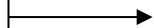


**ROLE OF WORMWISE**  
 To lead and promote the development and adoption of the Wormwise strategy

**VISION**  
 Internal parasites no longer pose a risk to animal welfare, sustainability and productivity of New Zealand livestock

**ROLE OF LIVESTOCK INDUSTRIES**  
 To contribute to the implementation of the Wormwise strategy



**KEY STRATEGIES**

**LEADERSHIP & COMMUNICATION**  
 Ensure ongoing leadership, coordination, communication and oversight of Wormwise, at all levels of the industry

**AGREED PRINCIPLES**  
 Monitor and update industry-agreed key technical principles for internal parasite management of livestock

**RESEARCH**  
 Review and consult on R&D outputs and directions

**RESOURCES & TOOLS**  
 Develop effective support resources and tools

**EXTENSION & ADOPTION**  
 Support behaviour change toward management practices that minimise the impact of internal parasites

**ACCOUNTABILITY**  
 Collaboration and participation of stakeholders

**PROGRESSIVE OUTCOMES**

Increased industry awareness and understanding of parasites, impact on productivity, management options and drench resistance implications

Industry advocating, and farmers accepting, the need to understand the parasite resistance status of individual farms

Farmers developing active internal parasite management plans

Testing and identification

**Farmers throughout New Zealand understanding and implementing management practices that minimise the impact of internal parasites in the short and long term**

**WORMWISE – Action Plan 2018 - 2021**

**1. LEADERSHIP & COMMUNICATION – ENSURE ONGOING LEADERSHIP, COORDINATION, COMMUNICATION AND OVERSIGHT OF THE NATIONAL STRATEGY AT ALL LEVELS OF THE INDUSTRY**

<b>ACTIONS</b>	<b>END RESULTS</b>	<b>TIME FRAME</b>	<b>RESPONSIBLE</b>
<p><b>1.1</b> Develop ownership of the strategy by industries</p> <ul style="list-style-type: none"> <li>▪ Wormwise continues to be promoted and recognised as an industry agreed initiative</li> </ul>	<p>Industry including regulators, vets, commercial companies and farmers (including sheep, beef, dairy, deer and goats) are aware of the strategy and participate in its ongoing development</p> <p>Industry participants actively promote Wormwise</p>	Ongoing	WIG to ensure any strategy development includes industry representation
<p><b>1.2</b> Co-ordinate Wormwise</p> <p>Monitor budgets and milestones for strategy implementation</p>	<p>Maintain Wormwise Implementation Group (WIG) and Technical Advisory Group (TAG), and deliverables are identified &amp; achieved</p> <p>Report to funders and stakeholders Where applicable, project management plan in place</p> <p>Monitoring</p>	Ongoing	<p>WIG to identify their deliverables for WIG and TAG</p> <p>WIG</p>
<b>1.3</b> Collaborate with industry leaders	Use relevant industry ‘ambassadors’	Ongoing	
<b>1.4</b> Review and collate a business case for investment in Wormwise	<p>A business case to support continued growth and development.</p> <p>Stakeholder funding to Wormwise</p>	As business cases arise	WIG to contract out

<p><b>1.5 Manage the communication strategy</b></p>	<p>All participants, aware of actions and progress, including extension activities.</p> <p>Social media management</p> <p>Communication made to farmers at regular intervals to increase brand recognition and key principle awareness.</p> <p>Use existing stakeholder marketing avenues eg e-diary</p> <p>Evaluate effectiveness</p>	<p>Annual review</p>	<p>WIG</p>
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**WORMWISE – Action Plan 2018 - 2021**

**2. AGREED PRINCIPLES – MONITOR AND UPDATE INDUSTRY-AGREED KEY TECHNICAL PRINCIPLES FOR INTERNAL PARASITE MANAGEMENT OF LIVESTOCK**

<b>ACTIONS</b>	<b>END RESULTS</b>	<b>TIME FRAME</b>	<b>RESPONSIBLE</b>
<p><b>2.1</b> Monitor and update industry-agreed key technical principles:</p> <ul style="list-style-type: none"> <li>▪ Annual skills and capabilities review of TAG</li> <li>▪ Periodic review of new research trial results (including international), veterinary correspondence and farm results – literature review</li> <li>▪ Include all factors – chemical and non-chemical, including nutrition/forages, genetics, farm management practices and drenching</li> <li>▪ Principles and available practices updated</li> </ul>	<p>Key technical principles and available management tools disseminated are current</p> <p>All factors are considered in the development of key technical principles</p>	Annual review	<p>WIG to initiate and oversee</p> <p>TAG to sign off on agreed principles</p>
<p><b>2.2</b> Updating and disseminating agreed principles</p>	<p>Key stakeholders are updated about any changes in agreed principles</p>	As required	WIG

## WORMWISE – Action Plan 2018 - 2021

### 3. RESEARCH – REVIEW THE DIRECTIONS AND CONSULT ON R&D OUTPUTS

ACTIONS	END RESULTS	TIME FRAME	RESPONSIBLE
<p><b>3.1</b> Review industry-agreed priorities for research and development for internal parasite management</p> <p>Identify information gaps</p> <p>Provide awareness/information to government and industry so that they are aware of requirements for R&amp;D support, including succession-planning for parasitology capability in New Zealand</p>	<p>Research targeted at priority areas, through funders being provided with industry priorities</p> <p>Information gaps identified and incorporated into revised priorities. Regular consultation between researcher funders, research users and researchers</p> <p>Gaps and opportunities identified and clear recommendations supplied to industry and government policy-makers</p>	<p>At least six-monthly, aligned with timing of funding rounds</p>	<p>WIG to initiate and oversee review, in consultation with TAG and other parties, including farmer groups</p>
<p><b>3.2</b> Regular consultation process in place between research funders, research users and researchers</p> <ul style="list-style-type: none"> <li>• Includes annual review of all research to assess coordination of research</li> </ul>	<p>Relationship developed between researchers, funders and users</p>	<p>As above</p>	<p>WIG</p>
<p><b>3.3</b> Review of dissemination and adoption of internal parasite research results</p>	<p>Results are disseminated through extension strategy</p>	<p>As above</p>	<p>WIG, with feedback from farmer level</p>

**WORMWISE – Action Plan 2018 - 2021**

**4. RESOURCES & TOOLS - DEVELOP AND MAINTAIN EFFECTIVE SUPPORT RESOURCES AND TOOLS**

<b>ACTIONS</b>	<b>END RESULTS</b>	<b>TIME FRAME</b>	<b>RESPONSIBLE</b>
4.1 Facilitate training programmes for vets and industry	Create an active group of people that have a good understanding of Wormwise principles and can effectively and consistently communicate those principles	Annual review	WIG to initiate and identify review team
4.2 Develop the capability to capture research outcomes and industry outcomes in a single resource point	A central resource database developed and updated, including industry and research outcomes, with access available to WIG and TAG	Ongoing	WIG to initiate. B&L NZ to hold central resource  TAG to update
4.3 Ensure Wormwise handbook is up-to-date and builds on current resources – links to 2.1	Wormwise handbook disseminated containing the most current information  Further develop current resources and ensure all publications and facilitator materials are up to date	At least every two years, or as required	WIG to initiate, TAG to review
4.4 Promote Wormwise principles to curriculum for vet and agricultural students  <ul style="list-style-type: none"> <li>▪ Institutions include Lincoln University, Massey University, Telford Rural Polytechnic, schools and Primary ITO</li> </ul>	Provide information for education providers, including the Wormwise key principles in animal science/production/management papers  Maintain a website, Twitter, Facebook and case reports	Reviewed at least every two years	WIG

**WORMWISE – Action Plan 2018 - 2021**

**5. EXTENSION & ADOPTION – SUPPORT BEHAVIOUR CHANGE TOWARD MANAGEMENT PRACTICES THAT MINIMISE THE IMPACT OF INTERNAL PARASITES**

<b>ACTIONS</b>	<b>END RESULTS</b>	<b>TIME FRAME</b>	<b>RESPONSIBLE</b>
<p><b>5.1</b> Promote the Wormwise brand, use guidelines and develop a marketing campaign</p>	<p>Control is established over the use of the brand, avoiding misrepresentation</p> <p>Increased brand awareness</p> <p>Increased awareness of key technical principles, resulting in behaviour change by farmers</p>	Ongoing	WIG
<p><b>5.2</b> Communicate the key principles</p> <ul style="list-style-type: none"> <li>▪ To highlight the need for diagnostics and integrated internal parasite management</li> <li>▪ To encourage vets, in particular, to take ownership</li> <li>▪ To encompass broader industry needs</li> </ul>	<p>Key influencers are aware and understand the need for integrated internal parasite management</p> <p>Increased understanding by vets resulting in them taking ownership of the key principles and disseminating clear consistent messages to farmers</p> <p>Clear objectives outlined in the Wormwise communication plan</p>	Ongoing	WIG

<p><b>5.3</b> Increase overall awareness through a communication/promotion programme targeting farmers</p> <ul style="list-style-type: none"> <li>▪ Increase distribution of publications and resource material</li> <li>▪ Incorporate the results from reviews of the research into extension products</li> <li>▪ Ensure information disseminated is technically sound, makes economic sense and is relevant to current farm management practices.</li> <li>▪ Continue to promote that Wormwise is an industry agreed initiative</li> <li>▪ Increase awareness, knowledge and uptake</li> <li>• Ensure consistent messages are disseminated</li> <li>• Develop multi-channel approach, for a range of situations</li> </ul>	<p>Farmers are aware and understand management practices that minimise the impact of internal parasites</p> <p>The increase in awareness and understanding leads to farmers implementing management practices that minimise the impact of internal parasites in the short and long term.</p> <p>Clear objectives outlined in the Wormwise communication plan.</p> <p>Increase awareness and credibility of Wormwise</p>	<p>Ongoing</p> <p>Objectives to be included in the communication plan</p> <p>Ongoing</p>	<p>extension programme</p> <p>WIG</p>
<p><b>5.4</b> Review the effectiveness of the training programme for farmers (workshops) and analyse viability for future application</p>	<p>Objective review conducted of training programme for farmers. Plan of action for future determined</p>	<p>Ongoing</p>	<p>WIG</p>