



### Requirements for successful implementation

- Commitment at policy level
- Financial commitment
- Technical skills and resources

• Surveillance techniques are important – but are totally dependent on the first two – policy that recognises the importance of surveillance as providing the basic information that underpins both the import and export of plant material and provides protection for the environment. The policy must be supportive and continuous.

### New Zealand commitments to surveillance best practice

- Commitment at policy level
  - New Zealand Biosecurity Surveillance Strategy
  - Decision-making guidelines for government
  - Recognition by import/export groups in government
- Financial commitment
  - Ongoing national plants surveillance programs (e.g. fruit fly, gypsy moth)
- Technical skills and resources
  - Dedicated surveillance group within MAF
  - Call centre for general surveillance

### General Surveillance in New Zealand - commitments to surveillance best practice

- NPPO acting as national repository for plant pest records
  - Plant Pest Identification Network (PPIN) database
- A record keeping and retrieval system
  - PPIN: LIMS; GIS
- Data verification procedures
  - ISO 17025 procedures
- Communication channels to transfer information from the sources to the NPPO
  - 0800 80 99 66 free phone
- Incentives to report such as:
  - Legislative obligations (Section 44 - Biosecurity Act 1993)
  - Memorandum of Understanding between the NPPO & research organisations and other government departments
  - Part of field personnel's role is to enhance communication to and from the NPPO
  - Public awareness/education programmes

### Specific Surveys - surveillance best practice

High Risk Site Surveillance

- Definition of purpose
  - provide effective detections of new plant pests that may have potentially adverse effects on the environment, economy or people of New Zealand.
- Target pest
  - organisms of biosecurity risk or potential impact on trees and arborescent shrubs in the early stages of establishment
- Scope
  - areas or sites that are known to be significant pathways or establishment sites for exotic organisms
  - Hosts are trees and arborescent shrubs (e.g. plantation forest species, native forest species, urban tree species)

Pathway	Risk item	Number of items
Air	Passengers	4,800,000
Shipping	Sea containers	631,000
International mail	Letters, parcels	41,600,000
Imported goods	Used vehicles and machinery	127,000

### Specific Surveys - surveillance best practice

Description of survey methodology

- Program design
  - High risk sites identified and mapped in GIS
  - Transects mapped in high risk sites
  - Latest risk data gathered
  - Risk calculated and ranked for high risk sites
  - Surveillance resources allocated according to risk

## Specific Surveys - surveillance best practice

### Description of survey methodology

- Sampling procedures
  - visual inspection of tree/shrub vegetation within transects
  - sample collection (with GPS and PDA for data)
  - laboratory analysis
- Diagnostic procedures
  - Scion forest health laboratory
- Reporting procedures
  - Electronic data transfer to database
  - Publication of results in Surveillance magazine



## Specific Surveys - surveillance best practice

### High Risk Site Surveillance

- Statistical basis
  - 900 samples
  - 7,550 transects inspected
- Detection probability target
  - Highest risk sites > 90% annually
  - Medium - High risk sites: 50 - 80% annually
- Selection of survey sites
  - previously reported presence and distribution
  - known risk pathways
    - known points of entry
    - possible pathways of spread
  - host plant distribution
  - climatic suitability of sites
- Timing
  - Carried out annually from September to May (spring-summer-autumn)



## Results

### New to New Zealand

- Tenthredinid sawfly on willow

### New hosts

- Tamarix ramosissima

### New pest distribution

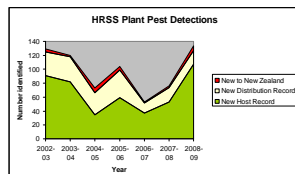
- Gum Leaf Skeletoniser in Hawke Bay

### Delimitation surveillance

- Orange Fruit Borer

### Spread of high risk pests

- Dutch Elm Disease
- Gum Leaf Skeletoniser



## Challenges to implementation of ISPM 6

- Commitment at policy level
  - Integration between central and regional government
  - Commitment by a wider range of industries
- Financial commitment
  - Sinking lid
- Technical skills and resources
  - Tools/methodologies to measure quality
  - Recognition of new techniques

