

# **Improving Serrated Tussock Control**

## **Serrated Tussock Working Party for New South Wales and the ACT**

### **The Weed**

Serrated tussock is a weed of regional and national significance because of its invasiveness, destruction of pastures, negative impacts on biodiversity, and difficulty of control. So long as there is any serrated tussock, its continuing spread and damage is guaranteed because of its dispersion patterns, for example, by wind, vehicles, machinery and stock.

For farmers, there are production losses and the cost burdens of control activity. For the general public, there is a loss of amenity and of benefits of biodiversity, and the costs of control activities on public land. The long term consequences of inadequate action will be severe for the community, and dire for those directly affected, as they have been for rabbit and prickly pear devastation in the past.

### **The Problem**

Although the serrated tussock problem is well recognized, the weed continues to spread. Climate change scenarios suggest that the potential range will continue to increase.

There are State and regional plans, but no clear and definite aim flows from them and their administration. There is no reliable measure of weed control outcomes.

Weed control budgets, including for public lands, are insufficient to achieve continuing effective results. The potential force of the formal regulatory system is rarely used.

The poor outcomes cost land managers a lot of money, generate frustration, continue reliance on residual chemicals, jeopardise biosecurity in native and productive ecosystems, and jeopardise grazing industries. There is a lack of respect and credibility for authorities. Good action by a land manager is pointless if neighbours don't act too. This is manifestly unfair.

### **The Serrated Tussock Working Party for New South Wales and the ACT (STWP)**

The STWP is a landholder based group formed in 2006 in response to public concern at the potential for increasing the adverse effects of serrated tussock for the environment and agricultural production in New South Wales and the ACT.

There has been some progress since then at a policy level. There is a new draft National Serrated Tussock Strategic Plan (Revised update) 2010 to 2015, the Best Practice Manual has been published, and at least in some areas, widely

distributed. The comprehensive guide to identification and management of serrated tussock published by the Department of Primary Industries (Serrated Tussock - a Weed of National Significance) was revised in 2010.

The New South Wales Government is funding a project aimed at achieving effective coordinaton and strategic management of serrated tussock across the State.

Several elements of the New South Wales Government's NSW 2021 Plan and associated Goals (<http://2021.nsw.gov.au/>) are consistent with pursuit of better outcomes with serrated tussock control, for example,

- in relation to economic growth in regional New South Wales,
- protection of the natural environment,
- increased opportunities for people to look after their own neighbourhoods and environments, and
- maintaining preparedness to deal with biosecurity threats (including building capacity within local government, community groups and landholders to manage invasive species effectively).

The New South Wales Minister for Primary Industries has advised that weeds and feral pests have always been a top priority for her, and will continue to be so. She indicated that not enough had been done in the past. She has asked the Noxious Weeds Advisory Committee to assess the feasibility of legal options regarding the disclosure of weeds information for prospective land buyers.

None of this heightened interest has much changed the on-ground situation, but it has increased awareness and set the stage for accelerated progress.

The STWP seeks to generate sustained action by all interested parties, including local, State and Commonwealth governments to deliver policies and committed action to reduce the impact of serrated tussock (and other weeds) on the environment, economic activities and public amenity.

The STWP's vision for serrated tussock is:

*The continuous suppression and destruction of serrated tussock on arable land, the identification and destruction of serrated tussock where dealing with it is beyond the capacity of the landholder, the stopping of the expansion of the weed's range and the stopping of seed rain everywhere.*

## **Planning and Acting for Improvement**

The STWP believes that meaningful progress requires several things:

1. Revision of the administrative arrangements for weed control, with three clear and separate operation centres:
  - local or regional education, inspection and monitoring,
  - a prosecution service acting on advice from the local or regional bodies, and
  - a State wide oversight agency to ensure a strategic and unified approach across the State and a basis for accountability and policy and program review (leadership and administration).
2. Increased funding over the long term for all aspects of weed control, and accurate and verifiable mapping (resources and knowledge).
3. Engaging all landholders, public and private, in the effort (engaging landholders).
4. Establishing and maintaining effective communications strategies by all interested parties (communications).

As well as removing serrated tussock from the landscape, the needed action involves landscape regeneration and continuing management that will inhibit or prevent the return of serrated tussock.

Success with serrated tussock suppression will inevitably bring multiple benefits:

- suppression of other weeds,
- better overall landscape management,
- more profitable farming systems,
- environmental improvements, and
- greater public amenity.

The STWP believes that effective action should involve at least the steps below. All interested parties need to play a role.

### **Leadership and Administration**

Governments at all levels have responsibilities related to weed management, including landscape, ecological sustainability, biosecurity, funding, direct land management and regulatory systems.

Weeds have a major economic impact on many industries in addition to agriculture and livestock. These include forestry, nursery, landscaping, fishing, aquaculture, transport and tourism. Industry organisations have an interest in weed control because of its significance for industry profitability and quality.

Weed problems, including serrated tussock, will not be dealt with satisfactorily

now and in the future unless all landholders, public and private, actively participate in continuing control and management programs. Therefore landholder organisations with a focus on the environment, such as the Landcare movement, are critical for success.

Transport, landscape and farming contractors, gardens and waterways are important sources of weeds, including serrated tussock. Therefore those involved in these must become part of the solution.

The real estate, legal, insurance, commodity trading, rural supplies and rural and gardening advising industries all may contribute to worsening or improving the weeds position, depending on how they carry out their functions.

Because of their land and water management responsibilities, State and Territory Governments have the primary responsibility for weed management.

In New South Wales the current arrangements affecting weed management are highly fragmented.

The Review of Progress towards the National Serrated Tussock Strategic Plan (2008 – 2009) noted that: “Coordination of weed management in NSW is especially difficult given the number of different organisations, jurisdictions and associated boundaries that aren’t aligned with each other.” and “Nor is there a formal mechanism for coordinating the various weed roles and responsibilities.” This situation inhibits effective cooperative action with the ACT and with Commonwealth government landholders in New South Wales, and productive participation in national programs. It also inhibits effective cooperation among the many interested parties in New South Wales.

There is currently no agency charged with or undertaking overall ‘audit’ or monitoring functions, and there are doubts about the capacity of the Auditor-General to undertake useful performance audits where local government is involved.

The Commonwealth Government can foster more and better action through criteria for grants programs, establishment of a permanent, adequately funded weeds research function, and through exemplary management of the extensive lands it controls. For example, Defence alone manages millions of hectares in Australia, including land in New South Wales and the ACT in the serrated tussock areas.

The desirable action includes:

#### **A. State Government and Minister for Primary Industries**

1. Continue to make clear statements on commitment to improved weeds management, and act on the specific items proposed below.

2. Require catchment management authorities to include weed control as a continuing priority, and to include weed issues in all property planning processes.
3. Separate the weed education and inspection functions from formal compliance, eg prosecutions, with the former being local or regional in operation, while reporting to a State body as part of a universal, consistent system.
4. Apply the following criteria in reviewing the location of a weed control function:
  - alignment with other activities relating to rural, environmental and landscape management
  - links with functions related to integrated land management, ecological integrity and long term landscape improvement
  - alignment of boundaries of organisations with related functions
  - avoidance of any conflicts of interest
  - potential for combining resources of the organization with others, for mutual or common benefit
  - availability of adequate and certain funding
  - links policy, education and inspection functions.
5. Ensure that environment prosecutions are dealt with in a specialised court, and that the judiciary has adequate training and information on environmental issues available to it.
6. Establish mechanisms for continuous and productive interaction among all interested parties, emphasising the need to generate long term commitment and maintain strategies that provide sustained weed control action and avoid failure and frustration. These parties include:
  - NSW agencies ( eg Department of Primary Industries, Department of Premier and Cabinet [Office of Environment and Heritage, National Parks, Division of Local Government] Noxious Weeds Advisory Committee, Department of Finance and Services, Department of Attorney General and Justice, Roads and Maritime Services),
  - local government (urban and rural),

- all other State land managers and bodies affecting land management, Livestock Health and Pest Animal Authorities, regional weeds committees, catchment management authorities, Natural Resource Commission,
  - Commonwealth government land managers, for example, Department of Defence
  - Australian Rail Track Corporation,
  - all service easement managers, and
  - community: Landcare and catchment groups, primary industry groups, and associated service industries, including real estate, legal, insurance, rural supplies, rural contractors, commodity traders, rural and garden advisers,
7. Determine clear goals and targets for (annual and long term) improvement in serrated tussock control, as a first step in achieving a universal State wide approach and an effective monitoring and accountability approach.
  8. Establish a State wide 'audit' and monitoring function, encompassing private as well as public functions, and involving community collaboration, and clarify the capacity of the Auditor-General to undertake useful performance audits of all activities under the Noxious Weeds Act, including by local control authorities that coincidentally are local government Councils.
  9. Achieve uniformity or at least compatibility of systems and processes used in weed control activities.
  10. In collaboration with interested parties, consider the relevance of the principles, laws and practices underlying contaminated land management to improved weed control.

## **B. Community Groups and Industry Organisations**

1. Recognise weed problems in their aims, strategies and programs, and facilitate participation by their members and supporters in weed control activities.
2. Lobby local, State, Territory, and Commonwealth Governments to strengthen their commitments and programs for positive, continuing action on weed problems.
3. Develop partnerships with others to strengthen weed control programs.

### **C. Industries Supporting or Interacting with Land Managers**

1. Adopt practices and programs enhancing rather than weakening weed control activities.

#### **Resources and Knowledge**

There is general agreement by interested parties that the existing inspection and compliance regime is underfunded. Some public land managers, eg National Parks, apparently lack the resources necessary for effective weed control. There are mother lode areas beyond the capacity of landholders (whether public or private) to deal with.

There is the special problem of identifying, mapping and rapidly dealing with new outbreaks.

Accurate and verifiable mapping is needed to generate better understanding of the spread of the weed, to facilitate targeted control action, and as a basis for monitoring action.

There are already several readily available information sources dealing specifically with serrated tussock that land managers can use, eg the National Best Practice Manual, Serrated Tussock – A Weed of National Significance (NSW DPI) and The Serrated Tussock Managers' Factpack. There are also useful publications about weeds generally, such as Introductory Weed Management Manual (CRC for Weed Management) and Weed Detection and Control on Small Farms (Sindel and Coleman).

One issue for weed control, including serrated tussock, is ensuring that available information is up to date, and that new research does not duplicate previous work. An associated problem is that there is still no permanent national weed research program to foster research to help overcome knowledge gaps as they are identified, to generate interest among research organisations and researchers in contributing to weed research programs, and to undertake synthesis, analysis and promulgation of research outcomes from multiple sources.

All involved can increase the available workforce for serrated tussock (and other weed control) by use of volunteer or similar sources, for example, Landcare volunteers, environmental service organisations such as Conservation Volunteers Australia and Greening Australia, other community service organisations such as Rotary, farming system groups, wwoofers (willing workers on organic farms), and teams established from time to time under Government training or unemployment relief programs. These approaches will also assist with engaging landholders and with communication strategies.

The desirable action includes:

**A. State Government and Minister for Primary Industries**

1. Increase funding for the inspection – control system as soon as possible, and review the basis of allocation to ensure that it is based on risk assessment and not primarily on historic expenditure patterns.
2. Widen training for weed control staff to include education techniques, landscape management and farming systems.
3. Ensure that State land managers are adequately funded to carry out their weed control responsibilities.
4. Establish and fund task forces to seek out, map and suppress new outbreaks, also providing a basis for developing predictive models to assist with tracking serrated tussock dispersion.
5. Coordinate all interested parties, including volunteer groups, to develop ground-up mapping leading to a uniform baseline ‘ground truth’, ensuring that privacy laws are accommodated so that they do not inhibit or frustrate this action.
6. Investigate, develop and fund a large scale remote sensing mapping program.
7. Establish a system for regular monitoring and publicising of change against mapped baselines.
8. In collaboration with interested parties, review rating and taxing arrangements to enhance weed control action, including ensuring that good managers pay less than problem managers.
9. Review environmental offset arrangements
  - so that those who benefit from them are directed to areas of environmental need, and
  - delete the requirement for offsets to be close-by the development.
10. Identify and publicise potential funding sources, including public and private grant systems, for improved weed control.
11. Increase funding for weeds research.
12. Expand the activity of seeking transfer of successful management and technical practices of other jurisdictions.



**B. State and Territory Governments**

1. In collaboration with the Commonwealth government, provide funding for control of serrated tussock problem areas beyond the capacity of landholders to deal with successfully in a reasonable time frame.
2. Seek Commonwealth funding to support serrated tussock control activities contributing to national aims, or benefiting Commonwealth land or activities.
3. Indicate willingness to contribute to any national weeds research activities established by the Commonwealth Government.
4. Collaborate with the Serrated Tussock Working Party for NSW and the ACT to arrange biennial reviews of experience with control programs and of research outcomes, and use the outcomes to revise programs and available information sources, beginning in 2012.

**C. Commonwealth Government**

1. Establish a permanent research facility for dealing with weeds problems, including the relationship between weeds and environmental and farming system issues.

**D. All Interested Parties**

1. Review the possibilities for productive collaborative action with others, including private land managers.
2. Participate in and actively support the proposed STWP - ALM Group 'What Works' Workshop supported by RIRDC.
3. Seek RIRDC support for weed control activities that fall within RIRDC criteria for funding support.
4. Seek to influence the programs and spending of catchment management authorities, Landcare and industry groups to contribute to serrated tussock (and other weed) control as elements in their normal activities.
5. Encourage the use of volunteer or similar sources of assistance in serrated control activities.

## **Engaging Landholders**

The serrated tussock problem can be overcome only if all landholders with the weed, and those who may become affected, participate in control programs and in identifying new outbreaks.

The problem is compounded because prospective purchasers of land are allowed to buy land without any warning about the weed problems existing on the land they are interested in purchasing or the region within which such land is situated. The purchaser can buy a problem, and those who came before who profit from the transaction escape responsibility. Another manifestly unfair situation.

Continuity of effort over the long term and across generations is necessary. Therefore public and private interests need continuing interaction to ensure the necessary continuity and continuing pressure on landholders and others whose actions can help or hinder. Peer pressure based on strong local environmental efforts can sway otherwise uninterested individuals in the right direction. The Landcare movement is most important in this context. Farming system groups and other service organisations can also contribute.

There will also be advantages to landholders and the system as a whole if landholders use management systems that facilitate monitoring over time and the sharing of information, noting that in Australia these approaches are accepted only if they are voluntary and are not based on 'one size fits all' or on the needs of non landholders. Some landholders, for example, Commonwealth agencies, already use such systems.

Adoption of several of the proposed actions above would assist with engaging landholders. Other desirable action includes:

### **A. State and Territory Governments**

1. Make subdivision and other land development approval conditional on a prior environmental report, including weeds inspection, with approval withheld until any required remedial work has been carried out.
2. Introduce a legal requirement that land dealings disclose any outstanding section 18 notice, or weed management or other land management plans, to be included in a vendor provided environmental report available to all prospective purchasers
3. Ensure that all government land managers, including local government and corporatised bodies, should have the same weed control obligations as private landholders, preferably through legislative requirements, and take up with the Commonwealth government the need for similar action by Commonwealth land managers and by bodies such as the Australian Rail Track Corporation.

4. Endorse and promote the concept of a voluntary land management system incorporating weeds that can be uniquely tailored to the needs, aspirations and resources of individual landholders and the community as a basis for 'regulation' and for participation in catchment management authority programs.

#### **B. All Parties**

1. Encourage-Landcare groups, farming system groups, and service organisations to embrace the weed control cause.
2. Encourage industry groups to acknowledge the value of weed control for profitable production, and to include it in their strategies and programs.
3. Adopt or promote the concept of voluntary land management systems.

### **Communication**

Success with any long term program requiring sustained and continuing action depends on good communication strategies and programs, to ensure all who can or should contribute are constantly reminded and kept up to date with new developments, and to build pressure from the general public on decision-makers and landholders.

Political decision-makers and agency administrators need to be well informed about the problem, and about the severe long-term consequences of inadequate action.

Desirable action to contribute to effective communications includes:

#### **A. State and Territory Governments**

1. Publicise and distribute the existing documents on serrated tussock control (see 'Resources and Knowledge' above), using State and Territory agencies, local government, rural service providers and contractors, catchment management authorities and volunteer groups.

#### **B. All Interested Parties**

1. Develop and maintain communications programs so that the issues get constant publicity.

**C. Serrated Tussock Working Party**

1. Arrange field day or similar activities for the benefit of politicians and senior agency personnel, to increase their understanding and appreciation of the problem.

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