

# Northern Australia Quarantine Strategy

25 years of protecting Australia



## Acknowledgements

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This publication may include images of people now deceased.



**The Hon. Barnaby Joyce MP**  
Minister for Agriculture

One of the many advantages for Australian agriculture in domestic and global markets is our reputation as a supplier of clean, green, premium quality produce—a reputation that is second to none.

Yet most Australians would be blissfully unaware of the work that goes into protecting Australia from threats to the quality of our lives as a whole and the quality of our produce.

Threats from other countries and other ecosystems could bring with them environmental, human and economic burdens too great to contemplate.

Up here in northern Australia, you can see our nearest neighbours on a clear day.

That's why the Northern Australia Quarantine Strategy was established in 1989, to monitor our borders, to assist states and territories eradicate those threats and to help nearby countries eliminate or contain pests and diseases before they leave their borders.

NAQS also provides essential support for the free movement of people for traditional activities in Torres Strait, under the auspices of the Torres Strait Treaty, by managing the quarantine risks involved.

Where I'm from in Tamworth, New South Wales, communities and farmers rely on NAQS every day to protect their personal health, the health of their animals and their investment in agriculture. People and farmers across Australia are no different.

We don't hear about their work though because they're doing such a great job.

For too long, the quiet and consistent contribution that NAQS is making to Australian agriculture has been taken for granted and gone unthanked.

For a quarter of a century, dedicated biosecurity officers across the Top End—from Broome in the west to Cairns in the east—have worked with local communities to monitor more than 10 000 km of rugged coastline, islands and coves.

Think about the magnitude of that task.

It takes great patience and scientific expertise to identify biosecurity threats that travel with the wind, on the tides or hitchhike with people using all forms of transport.

With the best of intentions, people like you and I couldn't hope to achieve what the people of NAQS have been doing on a daily basis for over two decades.

All Australians owe the people of NAQS a great debt of gratitude; they have my highest respect.

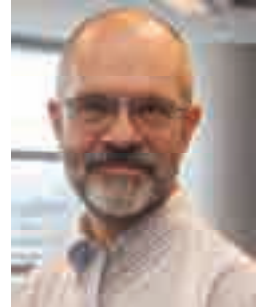
Their work protects an environment in which our farmers can excel. This work also helps to keep our fisheries clean, our animals healthy and allows our industries to thrive.

On behalf of all Australians, I extend my sincerest thanks to everyone who has contributed to NAQS over the past 25 years.

I hope the next 25 is just as successful for you. Even if they don't know it, the rest of Australia is counting on it.

*Northern Australia Quarantine Strategy – 25 years of protecting Australia* commemorates the 25th anniversary of the Northern Australia Quarantine Strategy, where it came from, what it has achieved and what lies ahead.

It showcases the efforts of our NAQS officers—past and present—and the stunning locations in which they work. It is a bountiful book, full of character, beauty and personal experiences.



**Dr Paul Grimes**  
Secretary

The Northern Australia Quarantine Strategy is an iconic programme that, in its 25-year history, has helped to safeguard Australia, our agricultural industries, and unique environment.

The programme was set up in 1989 to provide an early warning system for exotic pest, weed and disease detections and address the unique biosecurity risks faced by Australia's far north.

Since then there have been many key achievements including the establishment of the most extensive quarantine zone inside Australia and the development of strong community partnerships that underpin the programme.

NAQS is a wonderful demonstration of the inter-connected nature of the work we undertake to safeguard our country.

While NAQS is one of our department's true success stories, clearly the success behind the programme is our people.

Whether they work in Broome, Cairns, Weipa or one of the many beautiful islands of Torres Strait, our NAQS officers do an amazing job in often remote locations with a diverse range of issues and stakeholders. They are at the pointy end of our business and their legacy will be one of significance for Australia's biosecurity status.

*Northern Australia Quarantine Strategy – 25 years of protecting Australia* tells the story of NAQS through the stories of its people. It is a vital part of our portfolio of which we should all be proud.



# The story of NAQS

## NAQS history

This year, 2014, sees the Northern Australia Quarantine Strategy (NAQS) turn 25.

This is an important milestone for what has become one of Australia's most important front-line biosecurity programmes.

The genesis of NAQS dates back to 1908 when the fledgling Australian Government passed the *Commonwealth Quarantine Act*.

Eighty years later, in 1988, an agreement was struck to establish a Northern Australia Quarantine Strategy (NAQS) following various experiences with introduced pests, and a coastal surveillance review.

The following year, 1989, NAQS was born.

The programme was initially funded for just two years by the Federal Government and operated by the Queensland, Western Australian and Northern Territory Governments.

NAQS was quickly populated by a small but highly dedicated and enthusiastic group of scientific specialists and biosecurity officers who forged the programme's foundation legacy that remains today.

NAQS quickly chalked up a number of significant biosecurity finds and established strong working relationships with many remote Aboriginal and Torres Strait Islander communities throughout northern Australia.

By 2000 the Australian Government assumed full responsibility for the delivery of NAQS services through the Department of Agriculture.





## NAQS today

Today, NAQS operates across almost 10 000 kilometres of coastline, river mouths and islands stretching from Broome in Western Australia to Cairns in Queensland, including Torres Strait.

NAQS has a highly-trained and dedicated workforce comprising veterinarians, botanists, plant pathologists, entomologists, community liaison officers and biosecurity officers.

Its staff are located in Broome, Darwin, Nhulunbuy, Cairns, Weipa, Bamaga, Thursday Island and many other Torres Strait islands.

The programme is a major employer of Aboriginals and Torres Strait Islanders within the region and also contracts numerous Aboriginal and Torres Strait Islander ranger groups to assist with biosecurity work in some of the more remote, but high-risk areas, of northern Australia.

NAQS works with people from more than 85 language groups in the Northern Territory, Queensland and Western Australia and delivers a high proportion of its work on traditional lands of both Aboriginal and Torres Strait Islander peoples.

NAQS has three core activities:

- ~ scientific monitoring for the presence of exotic pests and diseases across northern Australia
- ~ conducting public awareness with local communities, businesses, government agencies and visitors to ensure:
  - people ‘Keep A Top Watch’ for exotic pests and report any suspected threats to the Department of Agriculture
  - cooperation from traditional land owners and private land owners to enable scientific surveys
- ~ managing quarantine for traditional visitors from PNG and southward movements between legislated zones in Torres Strait and to the mainland.

These activities contribute to Australia’s overall prevention, preparedness, and response capability for exotic pests, diseases and weeds.

Major incursions have severe consequences and not only affect agricultural industries. They also impact on Australia’s unique environment, economy and, occasionally, human health.

The programme contributes to the department’s role in developing the capabilities of neighbouring countries to contain pests and diseases within their borders—especially with the threats of emerging infectious diseases such as rabies. NAQS also has a role in assisting state and territory agencies in responding to pest and disease incursions in Australia’s northern region by helping to conduct surveillance that supports containment and eradication efforts.

NAQS has powered past its initial 1991 lifespan. After 25 years the programme continues to be a major contributor to the national biosecurity system, and deserves full credit for its part in sustaining the Australian way of life we all enjoy today, and well into the future.



# Keeping a Top Watch! for Australia's biosecurity



The Northern Australia Quarantine Strategy has achieved many successes, but one critical accomplishment has been its Top Watch! programme.

With the NAQS operating zone so vast and diverse, and its land predominantly controlled by external parties, the need for engagement and support from communities and stakeholder participation is vital.

Top Watch! was set up to meet these challenges by raising awareness of biosecurity risks in the area and encouraging people to report them.

It provides a vehicle for establishing strong working relationships with local communities, facilitating surveillance activity on privately owned land and improving compliance with legislation on the movement of prohibited items through the Torres Strait risk pathway.

The programme has proved to be a winner across the north and has been embraced by local communities, councils, the general public and other government agencies.

The early introduction of the iconic NAQS calendars allowed the programme to share more detailed information with those in remote locations and assisted mainland and Torres Strait communities to all keep a Top Watch! for target pests, weeds and diseases.

Since the earliest days of NAQS, Top Watch! has evolved to include a coordinated programme of information material, strategic community engagement, such as working with Indigenous ranger groups, and participation in high-impact community events.

It is a programme that has thrived on relationships and face-to-face communication.

NAQS officers understand that it's often the personal touches, like sharing information over a cuppa, that can be the difference between success and failure in working with the community.













A scenic coastal landscape. In the foreground, dark, layered rocks are visible. Beyond them is a sandy beach that meets the turquoise water. The water is calm, reflecting the overcast sky. In the distance, a low-lying island or headland with sparse green vegetation is visible under a heavy, dark, and stormy sky. The text "Our stories" is written in a white, cursive font across the middle of the image.

*Our stories*

# Titom Nona

**M**y name is Titom Nona. I am the biosecurity officer on Badu Island and have worked for the Department of Agriculture on Badu for 20 years. I work as part of the Northern Australia Quarantine Strategy which covers the top end of Australia from Cairns to Broome, managing the risks of unwanted pests and diseases from entering the region.

I was born on Thursday Island and raised on Badu Island. My family are traditional land owners on Badu. My totems are Thupmul (Stingray) and Thabu Augadh (Snake).

Before I became a quarantine officer I was a crayfish diver and fisherman, and later in the 1980s I was a community police officer.

In 1991 I was appointed a quarantine officer with the Queensland Department of Primary Industries. At that time, quarantine duties in Torres Strait were administered by the state government. In 1995 we moved to being administered by the Australian Government. This move represented a lot of changes for me as my role altered and we had to learn the new legislation.

I am very proud of being an officer working for the Department of Agriculture and the contribution I have made to safeguarding Australia, and more importantly, my island home.

During my career with NAQS I have witnessed many changes. In 1993 Asian honey bee was first detected in Torres Strait, on Boigu Island and, with my fellow officers, I implemented the first Asian honey bee eradication programme.

The importance of my role as a quarantine officer really hit home for me and my community in 1995 when there was a Japanese Encephalitis outbreak on Badu. The outbreak claimed the lives of two community members. Sadly, one was a child. Two other community members also fell ill but survived.

This sad time highlighted for me the importance of my role with NAQS and as a member of the Badu community. It was my responsibility to make people aware of the importance of being careful when keeping pigs in the community as they carry the risk of Japanese Encephalitis, and were the source of the outbreak. This was challenging, as keeping pigs is part of our traditional way of life and culture.

The Badu community agreed to start a piggery to keep all of our pigs, and I performed ongoing monitoring for diseases by taking blood samples from the pigs each week.

These days my role as a biosecurity officer involves many different activities including clearance of aircraft and sea cargo, scientific monitoring, clearance of traditional visitors from Papua New Guinea and delivering public awareness programmes to our community, schools and traditional visitors.



I often do relief work at other locations, but although I enjoy visiting other places, Badu and Torres Strait will always be my home.

But I don't spend all of my time working. In my spare time I enjoy hunting, fishing and camping and those who know me know I'm a 'straight shooter' and love to have a joke.



*I am very proud of being an officer working for the Department of Agriculture and the contribution I have made to safeguarding Australia, and more importantly, my island home.*



# Jonathan Corpus

I joined NAQS in February 2008 not realising that I was about to have the best time of my life! But the majority of the best stories are those that occurred away from the city—out in the scrub while sleeping in swags.

After a long day's work we'd sit by the fire at places like Roper River with nothing but a swag, a nice fire and stars as far as the eye can see.

I met people from one side of Australia to the other—the ringers (cowboys) from the scrub, to the remote Indigenous fellas that would have me laughing so much I would be in tears. All while having a cuppa tea (preferably in a pannikin just short of 1 litre) boiled on a fresh fire and whitened with powdered milk, which I still use to this day.

It was a job I loved, and genuinely believe makes a difference to protecting Australia.

With the vast distances to cover, travelling with people while on the job became second nature and spending many hours next to someone was standard. You learn a lot about people on these trips. Some were easy to work with while others stretch the patience level, but there are so many good people whose words changed my life.

The plant and animal scientific surveys I took part in taught me a lot and I saw a lot of the country travelling most of the Northern Territory and the Western Australian regions. For a while I also stepped out of the role as a liaison officer into cruise ship, iron ore and transport ship inspections, as well as hanging out of a chopper and participating in post mortems.

My challenge, and one that I love, was adapting the message of NAQS to share with people—it could be people who have spent years studying to get a degree or those for whom English was a second language. Regardless, building a bond and strong relationship was vital.

NAQS to me is a dedicated team of people protecting the rest of Australia from exotic pests, weeds and diseases and looking for the first signs of incursions. I feel that in my time with NAQS I touched people and changed minds and brought awareness to them which was the big objective. It has also been about lifelong mates, learning how important our country and land are to everyone, and helping younger Aboriginal people realise they can get a good job and travel the country to help people and the land.





*It was a job I loved, and genuinely believe makes a difference to protecting Australia.*



# Heidi Taylor

Travelling, working and visiting in Cape York is always an adventure. Most of the time I spend at least 12 hours driving in a cloud of red dust, navigating the odd river crossing and keeping an eye out for snakes, feral pigs and crocodiles. When I hit the unsealed road just north of Laura, I get a smile on my face as the craziness of the cities is left far behind.

When Tangaroa Blue Foundation began working with Cape York communities on the Australian Marine Debris Initiative in 2011, we were on a very steep learning curve as we had primarily been running the programme for the previous eight years in more urban areas around the country.

This was when I first met NAQS officer Bruce Lansdown, who seemed to know everyone in the Cape, and provided advice on who, when, how and where we should be focusing our work to reduce marine debris, and that being flexible was the key. From there, the Tangaroa Blue-NAQS relationship slowly grew, resulting in a partnership linking the Department of Agriculture in Cairns with our network of volunteers on the ground, first in northern Australia, and more recently, around Australia.

Early in 2014 I travelled to Canberra to sign a Memorandum of Understanding with the Department of Agriculture which provides a channel for our volunteers to report biosecurity threats found during beach clean up events.

This partnership has provided our 30 000+ volunteers with an avenue to be part of a vital network that protects Australia from biosecurity threats. By collecting and reporting data on biosecurity threats, in addition to marine debris, ocean pollution, MARPOL breaches, wildlife strandings and suspicious behaviour, our volunteers are no longer rubbish collectors, but an important link in protecting Australia's biodiversity and environment.





*When I hit the unsealed road just north of Laura, I get a smile on my face as the craziness of the cities is left far behind.*



# Chris Dale

NAQS is not just a programme, and it's not just a job. It is an institution, a way of life, and a passion for those of us privileged to have worn the khaki and TopWatch! brand.

I stumbled upon NAQS 12 years ago when, shortly after returning from Timor-Leste as a United Nations Peacekeeper, I ambitiously applied for a quarantine adviser position in the East Timor Quarantine Support Project

Twelve years, and many adventures later, I can honestly say that NAQS changed my life.

It began in Timor when I was involved in the ambitious task of establishing a quarantine service in the region's newest nation. Three years later, Timor had a fully operational quarantine service—Servicio de Quarentina Timor-Leste, I'd parked an Armoured Personnel Carrier (with help from the Australian Defence Force) in front of the Edmund Barton Building and I was on my way north to the NAQS heartland to join the NAQS operations team.

I spent the next 18 months spreading the Top Watch! message by land and sea, visiting stations, islands, communities and cooperators throughout Cape York. The Straits soon beckoned and

I spent four memorable years on Thursday Island, working throughout Torres Strait and the Northern Peninsula Area.

However, I still had a yearning to experience NAQS in its entirety and was soon in Darwin running the NAQS Northern Territory/Western Australia operations. Our Indigenous engagement programme stretched from Broome in the west to Cooktown in the east and I spent the next two years travelling between Indigenous communities across the Kimberly and Arnhem Land, working with Indigenous ranger groups in the delivery of NAQS surveillance activities.

The opportunity to work across all NAQS programmes has brought many amazing adventures like being chased up a tree on the Tiwi Islands by a buffalo bull, hunting bats through swamps in Timor, migratory bird surveys on the barrier reef, illegal foreign fishing vessel clearances in the middle of the ocean, and enough helicopter rides to last a lifetime.

Being part of NAQS has been a great privilege and has had a significant influence on me personally, professionally and culturally. NAQS will always be in my blood as I'm sure it will be for those privileged to have been part of the journey over the past 25 years.





*It began in Timor when I was involved in the ambitious task of establishing a quarantine service in the region's newest nation.*



# Barbara Waterhouse PSM

When I signed a short-term contract as the first NAQS botanist in early 1990, I was thrilled at the prospect of experiencing the adventure of a lifetime as part of a multi-disciplinary team. I didn't expect it to become my lifetime adventure.

Having previously worked as a registered nurse and then as a full-time tutor at the University of New England, I had every expectation of resuming my PhD in Biogeography at the Australian National University on conclusion of the contract.

Now in my 25th year with NAQS, I am still passionate about our role in early detection of new biosecurity threats in and near northern Australia, and the PhD has been put off until retirement.

Initially we faced the enormous challenge of forging the methods for doing plant health surveys in remote, and in those days, virtually inaccessible locations. Many of the strategies we implemented are still practised today.

It was literally a case of jumping in at the deep end. Within a week of starting, I was off to Papua New Guinea for a joint animal and plant health survey in the Western Province. I was one of the first white women to have visited some of these villages since PNG gained its independence in 1975, and was treated like royalty by the women who are the principal gardeners there.

It is difficult to nominate a single highlight. Being welcomed repeatedly to Torres Strait islands ranks high. Most Australians don't realise the amazing sacrifices made by Torres Strait residents to protect mainland biosecurity.

I am fortunate to have worked alongside charismatic colleagues like the late Bishop Ted Mosby and Dr David Banks. On our first visit to Masig Island, Ted ensured that I ate wongai fruit, a native fruit that would ensure I returned to Torres Strait. He was right!

Using feral European honey bees in suburban Canberra, David and I developed bee-lining techniques for nest location which I adapted for tracking Asian honey bee nests in the northernmost Torres Strait islands. One technique we tried was to tie a small glittering thread onto bees' hind legs so we could observe them flying towards the nest. When we explained to a puzzled resident what we were doing, he pointed to a large tree in his neighbour's yard and said: "Why on earth didn't you ask me? The nest is in that tree."

One of the greatest rewards has been to know that early detection and reporting of new pests has made a difference to biosecurity outcomes in northern Australia and neighbouring countries. For example my detection of Siam weed in Sandaun Province in PNG in May 1992 led to PNG's inclusion on a biological control programme (funded by the Australian Centre for International Agricultural Research).



In northern Australia I have played a key role in the early detection and response to numerous pests including spiralling whitefly, Asian honey bee, papaya fruit fly, Siam weed, yellow burrhead and mile-a-minute weed.

I also feel especially fortunate that my contributions have been formally recognised by several national awards, including the Council of Australasian Weed Societies Medal for Leadership (2002), the Invasive Species Council's inaugural Frogatt Award (2003), a Public Service Medal (2004) and an Australia Day Award (2011).



*Now in my 25th year with NAQS, I am still passionate about our role in early detection...*



# Roger Shivas

The excitement of discovery is addictive. People and places, foods and smells, rainforests and savannahs, plants and microfungi (you can see where this is heading).

Back in the 1980s and '90s, I was a plant pathologist in Western Australia. In fact, I was there at the birth of NAQS.

In those foundation years, I was invited to participate on a NAQS survey in Irian Jaya for plant pests and diseases. My recollections of that survey still cause me to pause and reflect on:

- ~ the hectic, left-it-too-late packing for four weeks away from home, not knowing what gifts I should take
- ~ perpetual perspiration that comes both from tropical heat as well as the ingestion of foods laced with chilli
- ~ the ritual of drinking stale tea in anonymous offices
- ~ the Baliem Valley under a pure-blue sky edged by mountain white and rainforest green

- ~ Wamena market with its condensed produce of unfamiliar plants from hundreds of farmers, from countless plots eked out of steep hillsides
- ~ conversations lost in language and translation, but always meaningful
- ~ entanglement in a mosquito net.

After two decades I still have John Turner's plant press and a collection of koteka that hang from my lounge room wall.

And, of course, there are the specimens, the NAQS specimens which have laid the foundation for their surveillance and diagnostic work.

Has it really been 25 years?







*Conversations lost in language and translation,  
but always meaningful.*



# Cassandra Wittwer

I moved to Broome to join NAQS as a veterinary officer early in 2010 when looking for a change in career direction after getting the 'seven year itch' in private vet practice.

I stumbled on this position in this north-western corner of paradise I'd heard so much about but not yet visited. Though on my first day in town it was pretty warm at 42 °C, with short bursts of rain in between roasting sunshine!

Fortunately I love hot weather and I was warmly welcomed into our little office and the broader Northern Region and found that taking on this new role so far from home was exactly the challenge I needed.

I had huge shoes to fill after the 20 years of effort of my predecessor John Curran. Following his extensive work discovering the minimal risks of migratory shorebirds bringing in highly pathogenic avian influenza from the East-Asian Flyway, the role of NAQS veterinary officer in Broome has evolved from conducting frequent field surveys to spreading public awareness and understanding of the risk of entry, establishment, spread and most importantly, the consequence of exotic disease incursion.

Fortunately, there is still field work to be done as part of our early detection mantra, so there are opportunities to explore this incredible corner of the world and get to know the characters that live here.

My first field trip was 900 km by mostly unsealed road to Kalumburu, Western Australia's most northern community.

The Kalumburu Catholic Mission has a small, semi-wild cattle herd that NAQS samples as surveillance for exotic strains of Bluetongue virus and other livestock diseases. It was a great introduction to an example of the importance and relevance of NAQS's work. It was also an introduction to one of NAQS's true characters, stock manager and general larrikin Michael Keane who has been setting light traps every month for the past 25 years to catch the midges that carry Bluetongue virus.

Field trips like this give some perspective on the extreme remoteness and vast distances of the region yet also help to understand how close we are to our international neighbours and associated risks of exotic disease.

My other favourite trip was our annual avian influenza survey to Kununurra where we'd use cannon nets to trap hundreds of wild geese and ducks to test for strains of 'bird flu' in order to get an idea of which strains are present that might pose a risk to commercial poultry flocks.



NAQS has given me opportunities I never imagined were available to work in remote areas: the Kimberley wilderness, on Cape York and Torres Strait on animal surveys; and even overseas: in Kenya for training in foot-and-mouth disease diagnosis and Timor-Leste to get an understanding of what exotic diseases might pose a threat to our coastline.

And there are the many Indigenous communities and pastoral stations we visit to spread an understanding of the importance of our work and the need for residents to keep a 'Topwatch!' to protect their livelihoods and environment.

I look forward to plenty more years of exploring this amazing corner of Australia in an attempt to keep an eye out for these diseases that would threaten our way of life!



*I look forward to plenty more years of exploring this amazing corner of Australia in an attempt to keep an eye out for these diseases that would threaten our way of life!*



# Cygnnet Repu

**H**ello, my name is Cygnnet Repu and I am the biosecurity officer on Mabuiag Island. I've worked with the Department of Agriculture, once called the Australian Quarantine and Inspection Service (AQIS) for over 15 years.

I did this as part of the Northern Australia Quarantine Strategy, which covers most of the top end of our beautiful country, from Cairns to Broome, including Torres Strait.

Traditionally I am a Goemulayg from Goemu (the southern part of Mabuiag). My totem is Kaygas, the shovel nosed ray, and I am very happy to be a part of a close family of Department of Agriculture workers based throughout Torres Strait who work to help safeguard our lifestyle and care for country and nation.

It's important to have biosecurity officers in Torres Strait because each island and community is at the very door that opens to Australia. Our closeness to Papua New Guinea means that we're potentially exposed to many plant and animal diseases, weeds and other species which are present there but not in Australia. Some of these could cause serious damage not only to our agriculture, but also our future—our children.

Having our own people as biosecurity officers in Torres Strait provides opportunities for local people to help protect our nation. This also makes the workload much easier because of the language, family and cultural connections within each community.

The original idea of quarantine related to a Biblical requirement which was referred to as early as the book of Leviticus. God gave to Israel laws concerning the safety of their lives.

Similar laws still apply for all of us today; one way to help us live safe and protected lives is if we help to prevent unwanted pests and diseases from getting onto our front yard.

Oh, I forgot to mention I am also a singer and musician and I performed at Ailan Kores on Waibene. It was a memorable experience for me. My repertoire includes a number of songs promoting the quarantine message which I'm proud to see helping to educate communities about the importance of quarantine in our beautiful region.





*It's important to have biosecurity officers in Torres Strait because each island and community is at the very door that opens to Australia.*



# Joanne Pearce

All can recall exactly where they were at the time of the 9/11 terrorist attacks. However, it seems that NAQS surveillance work in remote areas of northern Australia carries on regardless of significant world events.

On 11 September 2001 I was with a NAQS scientific survey team camped out on a large cattle property near Normanton, a small town in northwest Queensland, just south of the Gulf of Carpentaria.

As a manager for the NAQS programme from Canberra, I was conscious of the need for street cred. It was important to understand the programme properly and there was no better way to do this than by getting out there—getting down and dirty, literally—and participating in one of the many field activities that occur each year as part of NAQS's annual survey schedule.

Our focus at the time was on surveillance for animal diseases, such as foot-and-mouth. We were searching for feral pigs, for clinical examination and sample collection, but in our porcine pursuit we were completely oblivious to the terror that had struck in the US and reverberated around the world.

It was not until the following day when we relocated to the station's base—and traded our tents for proper beds with the luxury of a shower and a toilet (things often taken for granted)—that it was apparent that something of monumental proportions had occurred. It was a surreal moment realising that NAQS work was carried out in such remote areas that those involved could be completely and utterly cut off from the world and what was happening in it.

NAQS's work and comfort are mutually exclusive—a point reiterated to me repeatedly over my 10-year association with the programme. It is a daily reality for many of the programme's regional staff and those who reside in areas of northern Australia with harsh climates, considerable isolation, crocodiles and other dangers, and surprisingly none of the big city conveniences. A completely different existence to that of residents in capital cities in southern Australia, but who are also (and mostly unknowingly) beneficiaries of NAQS.

This was my first NAQS survey experience and one that has stayed with me, not only because of 9/11, but also because I was proud and excited to be a part of what happens on the ground to generate valuable scientific data that makes a difference to our country's biosecurity.





*... but in our porcine pursuit we were completely oblivious to the terror that had struck in the US and reverberated around the world.*



# Tony Pattle

I joined NAQS in November 1998, right at the start of the programme, but in reality I had been doing NAQS-type of work in Kununurra and Broome since I joined the Western Australian Department of Agriculture in 1995.

I am an entomologist and my role was to survey for and document insect species with a view to monitor exotic species that may be a threat to our agricultural industries and our environment.

I feel very proud about my work with NAQS. If you drew a line from Darwin to Alice Springs and west across to Perth, I was, at the time when I first started, the leading expert on insects in this area (outside of Perth and Darwin, of course). I had responsibility for about one-third of Australia.

I identified or submitted for identification anything of quarantine interest and I found a number of first records for WA.

If it damaged crops, I wanted to find out what it was.

The public were also fantastic, either sending in or bringing in all sorts of fabulous insect samples. I found quite a few we didn't expect to see.

One of my pet areas is aerial plankton—plankton referring in this case to a 'floating mass'—so I'm talking about tiny insects that get swept up by air currents and drift great distances, sometimes in excess of 1000 km.

This pathway for exotic insect pests to reach Australia had been largely under the radar until 2006. In my 10 years in Broome, I submitted several of this type of insect that, after subsequent examination and identification by experts, were determined to be exotic. Whether they had blown in directly or from elsewhere in Australia is still a moot point!

My great passion is termites which can come into Australia via other major pathways—in driftwood, through boat movements or in IFFVs (Illegal Foreign Fishing Vessels). I have found a wide range of native and exotic termites in driftwood and IFFVs over the years.

I felt that my work contributed to the success of the IFFV programme. As the programme went on, we got better and better at finding termites and ants and other insect pests, including mosquitoes and wood borers.

I think NAQS is a very important programme that has done a lot with very limited resources.

We got a lot of support from the public—I was sent a lot of insect samples—which I think was great. People feel like they are a part of the work we do. Waving a flag and raising public awareness is a very important part of the work NAQS does.

We also worked closely with other agencies such as the Navy and Customs who helped us get into very unusual areas to conduct surveys.





*The public were also fantastic, either sending in or bringing in all sorts of fabulous insect samples. I found quite a few we didn't expect to see.*





# Hilda Mosby

Being the first ongoing Indigenous female quarantine officer with NAQS was challenging yet interesting.

I joined NAQS on 6 January 1997 as the quarantine officer on Masig (Yorke Island). I easily remember that day as there are a number of other family anniversaries happening on the same day.

At first it was hard, but soon I got used to working in a largely male dominated workplace. I did the same work as the guys. They didn't treat me any different and I didn't treat them any different. The respect was mutual.

There were bigger challenges to face in the early days than just worrying about being the only female.

It took a while for my office to get a phone line and I had to make my calls from home.

There was no air-conditioning in the early office—not like now—and we used a quad bike to get around the island. These days each island has its own vehicle.

But the work we did was, and still remains very important.

A lot of our work in the early days was focused on community engagement and building relationships within the community.

I think we did a fabulous job; we even had Mal Meninga and Christine Anu as quarantine ambassadors and produced the Mary G video. They were exciting times.

Our programme focussed more on education back then. I think we now have a larger focus on the scientific side of our work but I think we need to continue to spread our message. This is very important work and we need the support of the community to help us do our job.

Looking back I feel I contributed a lot to NAQS by sharing my culture with the programme.

I went to the department's middle management conference in Sydney and other important forums to tell my story and teach about my culture and values.

In return, the support I received from the department has also been very good. I was privileged to be acting team leader for a while and I learnt a lot of skills from that experience—skills I still use today.

I think the department and I have both benefitted from our relationship.





*I think the department and I have both benefited from our relationship.*



# Chris Rodwell

‘You’re going where and to do what?’  
A slightly puzzled practice owner in inner-Melbourne asked three years ago when I told him about moving to Cairns for the NAQS programme. I just smiled.

Who wouldn’t want to swap the pampered pooches of Albert Park for animal surveillance in remote Cape York?

I’d always looked for interesting and challenging work since I graduated back in the late nineties and it didn’t get too much more interesting than this.

During my veterinary travels I’d worked in James Herriot country and seen first-hand the devastation of a foot-and-mouth outbreak; sailed into Saudi Arabia with 65 000 sheep; hosted an animal TV show with Johnny Young on the ABC; and chased horses around New South Wales with large needles during the equine influenza outbreak—not your usual veterinary CV.

When I first came up to Cairns I thought I was the luckiest vet in Australia. Why? I was going to work in an amazing part of the country, with passionate people connected to their land practicing veterinary science in a unique environment.

Three years on and I still think I’m Australia’s luckiest vet. I love big picture stuff and the feeling I am contributing to the benefit of animals and people on the land in a way I could never do as a clinical vet.

And I love the cross-pollination of science that NAQS applies to the far north, working with a range of science professionals that are not only passionate about the programme, but are often independently world-renowned in their respective fields.

On my last visit ‘down south’ I popped in to the practice I used to work for. Over a cup of coffee my former boss asked when I was coming back to work for him in Melbourne. I just smiled.





*Who wouldn't want to swap the pampered pooches of Albert Park for animal surveillance in remote Cape York?*



# James Bond 'Jimmy'

We have a small herd of just 15 cattle here in Seisia that we regularly bleed to check for exotic diseases. That little herd is one of the most important in Australia. If something comes in that could affect all cattle in Australia, there's a good chance it will come in through Northern Cape York or Darwin.

As a young boy I grew up working with cattle and livestock and when I joined NAQS on 28 October 1997, one of my first roles was monitoring cattle, pigs, chooks and domestic animals for exotic diseases.

The early days were hectic as there were only two officers in Bamaga and a lot of monitoring work to do. One of the big jobs, done on behalf of the Queensland Department of Primary Industries, was to care for the livestock buffer fence that ran across the Northern Peninsula Area from east to west.

I found our monitoring work interesting. We were given new mosquito and midge traps to try—some worked and others are still ongoing—and it was exciting when we monitored domestic animals as we met a lot of people.

That's how we detected Japanese encephalitis on Badu and later in the Northern Peninsula Area.

We met a lot of scientific fellas from our department, and it was interesting work for them, working up here in that sort of tough environment. But I learnt a lot from them and gained a new perspective on working with cattle and livestock.

People—locals and visitors—watched us doing our work and gained an appreciation of the importance of the job we were doing to protect the cattle and agricultural industries.

I love this job and I'm really proud of my work. I have worked for NAQS for more than 17 years and I have even been recognised with an award that was presented to me in Canberra.

NAQS has given me a variety of skills. Apart from my monitoring and quarantine skills I also have my coxswain ticket so I can go out on our boat. I'm multi-skilled and I can relate to any work that NAQS does here.

And the people I work with—the staff in the Northern Peninsula Area, Thursday Island, Cairns and Darwin—they always make me feel welcome and we work closely together and learn from each other.

It's a bit like a family to me.





*I love this job and I'm really proud of my work. I have worked for NAQS for more than 17 years and I have even been recognised with an award that was presented to me in Canberra.*



# Pete Pedersen

I joined quarantine in 1990 when the programme had only been going for a short while.

In those days we had just three scientists in the programme in Queensland and we worked for the Queensland Department of Primary Industries.

I was assigned part-time to NAQS duties and at first I did public relations work. My first gig was at the Cairns Show and later that year at a field day in Laura. Back then, Laura was a full day's rugged drive from Cairns and we felt like we were in the depths of the Cape York wilderness.

Like all inspectors did then, I migrated across a range of roles each day: seaports, the airport, post entry, cargo and some NAQS activity. In 1998 I went into NAQS full time, this was around the time I was posted to Torres Strait as 2IC in the Thursday Island office.

I learnt a great deal from my Indigenous colleagues and got a very practical knowledge of the risks and challenges of quarantine work in that part of the world.

When someone who doesn't know anything about NAQS asks me to describe the work I did, I recall an old cricket analogy. I see the broader quarantine spectrum as the batsman at the crease, batting away any exotic pests at the border. NAQS is the wicket keeper who picks up any

exotic threats slipping past the batsman at the border. The broader community are the fielders, spread out and always on the lookout to catch exotic pests that get to the outfield. In northern Australia every ball is a googly!

In all of this, my role was as the orange boy supporting the rest of the team.

I was engaging with the community so they understood our role, knew what to be on the lookout for and, most importantly, they trusted us and respected our work. We also supported the scientists and undertook the operational aspects of the programme.

The reason I stuck with NAQS for so long is because not only is it important and rewarding work, it was really enjoyable.

I've lived up here for most of my life and travelled extensively around northern Australia and some of our neighbouring countries, seen the pests and diseases on our doorstep and also seen what happens when those pests get in, the devastation they cause and the lives they ruin.

Good quarantine is essential to agriculture, tourism and indigenous lifestyles in the north. The stakes are high if a big outbreak occurs.



One of the best things about working in NAQS was learning new skills. I learnt more from people like Barb Watehouse, Judy Grimshaw, Doug Claque and Jonathon Lee in a few days on survey than three years at university.

The other real appeal of working in NAQS was that we got to interact face-to-face with real life primary producers, residents of remote communities and the characters of the north.

What we did directly helped them in a practical way. Local people understood and respected the programme and appreciated what we were doing.

At the end of the day we made camp and felt really proud of the job we did.



*The reason I stuck with NAQS for so long is because not only is it important and rewarding work, it was really enjoyable.*



# Bruce Lansdown

Most folk up here know me as the 'banana man'.

Back in 1994 I was in the Queensland Department of Primary Industries (DPI) and due to several incursions in the far north of black sigatoka—a disease that affects banana plants—a black sigatoka banana replacement programme was developed.

This, as its names suggests, was to encourage property owners to replace disease-susceptible plants with disease-resistant varieties. I travelled throughout the Cape to sample all banana plants for the disease and negotiate with landholders and communities the removal of the susceptible banana varieties and replacement with resistant varieties.

I was based at Innisfail at the time and would spend two weeks in the Cape and one week back in Innisfail, and so on. Because of this work I got to know the Cape and its people, including the team at NAQS, very well.

NAQS and DPI did a similar role in the Cape, so I got to know the NAQS staff and more importantly, how they operated. From 2000 to 2003 I was running the DPI quarantine station at Coen and had a lot of interaction with NAQS. I even did some public awareness trips with them.

In 2005 I took the opportunity to join NAQS based in Weipa.

Initially I was in the operational and seaports role, but after a few months I moved across to the Community Liaison Role, a position I still hold today. Later I would add the team leader feather to my cap as I became responsible for a team of community liaison officers throughout Cape York Peninsula.

In 2010 I moved from Weipa to Cairns, but I still regularly get out into the Cape and the Gulf country conducting public awareness work and Indigenous engagement in remote communities and towns.

NAQS is a scientific-based programme, I work with the community to facilitate the work our scientists do, as well as work closely with, and train, the Indigenous rangers in surveillance activities which they do under a fee-for-service contract with us.

One of NAQS's major jobs is to develop remote community's quarantine awareness and to develop relationships. Our relationship with Indigenous communities throughout northern Australia is one of our great strengths. Forming relationships is valuable and many of the Indigenous communities that we work with also acknowledge the value of these relationships.

I enjoy what I do: meeting such a variety of people. I have learnt a lot from these people and have developed some great friendships along the way.



Some people say that I'm territorial in what I do; I guess that is true as I have a very strong sense of pride in the achievements I have made in this role.



*I also enjoy a good challenge and this job always has plenty of varied challenges to get my teeth into.*



# Clayford Lui

In commencing I would like to Eso youme Almighty Lord God and Saviour for his abundance blessings lor youme everyone, ya lor youme island homes, regions lor Australia and around the world.

Hello to everyone, I'm Clayford Lui, biosecurity officer/inspector on Iama Island, which is located in the central island group of Torres Strait and is my island home.

Thursday Island is my birthplace but I live out on Iama Island. My family roots are linked to the Island of Mer (Murray Island), the most eastern of the Torres Strait islands, and to Poruma Island (Coconut Island) in the central islands group.

My totem is the Turner bird we know as Serar, the Mackerel we know as Dabor and the Green Heron we know as Gau.

I have been in the Department of Agriculture (which used to be called the Australian Quarantine and Inspection Service or AQIS) for 13 years. Over that time the scope of work that I've experienced and been exposed to has been invaluable.

I have been privileged to experience not only the work on Iama, but also abroad at different communities, such as the Northern Peninsula Area, Thursday Island and the outer Torres Strait islands, conducting various operations and networking with various government agencies and clients.

I have been able to inspect cruise vessels and international aircraft, undertake helicopter flights while conducting fruit fly monitoring and interact with people from all walks of life. I have enjoyed educating and broadening people's knowledge about biosecurity.

My work with the department has even taken me to Timor-Leste where I conducted military personnel equipment inspections. Rather than bring the risk of Siam weed to our country, inspections were conducted in Timor-Leste. It is one of the world's worst weeds as it grows quickly and produces masses of seed. Siam weed can smother tropical fruit crops, young forestry plantation and pastures and invade native woodland.

Biosecurity is like a family group in Torres Strait and the Northern Peninsula Area and I am privileged and also grateful to be among this diverse and dedicated group of people.

Together we strive to safeguard, protect and manage our livelihood from the threat of exotic pests and diseases that may enter Torres Strait or spread from Torres Strait to mainland Australia.





*My totem is the Turner bird we know as Serar, the Mackerel we know as Dabor and the Green Heron we know as Gau.*



# Murray Korff

I grew up in rural New South Wales with farmers on both sides of my family so I appreciate the value of farming to our communities and national economy.

I was, let's say, 'challenged' when it came to the practical side of growing things (okay on the tractor but never the most talented or enthusiastic cocky as my grandfather 'Dar' would confirm).

Accordingly, I've been content to contribute to agriculture through the supporting work of the department, first in roles in Canberra and later through NAQS in a regional context.

I took on the programme director role after NAQS programme management responsibilities were regionalised in 2009.

NAQS's work reflects Australian innovation in meeting biosecurity challenges in demanding and often harsh environments. As a group, we've been particularly adept at achieving positive outcomes through sound science, a respect for culture and dashes of good humour—which I've learned can be the difference between success and failure.

My first experience of NAQS involved seeing a photo of an Indigenous ranger helping with a plant health survey. He was all smiles, and the pride in his part of the surveillance was obvious and, in my case, infectious. I've met plenty just

like him since joining the team and have come to understand the enthusiasm of these and other participants in the strategy's success.

It's the collaborative effort for common goals of biosecurity, a healthy environment and agriculture that generates a real sense of purpose and obviously aligns well with community values.

People up here are rightly proud of their land and contribution to biosecurity. They understand the benefits not only to their region but also areas 'down south' and help by supporting NAQS surveys and following Torres Strait quarantine rules. They have a genuine willingness to report evidence of quarantine threats. It's great to be a part of a team promoting this collaboration.

My role necessarily focuses on the corporate leadership, governance and stakeholder engagement aspects of the programme. It's rewarding work (a successful audit is as exciting as feral animal sampling you know!) and the opportunity to participate in a range of operations really adds to the challenge and enjoyment of the role.

NAQS has shown me some of the more unusual skills required for biosecurity in the north like how to check a three-legged dog for screw worm fly strike, and the number of stripes to look out for on an Asian Honey Bee's bum.



I've also developed practical skills in ways I'd never have imagined courtesy of working with staff in the field. Did you know I have a talent for digging temporary toilets for survey teams and overacting during safety training scenarios? I'm waiting for my award for best performance in the 'hysterical car accident victim' category which I'm told is on its way.

I'm proud of NAQS's contributions to Australian agriculture and the parts I've played in its 25 years. While they haven't involved turning soil or picking spuds, I know Dar would be happy.



*NAQS has shown me some of the more unusual skills required for biosecurity in the north like how to check a three-legged dog for screw worm fly strike...*



# Bart Rossel

When I joined NAQS in 2007 I could never have anticipated the experiences and diversity of work I would encounter.

I became interested in working in an operational environment (which was AQIS at the time) after working in Plant Biosecurity in the Department of Agriculture.

When I joined NAQS I began managing aspects of international plant health, specifically the delivery of overseas plant health surveys.

This included analysing plant health data and reporting on emerging plant pests. I was also involved in the planning and delivery of the Papua New Guinea and Australia Quarantine Twinning Scheme—an AusAid-funded project to help improve the PNG quarantine system.

I was based in Canberra but travelled to, and worked in, Torres Strait and also PNG. That alone made for some interesting tales. When I was in PNG I had rats as roommates, and I was using insect spray bombs only to find cockroaches the size of small rats under the bed.

I also remember flying over the PNG highlands and being amazed how the pilot could land a plane on such a small landing strip, but was worried about being able to take off again.

And I remember surveying food gardens. They were only a small walk away, but only reached

after many hours walking through the jungle and valleys in 40 degree heat and 100 per cent humidity.

I learned the basics of a new language, Tok Pisin, which is one of the official languages in PNG. It helped me to introduce myself to the elders. Some key words were:

- ~ pathologist: sick no good man
- ~ entomologist: binatang man
- ~ botanist: grass no good man
- ~ team leader: boss long them.

It was rewarding to see how I could make a difference, learning from different cultures and ways of thinking.

I was in NAQS until 2010, and found it to be a great experience. Seeing how a programme can make a change to Australian biosecurity and nearest neighbouring countries was the most valuable reward I received.

And one of the best things about working there was the commitment of all the people involved.

For new starters or people wanting to get involved with the programme, my advice is:

- ~ be patient—working with international counterparts has many unplanned challenges
- ~ be open-minded
- ~ be willing to learn.





*It was rewarding to see how I could make a difference,  
learning from different cultures and ways of thinking.*



# Jamie Brown

I was recruited to NAQS in 2007 to work on the Papua New Guinea–Australia Quarantine Twinning Scheme (PAQTS)—an AusAID-funded programme developed to improve the PNG quarantine system.

There was really no typical day. Our team worked closely with PNG's National Agriculture Quarantine and Inspection Authority on several capacity development projects.

My work was diverse and could be anything from scientific literature reviews, logistics, to plant pest and disease surveillance training, light trapping insects in Port Moresby, or meeting with PNG industry bodies.

I also worked on the response to the *Varroa jacobsoni* detection.

But my base was actually in Canberra so I had the opportunity to travel north regularly to Darwin and Cairns and Port Moresby, Lae, Rabual and North Bougainville in PNG.

I certainly got to travel to some beautiful parts of the world that most people don't get to see. But I also learnt a lot about the challenges PNG faces in managing biosecurity risks and the vital work we do with them.

I also learnt quite early that if you're going to do anything in PNG always have a plan B!

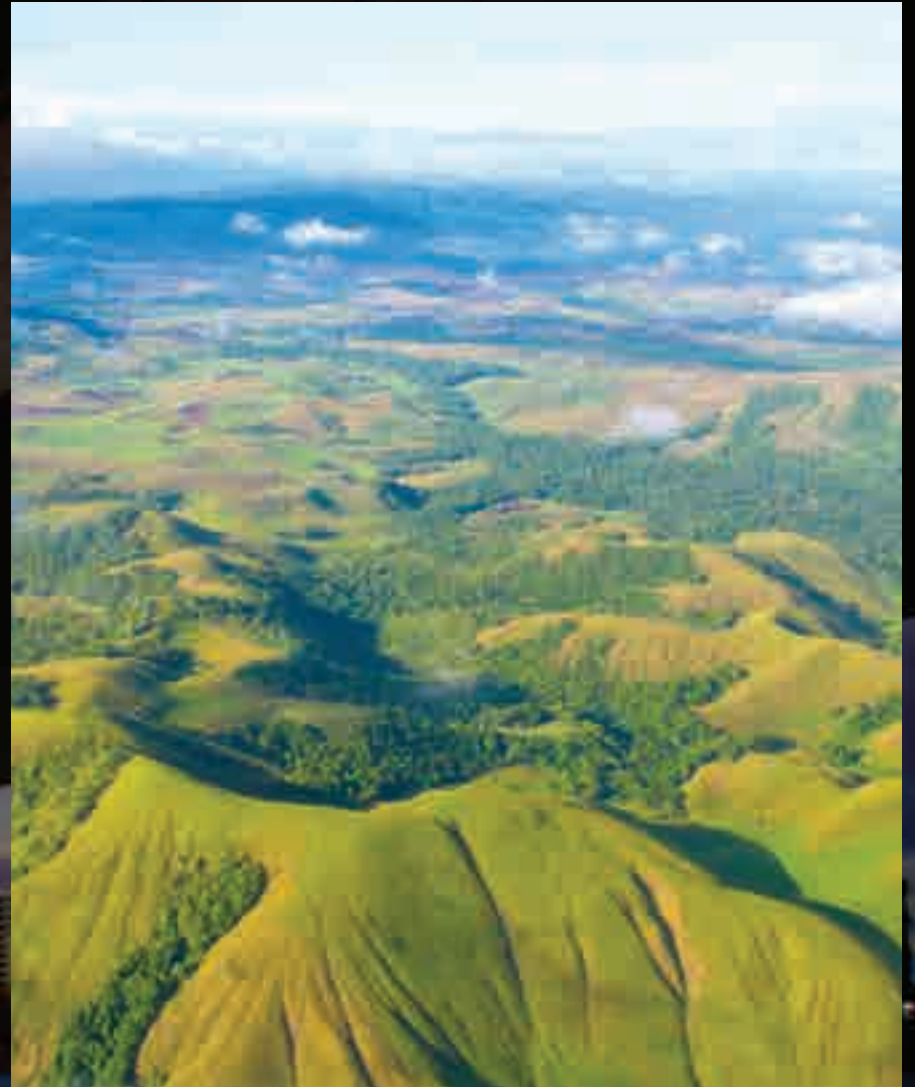
Sometimes things weren't quite what you expected. I recall we stayed at a hotel in Buka; I had Bart Simpson sheets on my bed in my hotel room, which was nice.

When I got up and went to the hotel restaurant for breakfast, my boss was already eating. He had ordered a full English breakfast—eggs, sausages, baked beans and toast. I ordered the same, but unfortunately they had run out of sausages. When one of our colleagues arrived he too ordered the full English breakfast—the restaurant had also run out of eggs. This continued until the last staff member arrived and ordered the full English breakfast—which was plain toast.

Overall, it was the people that I worked with in NAQS and the travel that I liked the most about the programme.

It showed me that a small number of dedicated people can achieve a lot.





Overall, it was the people that I worked with in NQS and the travel that I liked the most about the programme.



# Sheree Glasson

For a government public relations role, the job with NAQS was in many ways a dream job, but also one full of challenges and mystery.

One of my first jobs was to recruit a communications officer for the Darwin office, and as part of that trip to the Territory, I had the opportunity to visit a remote Aboriginal community in northeast Arnhem Land.

After two days and four flights from Canberra—the last in a light plane with just a pilot and me—I was deposited onto a tiny airstrip in the middle of an expansive green plain, then from an approaching 4WD emerged a green-eyed and khaki-clad Dr Andrew Moss (veterinarian and then head of the NAQS programme in Darwin).

We drove through the vast wetlands to the edge of the tiny outpost community of Mirrnatja, on the southern end of the Arafura Swamp, where we were to meet the rest of our team, a Melbourne anthropologist and his 10-year-old son.

The Arafura Swamp is a conservation site of international significance, supporting diverse and rare wetlands habitats. The purpose of our visit was to scope a video with the community about the native flora and fauna that would capture both Indigenous and western perspectives.

It's naïve to assume, like I probably did until then, that communicating with remote communities of northern Australia could be anything like communicating with mainstream Australia.

The Arnhem Land basket I'm holding is one of my most treasured possessions; and I bought it from the women of the community we visited because in the end, it was my only chance for any kind of meaningful exchange with them.

This was a community so far physically and spiritually removed from urban Australia—where none of the adults other than the school teacher spoke English—and yet we were there to try to better understand each other and what we held in common in our connection with the country.

To weave a basket such as this takes many weeks, using strips of dried pandanus leaves dyed with powders crushed from the local soils and plants. Even now, 13 years later, when you breathe the air from inside the basket it sheds the smokey smells of its wetlands home.

Even though there'll never be the right kind of government report or file in which to record experiences such as my brief visit to Arnhem Land, these are the experiences from NAQS that I carry, not just in my memories and imagination, but into my current professional life—although I'm still finding different ways to understand and interpret them even now.





To weave a basket such as this takes many weeks, using strips of dried pandanus leaves dyed with powders crushed from the local soils and plants. Even now, 13 years later, when you breathe the air from inside the basket it sheds the smokey smells of its wetlands home.



# Geoff Offner

I remember assisting with a survey for illegal foreign fishing vessel landing sites with a large team of Indigenous rangers, NAQS scientists and operational staff using helicopters, quad bikes and 4WDs.

Indigenous rangers were vital to the operation, their amazing observation skills identified signs of landings such as, tree carvings and fish remains they could tell had been cleaned and left by illegal fisherman; small, but vital signs.

Very early one morning I noticed a young community ranger closely studying a small plant with a single flower. He kept checking the plant and consulting with an elder—a very old chap who couldn't walk and had to be carried to the plant in question—the young ranger carefully removed the plant from the ground, working meticulously with a small stick and blowing the soil from the roots.

Soon after, I came across some other rangers seemingly searching for the same flower. I inquired what was special about this particular plant and was told it was used to make a love potion and that the young man was keen on impressing a girl back home. By all accounts the plant, infused in oil and rubbed into the skin will do the trick!

That's what I enjoyed about NAQS, unique experiences in amazing places.

Not so long ago we encountered a 4WD and caravan roll-over on the Gulf Developmental Road. We were the first on the scene and after confirming no one was injured and making the area safe we offered them a road side cup of tea and alerted the local police.

The thing I best remember is that the elderly chap was ecstatic that neither he nor his wife was hurt. His car was damaged and the caravan was totalled but he reckoned he was the luckiest guy alive and kept reassuring his distressed wife that they must be blessed.

Our NAQS staff are part of the broader northern community and contribute in sometimes unexpected ways.

I joined the department in 1999, working at the airport, and in 2002 I moved across to NAQS doing operational field work. At that time we did a lot of extension and field work in Cape York and also increased our intervention work, assessing and clearing Torres Strait movements to the mainland.

I'm proud of the work I did for NAQS. I was part of an inspection that intercepted a borer species not found in mainland Australia, infesting bamboo being transported from Torres Strait. I have collected undescribed dry wood termite species near illegal vessel landing sites and intercepted Asian Tiger Mosquitoes in freight.



This is important work and due to NAQS there is a high public awareness of the significant biosecurity threats facing Torres Strait and Cape York.

The other things I've taken from my time with NAQS were the opportunity to see much of this spectacular country—from the air, ground and sea—and meet the local people.

And NAQS people are real quality folk; it was good times with good people.



*And NAQS people are real quality folk; it was good times with good people.*



# Gary Maroske PSM

It was February 1991 when I went on my first NAQS field trip, having only recently transferred to Cairns from Brisbane as the regional inspector.

I had been to Torres Strait and the Northern Peninsula Area before NAQS had even been thought of and when Thursday Island was still a bit of a frontier town with no staff or facilities on the outer islands.

Therefore I was looking forward to meeting and working with our scientists on a plant and animal health survey focusing on several Cape York communities and other strategic sites for NAQS.

Cyclone Joy had recently battered North Queensland. By February there was still a lot of monsoonal rain around and much of western Cape York Peninsula was severely flooded.

It was under these conditions that the team, comprising an entomologist, botanist, pathologist, veterinarian and operational staff, squeezed into a light aircraft and headed for our first stop - Kowanyama. We were then due to survey Pormpuraaw, Aurukun, Weipa, Moreton Telegraph Station and Silver Plains before returning to Cairns.

When we landed at Kowanyama, it was inundated by floodwater and the residents were preparing to be evacuated. However, the scientists could still move around much of the community and complete their work before we were again back in the aircraft and heading for our next destination.

At times, as we went from one community to the next, we were flying relatively short distances so we would only be flying about 1000 feet above the ground. The aircraft wasn't air conditioned, and at that altitude there was no relief from the temperature and humidity. It was like being in a flying sauna! I clearly remember the perspiration just dripping off the guys as we looked forward to our next stop.

The NAQS scientists are renowned for the lengths they will go to get the job done, but one of the first things that struck me from that day was their dedication and professionalism and the respect they displayed towards the members of the community.

While everyone would work flat out during the day, when we got to our accommodation for the night, specimens still had to be prepared and stored safely before anyone could settle down and relax.

I was also struck by the camaraderie that was displayed by everyone as we joked and shared stories at the end of each day. From that first trip I just loved everything about NAQS.



I have now left the department but when I look back on my career I realise how lucky I was to have been associated with NAQS and through that programme met many of my closest friends. Twenty-five years on, it is still a programme where highly skilled and dedicated people continue to do really important work.



*From that first trip I just loved everything about NAQS.*



# Andrew Mitchell

The first official survey I was involved with was a boat survey of the Kimberley coast in April 1992. We met our charter captain on a beach near Beagle Bay then boarded his 40 ft vessel, the *Kalidris*.

We headed out to check old and current locations where people had been living. After about 10 days, in the vicinity of the Prince Regent River we learnt that a cyclone was heading our way and we decided to hole up in Porosus Creek—the safest but muddiest anchorage in the area. We stayed there for three days until the cyclone passed.

Where to go next? I had West Montalivet Island, a lonely radar station used during World War II, on my list of primary targets. However, the island is a fair way off the coast and, the *Kalidris* was slow. She could be driven backwards by a tide!

The alternative was to go part of the way, as far as Prince Frederick Sound, in the *Kalidris* and the shore party would take the tinny with its 140 hp motor to West Montalivet Island. Afterwards we would head east to Cape Voltaire where we would meet up with the *Kalidris*.

It was a bold decision and remember, this was before sat phones...we may have had a hand-held radio.

The tinny trip was memorable. We had low clouds and light scudding rain and the captain navigated with a compass—there was no GPS.

All the party were wet for most of the trip, but it was April and cold wasn't an issue. The sea conditions were rough as the cyclone and the tide conspired to run the waves in two directions. We would gather speed until we hit a big wave and the tinny would bottom out with a jarring thud which hurt our backs and our backsides. We were sitting on an aluminium bench and our only padding was our own! The most comfortable position was standing up front leaning back on the painter with your knees slightly flexed.

After two hours we reached West Montalivet Island and ran around looking for weeds. We didn't find many, and none of significance.

We jumped back in the tinny and two hours later, but what seemed like an eternity, Cape Voltaire came into view and finally, the *Kalidris*. I was very relieved to see her there.

The first thing I did was to stretch my back by hanging from the roof, and then took a shower.

Sitting was quite painful for the next two days and I avoided bumpy trips in the tinny.





*It was a bold decision and remember, this was before sat phones... we may have had a hand-held radio.*



# Mac Jensen

I joined NAQS in 2003 and spent five years as the Kimberley Aboriginal liaison officer. I had been a resident in the Kimberley, Northern Territory and Cape York for about 20 years before joining NAQS, working as a stockman, station manager, army officer (major) in a predominantly Aboriginal army unit, and an Aboriginal ranger trainer.

I'd met NAQS operators in the Kimberley and Cape York before joining the programme and always thought it would be a great job with very professional operators. And when I joined the programme this proved to be true.

For me NAQS was a practical programme, very focussed on remote area service delivery. Bush trips were high tempo but very productive and great fun. We concentrated on practical Indigenous and stakeholder engagement, quarantine awareness and scientific surveys and monitoring.

It was a 24/7 job, but a terrific job. You were always doing interesting work such as presentations, radio and other public relations work, as well as school and other stakeholder visits. We developed very reliable networks and our work was highly valued by our stakeholders.

I felt like I was making a big difference in my area of operations and that I was doing something very important for Australia. To me I felt I was doing more for my country in NAQS than when I was serving in the Army—it was that level of commitment and reward.

We were very well led and well managed by staff with strong quarantine and remote area backgrounds. The NAQS Ops staff lived and breathed NAQS and had strong connections to the remote communities, particularly Aboriginal communities.

I've moved on now, but I continue to use the old NAQS Ops remote area service delivery standards and methods in my current work to great effect. It's a proven method for outstanding results in remote area stakeholder engagement, awareness, communication, capacity building and capability development.

When I visit remote northern communities, reference is often made to NAQS and how quarantine is a shared responsibility. I really enjoy hearing that as it makes all the hard work worthwhile.





*We were very well-led and well-managed by staff with strong quarantine and remote area backgrounds.*



# Beth Cookson

I often tell people that I have grown up in NAQS (at least from a career perspective), and it is true.

I graduated as a vet in 2004 from the University of Sydney after being awarded an AQIS rural bonded scholarship to promote vets into regional and rural Australia.

This was the beginning of my interest in a government veterinary career and during that year I was introduced to the work of NAQS when I was given the opportunity to join an avian influenza survey in north Queensland.

I remember joking, probably in poor taste, with the vets on that survey that I would have to wait until someone died to be able to be involved in such interesting work (there are only three field vet positions in NAQS).

It turned out that my turn came up only nine months later when I won a position as a NAQS field veterinary officer in Darwin. I started the role in July 2006 and continued working as a field vet for the next four years.

I have many recollections of my time in the field, from sampling wild pigs and banteng cattle on Cobourg Peninsula in the Northern Territory to surveillance of domestic animals in Torres Strait, Indonesia, Timor-Leste and Papua New Guinea.

I have set up and pulled down many, many bush camps and worked side-by-side with Aboriginal

rangers to talk about animal disease and the importance of their role in detecting new disease.

I even arrived tired and dirty after completing my aerial marksmanship training on the eve of my wedding which, as you can imagine, required quite some transformation!

It didn't take long for me to realise I also wanted to contribute more strategically to our work and I started some further study in epidemiology to improve my technical knowledge of surveillance design and purpose.

In 2010 I was promoted to the animal health surveillance manager's role and it is here that I have really enjoyed the opportunity to contribute to the work of the department and national surveillance objectives.

My office has changed somewhat, from the remotest parts of northern Australia and daily contact with its community, to a physical office and daily contact with surveillance policy contributors, but the work has the same objective at its core, and it is this national, big picture focus which excites me.

More than anything though, it is about the people. I am grateful to be able to work with such a diverse group of individuals and in remarkable communities generous with their time and contribution, all who share a common passion for the work that we do and the natural environment that we do it in.





*I have set up and pulled down many, many bush camps and worked side by side with Aboriginal rangers to talk about animal disease and the importance of their role in detecting new disease.*



# Daryl Mannell

The beast was purring along beautifully. Its 4.5 litre diesel V8 swallowed the kilometres with ease.

I and my co-pilot made great time in the run along the blacktop from Cairns to just north of Lakeland Downs. That's where the bitumen ran out and the fun started.

Driving the Peninsula Development Road and the Old Telegraph Road along the spine of Cape York Peninsula to Bamaga is one of Australia's great motoring adventures.

The sights along the way are breathtaking: roughly carved roads coated in a thick layer of bulldust stretching off into infinity through ever changing scenery, ranging from savannah scrub, pockets of woody forests, coastal heath lands and vast pastoral plains.

You round a bend and brake hard as a massive wedge-tailed eagle lumbers to become airborne after feeding on some road kill in the middle of the road.

At the Exchange Hotel in Coen, you down a couple of frosties, power through a mean steak and talk the legs off a table with a couple of locals.

You have a good yarn with Scotty at the Department of Primary Industries quarantine station at Coen before bedding down for the night in a swag under a mozzie dome.

NAQS has six FM radio programmes transmitting biosecurity messaging from six locations along Cape York Peninsula.

I was conducting an audit of the NAQS 88 FM signage dotted from Lakeland Downs to Bamaga in preparation for updated programmes, improved transmitters and new signs alerting motorists to tune into 88 FM.

It also happens that we were transporting back one of the programme's Landcruiser 'troopcarriers' to Bamaga.

The trip went as planned and without incident.

The Dash 8 took off from Bamaga and lived up to its name making good time to Cairns.

Reflecting on this road trip I realised this is why I love working with NAQS: a vital programme working in a unique environment alongside some of the most fabulous characters you'll ever meet.

Beats being cooped up in the office any day!





*You round a bend and brake hard as a massive wedge-tailed eagle lumbers to become airborne after feeding on some road kill in the middle of the road.*



# John Westaway

I started with NAQS in 2011 at the Darwin office as senior botanist, responsible for delivering plant health surveys and risk assessment across the Northern Territory and Western Australian NAQS zones.

As a botanist I collect, collate, manage and provide information on plants, particularly introduced weeds, economic plants and plants that host insect pests and disease.

I work in a multidisciplinary team, typically with an entomologist and plant pathologist. We undertake surveillance for exotic pests, based on the premise that early detection provides the best chance of knocking off any new undesirable arrivals before they might harm agriculture or the environment.

My method of searching for 'new' weeds is to systematically record all weeds at the sites we visit.

I also record cultivated host (food) plants, which helps us evaluate the risk of new pests establishing, and I guide other scientists to check alternative host plants for pests.

On survey I collect plant samples for herbaria which provide an enduring record for natural history and further taxonomy.

I believe the NAQS programme makes a contribution that benefits Australia. If new insect pests, weeds and plant diseases establish here, they exert additional pressure on our already stressed agricultural and natural systems.

While much of my work involves a computer, the part of my job that I enjoy most is being out in the field looking at plants, as my background is in flora and fauna survey, and conservation planning.

Although I only visit settled areas, because food plants and weeds occur where people live, I do get a glimpse of some good country and native flora along the way.

Another very satisfying part of my role is working with Aboriginal rangers and seeing them care for their country, especially if someone takes an interest in plants, although compared to animals, or even insects, weeds are boring to most people, including rangers.

It's good to see rangers learn from their training and Aboriginal children look up to rangers as role models.

But the best part of my job is when we get to work with our neighbouring developing countries such as Timor-Leste where we help build their quarantine capacity. They greatly appreciate our assistance and I get a real sense that we are contributing to something worthwhile for people less fortunate than ourselves.





*It's good to see rangers learn from their training and  
Aboriginal children look up to rangers as role models.*



# Steve Goener

In the winter of 1990 I moved with my wife and young son to Thursday Island, or TI as it's known. Most of our friends thought we were crazy to move so far from Brisbane when we were just starting our family.

My work mates were just glad it wasn't them that got tapped on the shoulder to do time in a remote area. That was the selection process in the old DPI days—give the boss a sniff that you might be interested in getting away from the big smoke and you were gone.

We were more interested in an adventure, and boy did we get one. An added bonus was that we escaped winter for the next four years.

Lucky for us, my wife's auntie lived on TI so it felt like a lot of people already knew us. We received a warm welcome from the great bunch of people that worked at the DPI office (Quarantine TI) and never looked back.

The generosity and acceptance afforded to us by the staff on TI, Bamaga, the outer islands and Cairns was the most overwhelming feeling I have ever had in terms of a real sense of community and friendship. We made lifelong friendships of which the only regret is that life has passed too quickly to stay in touch anywhere near enough.

Life on TI for a young family is heaven-sent. The importance of family and the love of children are ever-present, as is the respect for elders within the community that paves the way for an appreciation of life, culture and an amazing history of this colourful region.

Work was more of a lifestyle than a job. I soon settled in to TI time, got rid of my watch (I still don't wear one) and got used to wearing TI sandals.

An average month would consist of helicopter rides to several of the outer islands to service the screw worm fly and fruit fly traps, boat trips to Horn Island to clear an aircraft and to Bamaga to work on the buffer fence.

We worked closely with Customs, Immigration, Fisheries, Foreign Affairs and the police to clear yachts and trawlers, inspect traditional traders and intercept illegal fishing vessels.

The best parts of the job were assisting the communities with small animal control, plant health and in the promotion of quarantine awareness with the school kids (later to become Top Watch!).

I was fortunate to work alongside some very dedicated scientific staff and to see them welcomed into the communities of Torres Strait, the Northern Peninsula Area and the Western Province villages of Papua New Guinea.



All of this work was true 'public service' in a sense that seems to have escaped us in today's hectic society.

Our family will be forever grateful that we had the pleasure of living in this beautiful part of the world. Our time on TI can be summed up in three words: unique, satisfying, enriching.



*All of this work was true 'public service' in a sense that seems to have escaped us in today's hectic society.*



# Bernadette Vogelzang

I joined NAQS in the role of coordinator in 1995 when the programme was still delivered by the Queensland, Northern Territory and Western Australian governments, with funding from the Commonwealth. Prior to that, I had been working in Canberra as a plant health policy officer (plant pathology) in the Australian Quarantine and Inspection Service (AQIS as it was then known) for three years.

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I had already had contact with the programme participating as a plant pathologist in a survey in Torres Strait in 1994. That gave me first-hand experience of the joys and rigours of life on a NAQS survey.

In 1995, shortly after I became coordinator, NAQS was reviewed by Malcolm Nairn which led to some very major changes. First, the programme was transferred to direct Commonwealth responsibility, and then NAQS had a major increase in funding which allowed us to recruit significantly more scientific and technical staff.

I was originally based in Canberra, but was transferred to Cairns following the transfer of NAQS to the Commonwealth. We had a truly dedicated team of scientists, and support staff, in addition of course to the operational staff in Torres Strait and elsewhere.

We also had excellent cooperation with counterparts in Papua New Guinea, Indonesia and, as it later became, Timor-Leste. One of my roles was to coordinate with them to discuss programme requirements, and funded survey and research activities.

Probably the main highlights for me were being able to expand the programme and, with major input from NAQS scientists, see NAQS bloom as a result.

Another high point was learning to lead such a diverse and talented bunch; I certainly made plenty of mistakes along the way!

I really enjoyed the surveys I undertook in Australia—from Torres Strait and the Northern Peninsula Area, to Croker Island and the Kimberley—as well as those done in Papua New Guinea and Timor-Leste.

In PNG a highlight was surveying the immaculate, well-tended gardens which were reached by dugout canoe; and in Timor-Leste the sweet singing of two female veterinarians from Timor-Leste while we were travelling long-distance by car.



While there are many joys of being on survey, I take my hat off to those who continue to do regular surveys year-in, year-out. It is a major disruption to life and involves physical challenges. I distinctly remember fleeing back to the helicopter from a valley full of the most vicious mosquitoes I have ever encountered, while others were left to clear the culicoides traps.

The NAQS programme is extremely important; without it Australia would be at risk of being unprepared for incursions of exotic pests and diseases. As a result of the relationships we have built with neighbouring countries, and our surveys and quarantine operations, we are in a position to safeguard Australia from threats such as exotic fruit flies, and be prepared for the movement of diseases.



*Another high point was learning to lead such a diverse and talented bunch; I certainly made plenty of mistakes along the way!*



# Andrew Moss

Before starting with NAQS, I had been working in the pastoral industry in the Northern Territory as a private veterinarian involved in the tuberculosis and brucellosis eradication campaign.

Before that I had been working on the Barkly Tableland in the NT as a Territory government veterinary officer. An opportunity to work as veterinary officer in the NAQS programme enabled me to use my bush experience focused around disease eradication to conduct animal health surveillance along the NT coast.

I have always enjoyed working in the NT bush and NAQS allowed me to continue this type of work but greatly broadened my horizons.

A large percentage of the NT coast is owned by Indigenous people and working in this area meant that engagement with the owners was an essential component of the work.

The work with Indigenous communities in Australia and then also conducting animal health surveys in villages in Indonesia, Timor Leste and Papua New Guinea greatly increased my understanding of the cultural diversity across the region plus the similar daily issues most humans experience.

When I first started with NAQS in the NT, relationships with Indigenous communities were quite positive but limited to obtaining permission to access Aboriginal land through the Northern Land Council, and then hiring local guides to accompany survey teams.

The Caring for Country programme developed by the NLC and the increasing interest of local communities to work on their own land sparked the realisation that some NAQS quarantine surveillance work supported certain aspirations of local communities.

This saw a greater involvement by local communities in quarantine surveillance. One interesting development from this was that local communities became more engaged with, and welcoming of, NAQS survey teams.

Access to survey areas became easier; in some cases NAQS was permitted into areas where cultural activities would have once excluded a survey to be undertaken. Local Aboriginals involved in the survey would ensure survey teams kept away from specific areas where ceremonies were conducted, but were still permitted to undertake the survey.

I have been very lucky to be involved in such a valuable and worthwhile programme, the people with which I worked were always fully committed and motivated.



I enjoyed very much working with the different communities in northern Australia, Timor Leste, Indonesia and Papua New Guinea.

A lasting personal impact from working on the NAQS programme is the realisation that although people have different cultural beliefs the similarities between people are far greater.



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# Jonathan Benyei

From pristine fish-breeding pools of the remote northwest of Australia, across the wild northern coastline, throughout the vast Cape and cattle country, the prosperous bird and turtle nesting grounds, to the crayfish seabed pilgrimages in the Torres Strait islands, these ancient routes and hunting grounds are vital to sustain life.

Every farmer, fisher and sailor knows how vulnerable and reliant we are on the patterns and moods of nature.

Our ability to understand these historical patterns and changing environments is fundamental to our future sustainability. Those who live in the north of Australia reflect the majesty, rawness and vulnerability of the land and nature. We understand the challenges all too well.

It's a humbling and privileged responsibility to protect and preserve our unique environment from natural and not-so-natural threats of introduced pests and diseases. And it's not surprising that anyone who works for the Northern Australia Quarantine Strategy cannot help but be consumed with the job of protecting northern Australia's biosecurity.

NAQS is one of Australia's best kept secrets—a quiet achiever that safeguards our wild north and helps support Australia's \$50 billion agricultural industry.

For example, many of the countries we export to demand proof that our produce isn't affected by certain pests and diseases. NAQS surveillance is proof of our controls and the absence of diseases that have crippled some other countries' agriculture.

For farmers in the rest of Australia, NAQS provides a buffer to stop pests and diseases, before they move south and take hold.

Committed scientists work alongside dedicated biosecurity officers, producers and passionate communities to offer a barrier of vigilance across northern Australia.

Working in all conditions, the people of NAQS rely on the goodwill and cooperation of communities throughout the north.

I've been humbled by traditional custodians patiently explaining the role of animal totems in helping find food and sustain productive lands. We've been honoured by the generous acceptance of NAQS staff onto traditional lands and the sharing of sacred stories describing the patterns of seasons and cycles of flora and fauna.

Across the top, senior women explain the various ailments assisted by particular plants that must not be allowed to disappear. Bushmen explain their association with the land through various jobs over many generations. Newcomer graziers



and horticulturalists tell their stories of trial-and-error with introduced plants and animals. They all share a passion to keep the north productive and free from introduced pests and diseases.

It's an honest, trusted relationship with remote communities as we work together to protect the land that nourishes all manner of life.

It's a story of the ancient, of survival and hope for the future.

And it's a big and growing task. The threats from pests and diseases are growing as the movement of people, animals, plants and enterprise grows. We need to build on the foundations of NAQS and work even more closely with agricultural producers, other industries, communities, partner agencies and neighbouring countries.

The resilience, agility and cooperation of the people of the north will continue to be tested and NAQS should continue to be an important part of the story for the next 25 years and beyond.

*Jonathan is the Regional Manager of the Department of Agriculture's Northern Region*



*It's an honest, trusted relationship with remote communities as we work together to protect the land that nourishes all manner of life.*



# David Banks In Memoriam

**D**r David Banks was typical of the scientific and practical ingenuity that makes NAQS work so well.

David was renowned in the scientific and biosecurity services of Australia's neighbours, particularly Indonesia, Timor-Leste, Papua New Guinea and the Pacific island nations, for helping to develop biosecurity systems to boost the fight against exotic diseases.

His interest in monitoring methods and electronics led him to invent a gas-powered mosquito trap as a weapon against a possible incursion of Japanese encephalitis into Far North Queensland.

At times while David was developing the trap, colleagues had to squeeze around a two metre high contraption consisting of a mix of high-tech and backyard bits and pieces, such as plastic pipe and bicycle spokes, to get into his office.

'It's solar powered, runs on bottled carbon dioxide and has a tiny little brain—a microprocessor—in there that maintains it,' David explained at the time.

'That means it can be placed in a remote area such as Cape York Peninsula and left to run, without human intervention.

'The process required to catch mosquitoes is fairly impractical; you have to take dry ice into a tropical climate. So I thought I could come up with something better.

'Testing for the presence of mosquito-borne diseases such as Japanese encephalitis on the Australian mainland is also a labour-intensive and logistical nightmare.

'We take blood samples from herds of sentinel pigs on Cape York Peninsula for laboratory testing.

'To do this, we had to build a piggery on Cape York, ferry pigs in by air, pay someone to feed and look after them and then bleed them to see if they had been infected.

'I'm sure I can make the mosquito trap smaller and tougher—we need to be able to throw it in the back of a helicopter and for it to sustain attacks from wild pigs.

'It was buzzing along nicely in my backyard, but the real test will be when we put it in the bush,' he told fellow scientists with characteristic enthusiasm.

David's invention has been used by NAQS and Queensland Tropical Public Health scientists in Cape York Peninsula and Torres Strait.



# *Tireless supporter and patron of NAQS*

David had a passion for working with Indigenous communities, rangers and biosecurity agencies in Australia and neighbouring countries to provide early warning and risk management measures for possible pest incursions in northern Australia.

Ambassadors and heads of our trading partners' biosecurity agencies expressed high praise for David's work and influence throughout the region.

Most of all, people remember 'Banksie' for his inspirational enthusiasm and passion for anything and everything he tackled.

*The Department of Agriculture's Northern Regional Office in Darwin was named in Dr David Bank's memory in 2006.*



*Most of all, people remember 'Banksie' for his inspirational enthusiasm and passion for anything and everything he tackled.*









A wide-angle photograph of a calm body of water, likely a lake or a wide river, under a vast sky. The sun is low on the horizon, creating a bright, golden glow that reflects on the water's surface. The sky is filled with soft, wispy clouds in shades of blue and white. In the distance, a range of dark, silhouetted mountains or hills stretches across the horizon. The overall mood is peaceful and contemplative.

*Our people*

















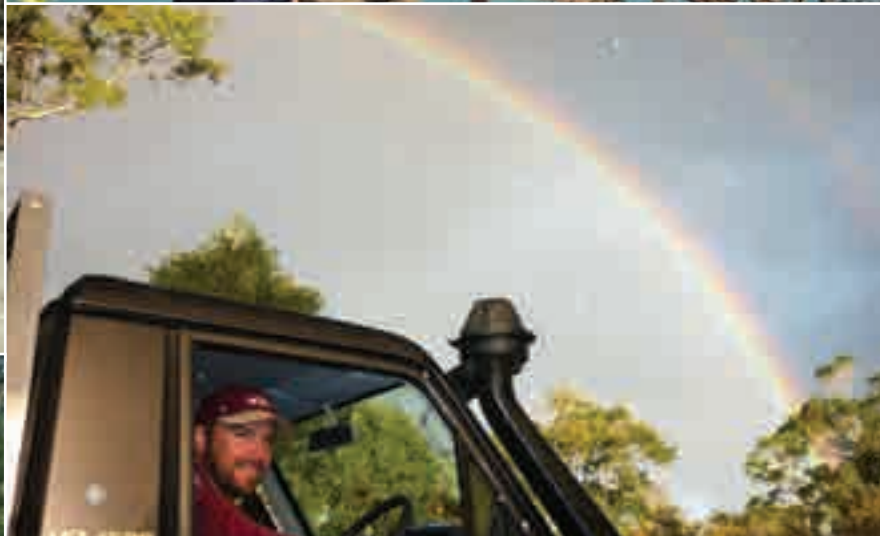




















NQS photo archive -  
25 years of programme  
operations



