion Project and University of Pretoria), Mduduzi Seakamela (DFFE), Yinhla Shihlomule (South African Polar Research Infrastructure), and Greg Hofmeyr (Bayworld)

7. Cape Town experience

Steve Benjamin (Animal Ocean)

8. Plettenberg Bay experience

Jaco Kruger (Offshore Adventures)

9. Thermal drones

Adam Yaney-Keller (Monash University)

10. Cape Town's response protocol

Arne Purves