



DECcreasing vehicle emissions from DEC's light fleet

DEC will soon be taking part in the first-ever Australian trial of fully electric fleet cars.

The trial is in line with a *DECcrease* project goal to lead by example in reducing total greenhouse gas emissions from fleet vehicles. DEC also has trialled the new Toyota Hybrid Camry as a potential low emissions fleet option.

Expected around September this year, DEC will receive one of 10 converted fully electric Ford Focus vehicles in a two- to three-year assessment of its suitability for meeting the specific operational requirements for the department.

The trial will also be a public demonstration of the operating characteristics and environmental benefits of electric vehicles.

The electric Focus will be garaged at the Atrium as a pool vehicle and will be available to all staff. Ideally suited to 'around town' or short-distance driving, the converted vehicle will have a combined city/country cycle or range of about 125 kilometres, with the driving performance very similar to the normal petrol version.

Office of Climate Change's Principal Policy Officer Lisa Harry explained that electric vehicle technology had the potential to be a major new industry.

"The great thing is that electric vehicles produce zero emissions when charged with electricity from renewable sources, such as solar, wind, tidal or geothermal energy," Lisa said.

As part of the trial, up to 10 state-of-the-art fast-recharge bays will be installed around Perth for use by fleet participants. Each of these public recharging stations will be powered by renewable energy.

The recent trial launch, attended by the Minister for Environment Donna Faragher and DEC Deputy Director General – Environment Robert Atkins, was an opportunity for attendees to experience a range of prototype electric vehicles on display.

In addition to the trial, staff at DEC's Kensington and Atrium workplaces also had the opportunity to test drive a petrol/electric hybrid Camry, loaned by Toyota's Government and Fleet Leasing services.

"The great thing is that electric vehicles produce zero emissions when charged with electricity from renewable sources, such as solar, wind, tidal or geothermal energy,"



DEC Environment Minister Donna Faragher with DEC Deputy Director General - Environment Robert Atkins at the launch of the trial of fully electric fleet cars.

The new Australian-built Toyota Hybrid Camry is particularly suited to stop-start city driving where it makes the most of the electric motor. The hybrid's 'urban usage' fuel consumption is just under half of many similar-sized passenger vehicles in DEC's fleet. Importantly, the hybrid Camry easily meets the State Government standard for 'Passenger Vehicles'.

DEC Manager of Fleet and Works Craig Simpson said the Hybrid Camry was a real option for DEC's light fleet.

"It looks great and drives like a normal car, as opposed to the Prius which is a lot more gadgety and put a lot of people off driving it," Craig said.

"It is also going to be in a price range that makes it affordable for fleet leasing."

Extraordinary Taxi Ride stops off at Tree Top Walk



Tree Top Walk business manager Julie Ross, guide Helen Nash, Ling and Shiun Gang and Bunbury taxi driver Doug Slater.

DEC's Tree Top Walk has featured in the itinerary of the Extraordinary Taxi Ride, Tourism WA's (TWA) innovative marketing campaign to promote the very best of the State.

Taxi passengers and winners of the south-west leg of the taxi ride, brothers Ling and Shiun Gang from Malaysia, were welcomed to the Tree Top Walk by business manager Julie Ross and guide Helen Nash.

Julie said it was great to welcome Ling and Shiun to the Tree Top Walk and believed the walk and the tingle forest had made a big impression on them.

"The visitors received an informative tour around the facility by Helen, one of our top guides, who also explained about the local flora and fauna," Julie said.

"The brothers were thrilled to learn that the idea for the Tree Top Walk was based on a walk in Malaysia.

"They were just in awe of the size of the tingle trees and enjoyed getting up close to the giants of the forest along the Ancient Empire."

To complement their visit to the Tree Top Walk, the winners also experienced Greens Pool in William Bay National Park near Denmark and a WOW cruise through Walpole and Nornalup Inlets Marine Park with Gary Muir.

Julie said Ling and Shiun promised to be back with their families for a holiday soon.

"The Taxi Ride represents a great opportunity for the Tree Top Walk and the region to be showcased nationally and internationally," Julie said.

"Capturing the imagination of potential tourists through innovative campaigns such as the Extraordinary Taxi Ride will lead to increased awareness of and visitation to the Tree Top Walk."

Seed orchards protect banksia species from dieback

MORE than 400 plants of the feather-leaved banksia (*Banksia brownii*) are thriving at three seed orchards that were planted by DEC between 2007 and 2009.

The critically endangered species is found in Stirling Range National Park, near Cheyne Beach and close to Albany.

DEC Research Scientist Leonie Monks said the orchards were created as part of a translocation program to safeguard species affected by the destructive pathogen *Phytophthora* dieback, which has almost lead to the extinction of the feather-leaved banksia.

"Only 17 populations of the plant exist in the wild, most infested with the *Phytophthora* dieback pathogen," she said.

"The seed orchards provide a means of creating additional plants in disease-free areas as a safeguard against extinction.

"The plants in the seed orchards are very healthy and are doing better than expected, with some of them growing up to three times faster than those in the wild.

"In a number of years we hope to collect seeds from these plants and conserve them at DEC's Threatened Flora Seed Centre in Perth, as part of DEC's seed banking for biodiversity strategy."

DEC South Coast Region Nature Conservation Regional Leader Deon Utber said dieback affected more than 40 per cent of WA's native plant species. He urged visitors to take care when visiting the Stirling

Range National Park, which is 80 per cent infected by dieback

"We recommend that people keep to roads, tracks and walk trails, obey road closures and make sure cars and hiking boots are free from mud, before entering any park in order to help stop the pathogen's spread," he said.



DEC staff Tania Jackson and Sarah Barrett planting a *Banksia brownii* seedling.

'Sleeper' weed a silent threat to WA waterways

ATHEL pine (*Tamarix aphylla*), once extensively planted for shade and windbreaks, is now regarded as one of Australia's worst weeds.

Alternatively known as the 'sleeper' weed because it took decades before the threat became apparent, athel pine is highly invasive and causes significant environmental and economic damage by draining valuable water resources and changing vegetation and waterway structures.

DEC recently hosted a forum for State and Local Government weed officers, members of the National Athel Pine Management Committee, WA stakeholders, land managers and community groups to develop a strategy to combat the weed in Western Australia.

DEC Invasive Plants Program Coordinator Ashley Millar said there were naturalised infestations of athel pine in WA in the Gascoyne River and in localised areas of the Goldfields.

"These *Tamarix* infestations are being actively managed through control and monitoring by a range of government and non-government organisations.

"The control of athel pine is considered a high priority from a national perspective because of the risk it poses to river systems in arid and semi-arid parts of the State," he said.



Spraying of athel pine regrowth along the Finke River, central Australia.

Athel pine is native to North Africa and was planted in Australia between the 1930s and 1970s for shade, as windbreaks and to stabilise banks on some mine sites near Laverton and Telfer.

The quick-growing plant was only discovered to be a major environmental weed in the 1980s when it invaded the Finke River in central Australia, covering 600 kilometres to devastating effect, and was subsequently declared a Weed of National Significance in 1999.

Ashley said the forum was well attended and that the foundations to understanding what is required to control the weed were in place.

"The aim of the forum was to share information on the current distribution and control achievements of athel pine as well as to discuss future needs and resource requirements," he said.

"We need to be vigilant and raise public awareness of this threat, which is all the more difficult to track because these plants can establish themselves in out-of-the-way places and not be noticed until they have choked a waterway."

For more information on athel pine, go to www.weeds.org.au/WoNS/athelpine.

Snake tracking to reveal impact of cane toads

RADIO transmitters have been fitted to more than 20 snakes in the East Kimberley to monitor the potential impact of cane toads on native species.

DEC has so far surgically implanted devices inside 10 olive pythons, 10 water pythons, four black-headed pythons and one king brown snake.

DEC Principal Research Scientist David Pearson said the aim of the research was to replicate laboratory trials that had demonstrated a vulnerability to cane toads in various reptile species in the wild.

"We know that cane toads have a significant impact on predatory species, including large snakes, however we don't know how wild snakes will react when they encounter their first toad," he said.

"Using radio transmitters, we can closely follow individual snakes during the arrival of toads to see if they will ignore the toads or if they will be tempted to try one.

"Cane toads are toxic to most native predators so if they attempt to eat a large toad, death is likely."

The research was part of a wider program that had identified species at risk of population declines due to toads.

"In conjunction with a research group from the University of Sydney which is led by Professor Rick Shine and Dr Jonathon Webb, we have examined a whole range of potentially affected species including mammals, lizards, snakes and snails which toads may eat," David said.

Several snakes were currently being tracked near Lake Argyle.

"These snakes will provide data on their survival now toads have invaded these areas, as well as giving us useful insights into the ecology of these little-studied tropical predators," he said.

"Toads arrived in our Lake Argyle study area several weeks ago and we are locating the snakes regularly. So far, none of the snakes has been lost to toads, but the temptation to try a toad will no doubt increase as toad numbers grow."

David, together with DEC Technical Officer Bill Stewart and the University of Sydney researchers, was also planning to attach radio transmitters to blue tongue lizards and two species of goannas in an experiment to 'teach' predators to avoid toads.

"Using a bait of toad pieces with a nausea-inducing chemical, it is hoped that the first experience of a native predator with something tasting like a toad will be unpleasant but not lethal," he said.

"This could then teach them not to be tempted by the toads, allowing various native species to survive and build up populations after the toad invasion."

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Carnaby's numbers estimated in the 2010 Great Cocky Count

NUMBERS of Carnaby's black cockatoos across the Swan Coastal Plain were counted on Wednesday 7 April, following the launch of the '2010 Great Cocky Count' on Tuesday 6.

The launch event was held at the Kaarakin Black Cockatoo Rehabilitation Centre in Martin, attended by representatives from the State Government, Birds Australia, DEC and some of the volunteers who took part in the count.

The first 'Great Cocky Count' was held in 2006 by Birds Australia, when it was noted that counting birds at their night roosts was a good way to estimate total numbers and monitor trends through time.

DEC and Birds Australia have teamed up to carry out the second extensive survey of cockatoos on the Swan Coastal Plain. The 2010 survey is being coordinated by Quinton Burnham, who was recently employed by Birds Australia WA with funding from DEC.

Chair of Birds Australia WA Group Bruce Haynes spoke at the launch, saying the count was critical to gaining an understanding of the areas that are significant to Carnaby's black cockatoo conservation, such as breeding, foraging and roosting sites.

DEC Swan Region Regional Ecologist Geoff Barrett, DEC coordinator of the count, said the survey was the best way to get a good indication of the changing numbers of Carnaby's black cockatoos in the greater Perth region.

"Some 200 volunteers counted Carnaby's black cockatoos as they came in to roost at 130 sites across the Swan Coastal Plain at sunset on Wednesday 7 April," Geoff said.

"By adding these counts together we can gain an estimate of the total number of birds visiting the greater Perth region over the summer and autumn months.

"When these counts are combined with mapped locations

of where the night roosts are, we have a powerful planning tool to help us conserve these beautiful birds."

DEC officer Mark Blythman also assisted with the location of new Carnaby's roost sites.

Member for the East Metropolitan Region Helen Morton also spoke at the launch, saying it was pleasing to see the mobilisation of so many volunteers in what was a great example of grassroots conservation.

City of Gosnells Mayor Olwen Searle thanked the coordinators and volunteers for their efforts in the count as well as the work of cockatoo rehabilitators. Glen Dewhurst from Kaarakin drew attention to the losses of Carnaby's black cockatoos in the recent hail storm.

For more information about the Great Cocky Count, contact Geoff on 0418 953 050 or 9423 2907 or by email (geoff.barrett@dec.wa.gov.au) or Quinton on 0428 762 292 or by email (q.burnham@ecu.edu.au).

Return to the wild – storm-affected cockatoos released



Environment Minister Donna Faragher (front row, second from left) takes part in the release.

ENVIRONMENT Minister Donna Faragher, DEC officers, Perth Zoo staff and volunteer wildlife rehabilitators were on hand to release eight endangered Carnaby's black cockatoos at Kings Park recently after they were successfully treated for serious injuries sustained in the recent Perth storms.

The joint DEC–Perth Zoo recovery operation assessed and treated 24 birds. Sadly, six birds had to be euthanased and another died as a result of its injuries. The remaining birds are still being treated at the Zoo's on-site veterinary hospital and at the Black Cockatoo Recovery Centre in Perth's southern suburbs.



(Back row, from left) Birds Australia Great Cocky Count Coordinator Quinton Burnham, Kaarakin Black Cockatoo Rehabilitation Centre Manager Glen Dewhurst, DEC Swan Region Regional Ecologist Geoff Barrett and Chair of Birds Australia WA Group Bruce Haynes, (front row, from left) Member for the East Metropolitan Region Helen Morton and City of Gosnells Mayor Olwen Searle.

