Report to Forest Biosecurity Consultative Committee

Update on Current Biosecurity New Zealand Forest-related Surveillance and Incursion Response Activities
for meeting 8 March 2007

PAINTED APPLE MOTH and FALL WEBWORM, AUCKLAND (Eradication)

- Given no further activity the PAM surveillance programme is due to close out in late April 2007. The last PAM was trapped in June 2006.
- The twice weekly Sterile Insect Technique releases at three sites ceased on 20 December 2006. Around 400,000 sterile moths have been released since 2002.
- Prior to Christmas 337 traps were removed form the field. The remaining 349 traps located in south Auckland are due for removal on 20 April 2007.
- Research into isotope analysis by Isotrace is progressing and 49 risk sites around New Zealand have been targeted for monthly rainfall collection. The intention is to build a national data base on New Zealand rainfall to assist in determining point of origin via stable isotope analysis.

DUTCH ELM DISEASE, AUCKLAND (Disease Management programme)

- Biosecurity New Zealand and currently affected territorial local authorities (TLAs) have continued an interim Dutch elm disease (DED) management programme in 2006/07, pending decisions on national pest management priorities. The programme objectives are to prevent or stop the disease spread and to control its impacts in greater Auckland.
- Biosecurity New Zealand approached TLAs throughout New Zealand, thorough their respective regional councils, in spring 2006 to seek financial contributions to address a funding shortfall for 2006/07. The response was limited, with few willing or able to commit any funds. Affected TLAs could not significantly increase their contributions and one of the major contributors and previous champions pulled out completely.
- As a result of funding shortfall operations implemented this year has been reduced. The scope of 2006/07operations generally does not give very high assurances that the programme objectives, will be delivered in the long term.
- Operations in 2006/07 are based on two surveys of (almost) all elms in DED high-risk areas (but not in the rest of the controlled area of greater Auckland); vector beetles trapping grid (currently consisted of 35 traps plus 3 traps voluntarily serviced by the Auckland City Council staff) and on receiving and replying to public enquiries. It is expected that the second round of surveys will be completed in the first half of March 2007. Three elms at three locations have been confirmed diseased (one elm in Papatoetoe, Manukau, one in Sunnyvale, Waitakere and one in Chatswood, North Shore). There have been no beetles detected positive for carrying the DED fungus by early March 2007.
- DED was one of twenty species evaluated for Biosecurity New Zealand-led delivery of management programmes. Although the DED programme was not identified as one to be Biosecurity New Zealand-led, it was noted as a possible candidate to be coordinated by Biosecurity New Zealand. However, for the programme to be successful, TLAs must support the continuation of the programme, and be willing to commit funding toward it.
- Biosecurity New Zealand will be contacting TLAs shortly to advise its current position and to provide one final opportunity for them to express effective interest in the DED management programme. Biosecurity New Zealand's level of continued involvement in the programme will be based on the combined financial commitment from TLAs.

SUBTERRANEAN TERMITES NELSON

- A colony of Australian subterranean termites, *Coptotermes acinaciformis,* was reported in late January 2006 from a single property in Richmond, Nelson.
- A delimiting survey of 38 properties within a 100 metre radius of the infected 2 properties was completed late November 2006. No additional activity was located.
- The latest bait station inspection was completed on 8 January 2007. Termites were showing signs of ingesting the bait (Hexaflumuron) and it is expected that the colony will be eliminated by late March 2007.
- After activity has ceased monitoring will continue for at least a further 2 years.
- Residents are being very cooperative and providing necessary access to properties.

SUBTERRANEAN TERMITES AUCKLAND

- The presence of exotic subterranean termites, *Coptotermes acinaciformis*, was confirmed at a property in South Rodney (Auckland) on 10 January 2007. An initial inspection detected termite activity within a shed and in adjacent planter boxes. The likely sources of the infestation are imported Australian railway sleepers used to construct the boxes.
- There have been no new infected sites or risk movements identified through trace back/forth activities. However, in mid-January 2007, a large swarm of winged alates were seen emerging from one of the planter boxes. The probability that new colonies have established as a result of alate flights from the known infestation is considered low.
- No termites have been detected so far in the property's main house or in neighbouring properties. Surveillance of the wider area is expected to commence during March 2007.
- BNZ is eradicating the subterranean termites using hexaflumuron baited stations. The baits have been laid by the end of January 2007. An initial inspection of stations at the beginning of February 2007 indicated that the termites commenced with ingesting the baits. This has been confirmed during the following inspection at the end of February 2007. The baits have been replenished where necessary and eradication continues.
- It cannot be forecasted at the moment, how long the eradication action might take. Once initial eradication action is completed, it will be followed with a monitoring programme for a several years before the colony can be declared eradicated. Biosecurity New Zealand is optimistic about successful eradication of *C. acinaciformis* from Rodney.

RED IMPORTED FIRE ANT - WHIRINAKI

- On June 7th 2006 *Solenopsis invicta* (Red Imported Fire Ant – RIFA) was identified from Pan Pac Forest Products Ltd, Whirinaki. The nest was thoroughly treated with an insecticide drench and insecticidal ant bait on June 9th.
- The nest is estimated to be two to three years old and dispersal flights may have occurred.
- This form of RIFA is more likely to disperse by walking short distances rather than flying but is also capable of human-assisted dispersal. We are taking measures through surveillance, movement control and tracing to cover all three possibilities.
- A Controlled Area has been declared out to a 2 km radius from the nest site with restrictions on the movement of all risk goods for RIFA spread including soil, gravel, hay and goods that have been in contact with the ground for more than 24 hours (except operational cars).
- The RIFA Technical Advisory Group was reconvened in September to provide independent advice to the CTO on the proposed plan. This advice formed the basis of the response plan.

- Tracing the movements of high risk items over the past three years has identified a number of high risk sites. Surveillance at these sites is underway.
- The first round of surveillance out to a 2 km radius from the nest was completed in December 2006, and the second round commenced in February 2007. The February round of surveillance will be repeated in each of the next two years.
- Baiting with insect growth regulators in high risk areas that are inaccessible for attractant surveillance was completed in December. Another application with insecticidal baits is planned for the same areas in late March/April 2007. These applications will be repeated in the next two summers.
- No further fire ants have been found to date.

This is the third detection of a RIFA colony in New Zealand, both previous finds were eradicated. Genetic analysis has confirmed that the Whirinaki colony is unrelated to the previous incursion at Port of Napier in 2004.

PHYTOPHTHORA KERNOVIAE (Update to presentation 6 July 2006)

- Following the analysis of samples collected from the Tokoroa sites identified by McAlonan and Newhook it is concluded that *Phytophthora kernoviae* has been present in this area since at least the 1950s.
- *Phytophthora kernoviae* was not recovered from some previously positive sites (as recorded by McAlonan), indicating the ephemeral nature of the fungus, and that changes in the local environment may influence distribution.
- The only plant host thus far detected in New Zealand remains cherimoya (*Annona cherimola*).
- Based on the observed distribution thus far (Northland – 3 sites, multiple sites within the Tokoroa pine forest), the lack of any link to importation activities and the DNA sequence data it is possible that *P. kernoviae* is a fungus of New Zealand origin.
- In addition to the three sites in Northland, *P. kernoviae* has been detected at a total of 29 sites within the Tokoroa pine forest.