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SAVE THE TASMANIAN DEVIL.

SAVE THE TASMANIAN DEVIL PROGRAM

FREE NEWSLETTER

MARIA ISLAND PROJECT FAVOURED

The establishment of disease free populations of Tasmanian devils on islands has been a key priority for the Save the Tasmanian Devil Program for some time; and in all assessments of candidate islands, Maria Island was identified as an outstanding prospect.

Given this fact, a comprehensive translocation policy was developed by the Department of Primary Industries, Parks, Water and Environment (DPIPWE). This was used as the basis for a Maria Island Translocation Proposal (MITP); the draft of which went through several cycles of review within the Department.

In late 2011 the proposal was submitted to the Commonwealth for consideration under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC). The Commonwealth determined that it is not a controlled action and therefore didn't need referral under the EPBC Act.

On this basis a Level 4 RAA (a Development Proposal and Environmental Management Plan, or "DPEMP") was prepared and internally referred for comment and approval.

At the time of publishing, the DPEMP was due to be released for public comment in early March (for 30 days).

If approved, it is planned for the project to be implemented this year; this will depend on resources including staff availability.

The purpose of the proposed translocation is a management action to establish a wild or semi-wild, free-living and DFTD-free population of Tasmanian devils that requires the minimum level of management for its persistence as part of the insurance meta-population for this threatened species.

By 2013, if all current isolation and translocation projects being planned by the Program proceed as hoped, there will be close to 1,000 devils secured in a range of facilities and enclosures as part of an insurance meta-population.

FROM THE MANAGER'S DESK

A new year for the Save the Tasmanian Devil Program provides a great opportunity for us to look back (and, more importantly, forward) to where we will be at the end of 2012 and the future for the devil.

Looking back one can't help but recognise the fantastic work of so many staff and partner organisations. Over the last nine years we have gained a detailed understanding of Devil Facial Tumour Disease (DFTD) and how it operates and impacts devil populations across the state. This knowledge has enabled us to implement and build on a range of management strategies focused on securing the long-term survival of Tasmanian devils in the wild in Tasmania.

Recently I came across a copy of the agenda for the very first workshop back in 2003 when the impact of the new mystery disease was first being realised.

There were presentations from local, interstate and overseas specialists hypothesising on what type of disease it was – a bacteria or virus, how was it being spread and what could be done to minimise its impacts; as well as predictions as to its worst case scenarios. We have certainly come a long way in our understanding of the devil's predicament since then.

Fortunately some of those worst case scenario forecasts have not come to fruition. While the prediction that extinction could be a possibility if we did nothing still rings true, the time frame for this is less clear. The disease continues to move through the Tasmanian landscape and continues to ravage the population with devil numbers still declining in the wild.

Doing nothing has never been an option and that sentiment has never been truer than it is now. Because of the work of so many over the years we now know an enormous amount about the disease, how devils are responding in the wild across the state, the effect of management intervention on disease populations and the management of captive devils in the insurance population.

Our insurance population – which now exceeds 500 devils – provides us with a fantastic base from which to not only secure the genetic diversity of the population; but also to start to look at novel and innovative ways to grow and maintain this population so it can be called upon when re-population strategies are identified.

So what else should we be doing? The Program vision is to have an enduring and ecologically functional population of Tasmanian devils in the wild in Tasmania. What we hope to embark on over the next few years are a series of projects aimed at achieving this in a number of locations across Tasmania.

There are several sites across Tasmania which could potentially be isolated through fences and other barriers to create "virtual islands". Woolnorth is one of the areas we have talked about in this newsletter previously; and we are continuing to work with the owners of Woolnorth, the Van Diemen's Land Company, to explore the options for a devil proof fence on Woolnorth to keep DFTD out of this significant population.

In addition to Woolnorth, there are other areas which have great potential as virtual islands – the difference being they currently have devils and DFTD. However, if we can remove the devils (and therefore the disease) from these areas, build barriers to stop devils coming in, we can then reintroduce healthy devils and restore the balance in the ecosystem. This is really ambitious stuff but the work we have done to date in the Program and elsewhere gives us confidence that we if we go about this the right way we can achieve a fantastic outcome: healthy, safe devils in the Tasmanian landscape in areas which had been decimated by DFTD.

Preliminary plans have been developed for virtual islands on the Forestier, Tasman and Freycinet peninsulas. A pilot program will commence in May on Forestier to determine the efficacy

of our techniques; and pending a favourable evaluation of the pilot, we will move ahead with the projects. We can't be complacent with the strategies we have in place, but must continue to identify new and innovative ways of protecting populations of animals from the disease.

In addition to virtual islands there are of course real islands. Public comments have been received on the proposal to make Maria Island home for a free ranging population of Tasmanian devils – a proposal that has involved extensive assessment over recent years.

We are also continuing to look at other proposals that could be utilised by the Program to further enhance the insurance population.

Hand in hand with the work to protect and restore devils in the landscape is the diagnostic analysis and research undertaken by Program partners at the University of Tasmania and by a range of other collaborators. This work clearly shows us that disease has a number of strains and that the Devil Facial Tumour appears to have developed a cunning way to evade detection by the devils' immune system. Armed with this knowledge we must continue to develop new strategies and approaches to securing the future for species.

I look forward to providing you with more information as we progress through 2012.

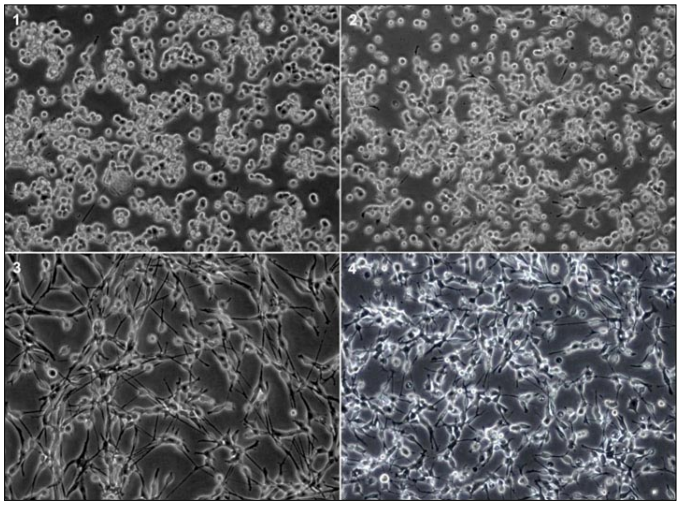
Andrew Sharman

Manager, Save the Tasmanian Devil Program

FEMALE DEVIL FIRST TO BE INFECTED

It's official - the first devil to get DFTD was a female.

This fascinating piece of information has been revealed in two recently published papers. One, entitled *Genome sequencing and analysis of the Tasmanian devil and its transmissible cancer* was published in the journal *Cell*. The paper describes how DFTD first arose from a female devil and that the tumour has since diverged into multiple, distinct strains (or 'sub clones').



These findings support discoveries outlined in a second paper, *Genomic restructuring in the Tasmanian devil facial tumour: chromosome painting and gene mapping provide clues to evolution of a transmissible tumour* found in the online journal *Public Library of Science: Genetics*.

This, and other, recently published work underlines the gradual shift in thinking about DFTD over the last few years: initially it was thought that devils were inbred with ineffectual immune systems that were unable to fight off DFTD; but it is now realised that devils in fact have a reasonable level of genetic diversity, with a completely capable immune system and that DFTD is quite sophisticated and able to evade the devils' immune system.

The papers also emphasise the importance of collaboration between the Save the Tasmanian Devil Program (STDP) and researchers around the world. The authors of *Genome sequencing (etc)* acknowledge STDP vets Sarah Peck and Collette Harmsen and diagnosticians Kate Swift, Bobby Hua, Robyn Taylor and Stephen Pyecroft; while *Genomic restructuring (etc)* names a number of collaborators including STDP staff Anne-Maree Pearse and Robyn Taylor with acknowledgements to Colette Harmsen and Kate Swift.

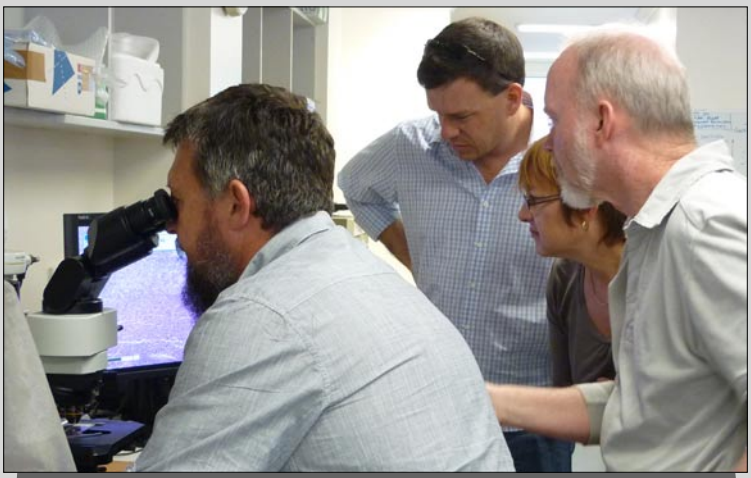
For a list of recently published devil and DFTD – related papers; please see our website www.tassiedevil.com.au and click on "Publications".

STEERING COMMITTEE TOUR

Following the November Steering Committee meeting, Committee members Matt Fuller (General Manager, Taronga Western Plains Zoo), Peter Latch and Deb Callister (Department of Sustainability, Environment, Water, Population and Communities) travelled to Cressy and Prospect with Program Management staff to tour two very different STDP facilities.

The Cressy Wildlife Centre is based at the Cressy Research and Demonstration Station (CRDS), situated in the Northern Midlands, six kilometres south of Cressy. Here, Senior Keeper (North) Dave Schaap gave the group a tour of this successful intensive captive management facility. On a hot November afternoon Steering Committee members were able to see a number of active devils playing, sleeping, swimming and showing a keen curiosity in their visitors.

The laboratories at Mt. Pleasant in Prospect (Launceston) are home to the team of clever scientists who have been unlocking more and more of the secrets of DFTD. Committee members toured the labs with Principal Veterinary Officer Stephen Pyecroft and had the opportunity to see what DFTD actually looks like under a microscope, thanks to Scientific Officer Kate Swift and Medical Scientist Dane Hayes (pictured).



Steering Committee members in the laboratories at Mount Pleasant.

The visit was a great opportunity for the Steering Committee members who were able to take part to get a broader view of the Save the Tasmanian Devil Program and to see how their efforts contribute to the overall conservation effort for the Tasmanian devil.

HAND RAISING HEROES

Some Northern based staff of the Captive Management and Translocation Section have been putting in the extra yards for the Save the Tasmanian Devil Program.

Captive Management facilities at Mount Pleasant are occasionally utilised for the care of diseased devils that are carrying pouch young. The goal is to help the mum stay reasonably healthy with a good quality of life so that she is able to perform the important task of rearing her joeys. However, due to the debilitating effects of Devil Facial Tumour Disease (DFTD) diseased females are often not able to see this task through.

This is where the team step in and remove the young for hand raising. Depending on the age of the young, this can be an incredibly demanding job requiring round the clock care. Initially devil joeys will require feeding every two to three hours utilising an especially formulated marsupial milk supplement. A typical night could include feeding times of 11pm, 2am and 5am ... and then get up and go to work!

As they grow, these little devils slowly transition onto mince, meat, fur and bone and the life of the carer becomes somewhat less nocturnal (if you can sleep through the noise as the devils become more nocturnal).

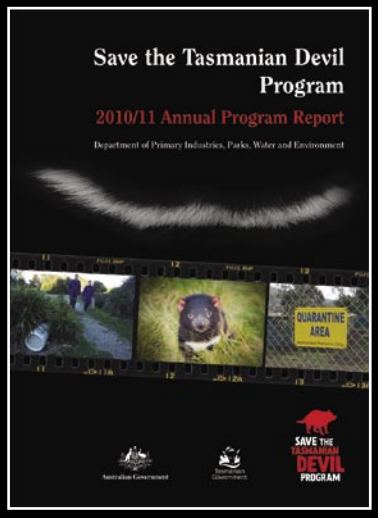
And the rewards come when a healthy, hand reared devil reaches maturity, breeds and produces its own young. Every devil saved and given the opportunity to further its species is another step in ensuring the survival of the Tasmanian Devil. This is achieved thanks to the dedication of the staff that tirelessly care for them while we sleep.

FIRST ANNUAL REPORT RELEASED

In December 2011 the Save the Tasmanian Devil Program released its first ever Annual Program Report.

The Report, available for download on www.tassiedevil.com.au, outlines the Program's performance during the 2010/11 financial year and features a lot of great photographs of the many activities undertaken by program staff and collaborators.

Content includes information on the Program Highlights; a look back at the Key Program Activities and Outcomes and a summary of the Program's key partnerships such as the Zoo and Aquarium Association, the University of Tasmania and Devil Island Project.



There is also a Case Study on Insurance Population partner Devil Ark, a facility built on a 500ha bushland property high in the Barrington Tops of NSW.

For those who like to crunch the numbers, the Report looks at the Program's Performance of the Program to Targets and provides a table to show how funds provided by the State and Federal Government were invested across the Program.

Importantly, the Report also identifies some future goals for the Program. Despite the significant achievements outlined in the report, we know there is still much work to be done – after all, the threat facing the Tasmanian devil will not be overcome quickly.

If you are unable to download your own copy, please contact the Program on DevilDisease.Enquiries@dpipwe.tas.gov.au and we will arrange for one to be sent to you.

DISEASE SPREAD MONITORED

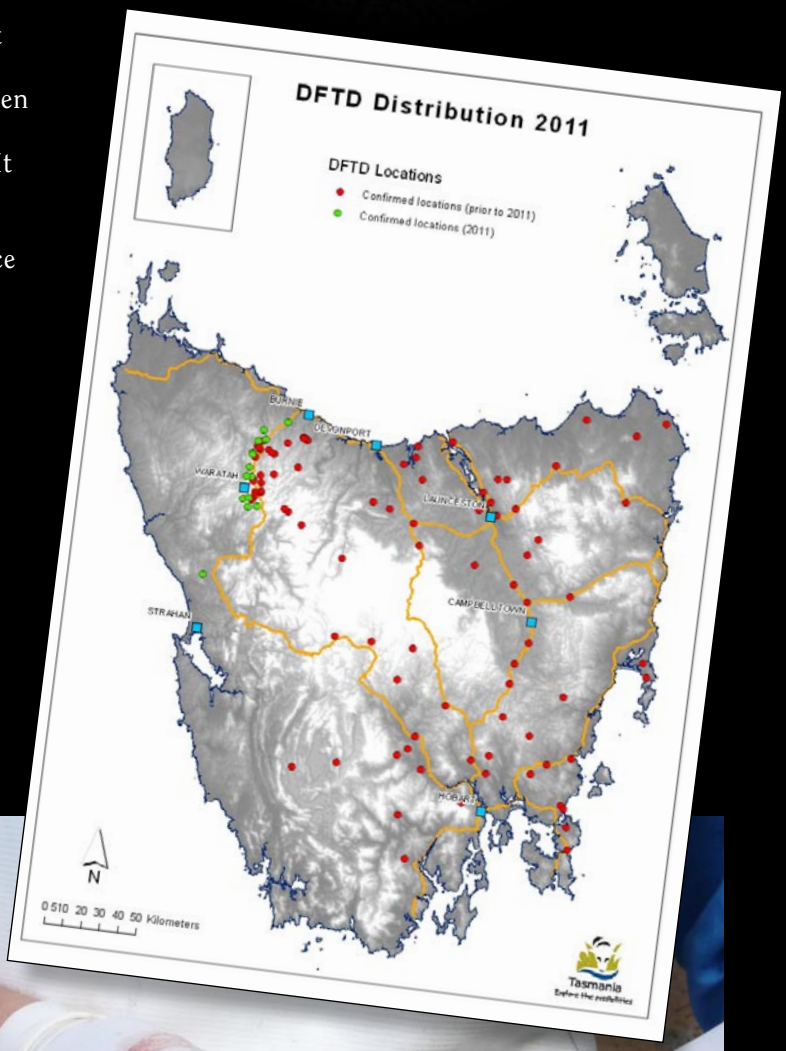
The STDP continues to monitor devil populations across Tasmania to determine how far DFTD has spread and the impact that it is having. The disease now affects 75% of the state.

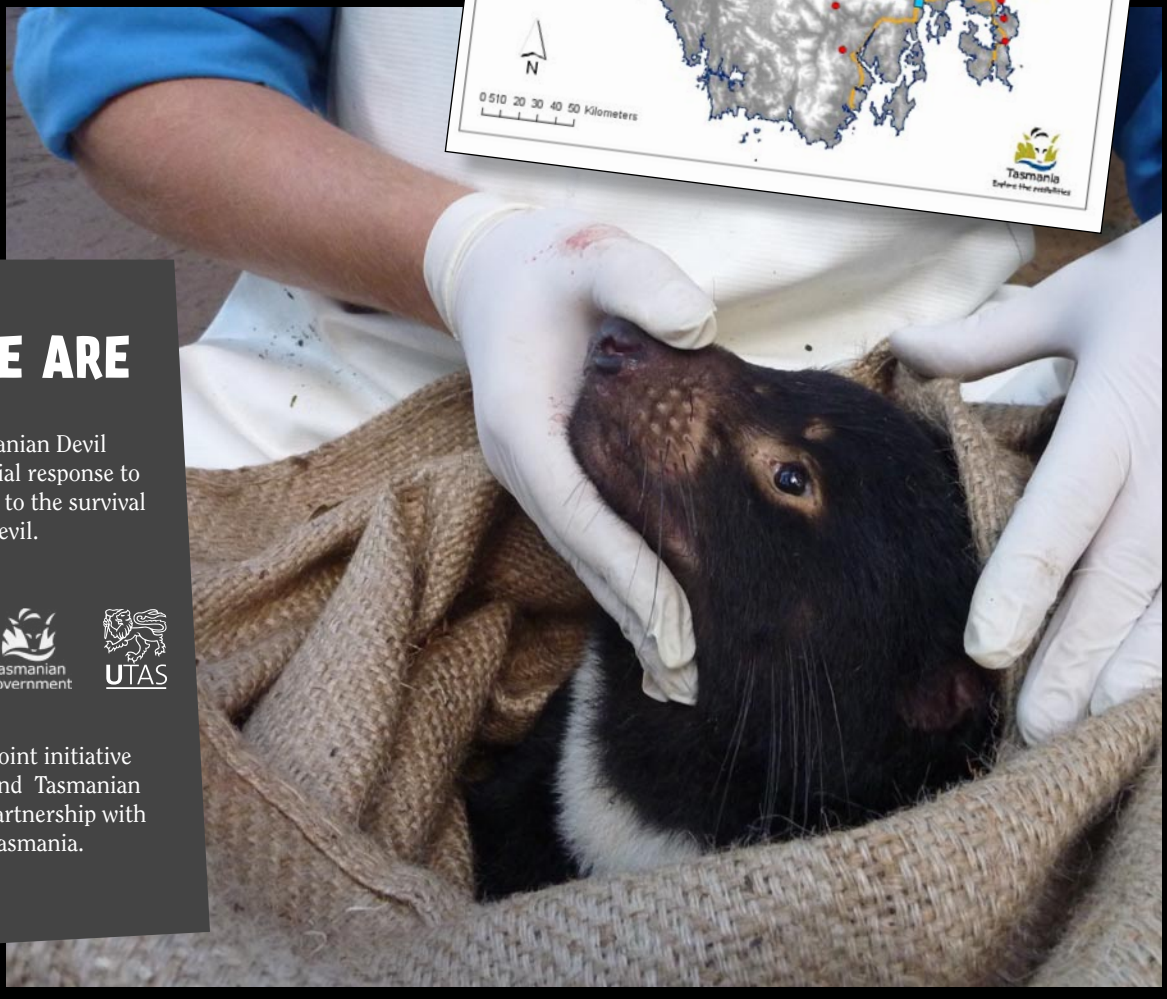
In November 2011 STDP staff and volunteers spent 10 days in the forestry coupes around Takone for this annual activity.

65 animals were caught during the trip, including 63 devils and 2 spotted tailed quolls. There were 38 new devils and 25 recaptured devils. The 63 devils were made up of 37 females and 26 males. More than half of the females were lactating.

Three devils were caught with tumours consistent with DFTD, and were given a DFTD score of 5. All 3 animals tested positive. It seems that the disease is moving further into the population but prevalence (0.05%) is still very low, suggesting the fairly recent arrival of the disease into the area.

The disease front trapping work supports a range of activities including planning for saving populations, managing diseased populations and monitoring any changes in the disease.





WHO WE ARE

The Save the Tasmanian Devil Progam is the official response to the threat of DFTD to the survival of the Tasmanian devil.

Australian Government | Tasmanian Government | UTAS

The Program is a joint initiative of the Australian and Tasmanian Governments in partnership with the University of Tasmania.

SAVE THE TASMANIAN DEVIL APPEAL

A RECORD YEAR FOR THE APPEAL

2011 was a great year for the Save the Tasmanian Devil Appeal, which achieved its best annual fundraising result, raising nearly $450,000. Contributions from individuals, schools and community groups have continued to grow, augmented by an increasing number of corporate supporters.

Critically, donations to the Appeal allow it to support a range of grants and scholarships, extended in 2011 to include management and community grants, as well as research grants. These are offered across Australia and help boost the capacity to deliver results on the ground. For example, last year Healesville Sanctuary received a generous grant, which enabled the Sanctuary to install remote surveillance equipment in the Tassie Devil free range enclosures helping ensure natural behaviours and social interactions continue during captive breeding programmes. Maintaining natural behaviours in captivity is critically important to their conservation, particularly if animals are to be reintroduced to the wild.

Jon English.

V8 Supercars: "Tassie Devil" enjoys himself.

In late October 2011 a new Manager of the Appeal was appointed. Rebecca Cuthill has been immersing herself in the numerous high profile events that have nominated the Appeal as their charity.

These have included the V8 Supercars 'Falken Tasmania Challenge', the Breath of Fresh Air Film Festival (BOFA) and the Mark Webber Challenge. At BOFA and the V8 Supercars events the Appeal had a stand where merchandise from corporate supporter Collins Debden was available, providing a great outlet for the products and enhancing the visual appeal of the area.

Mascot, "Tassie Devil" also made two appearances at the V8s.

"Since joining the Appeal I have been delighted in the level of interest and commitment shown by individuals and businesses in learning more about the plight of the devil and volunteering whatever they can do to help", said Rebecca. "Given the support I have witnesses in the last few months I am convinced 2012 will raise even more funds to contribute to the overall goals of the Save the Tasmanian Devil Program."

The New Year has proven even more eventful; with a current revival of the epic production Jesus Christ Superstar by Encore Theatre Company, featuring Appeal ambassador Jon English. All proceeds from a special benefit evening will go directly to the Appeal and the Company is anticipating raising a show-stopping $10,000.

In early March Collins Debden hosted a superb Gala Dinner in Sydney, donating considerable proceeds to the Appeal. And excitingly for ice-cream lovers everywhere, Valhalla ice-cream has just launched their new flavour, chilli-chocolate – money raised from the sale of each container of this flavour will go to the Appeal.

Tasmanian Scouts have just joined with the Appeal as key partners, so readers can also expect to see them out and about on "devil business", promoting Program and Appeal's messages and volunteering at numerous events.

The rest of 2012 promises to be just as jam packed with fundraising and promotional activities. Readers can keep up to date with events by "liking" the Save the Tasmanian Devil Appeal Face Book page, or reading the Appeal pages found at www.tassiedevil.com.au

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