

2020 FLYSTRIKE PREVENTION RD&E PROGRAM PROJECT SUMMARY REPORT

AWI PROJECT NO: ON-00382

FLYBOSS — IMPROVING FLYSTRIKE MANAGEMENT IN SHEEP

AUTHOR

Dr Deb Maxwell,
Executive Officer, ParaBoss,
University of New England, Armidale, NSW 2351

flyboss



INTRODUCTION

FlyBoss is one component of ParaBoss (ON-00382 ParaBoss Phase II), the project that delivers Australia's premier resource for parasite management of sheep and goats. FlyBoss commenced development in 2008 as part of the Sheep CRC II, later joining with WormBoss and LiceBoss under the ParaBoss umbrella in 2014, funded by AWI and MLA. FlyBoss continues to offer flystrike prevention and treatment solutions for Australian sheep producers and their advisors. The FlyBoss website is the primary repository of flystrike information and tools, and awareness of the content is strongly promoted through the ParaBoss News e-newsletter, the ParaBoss Facebook page and ParaBoss articles in Beyond the Bale, as well as other channels. During the two years since progress was reported at the 2018 AWI Flystrike RD&E Technical Update, further material has been created or is in development.

The current phase of ParaBoss has been extended until the end of June 2021. An industry strategy for ParaBoss Phase III will be developed over the next 12 months and is expected to include content targeting parasite management in cattle as well as sheep and goats.

NEW OR UPDATED FLYBOSS CONTENT

FlyBoss website

FlyBoss content on www.flyboss.com.au is relatively mature and complete, providing the majority of current information required by producers and their advisors to cost-effectively manage flystrike, improve animal welfare outcomes, and maintain low pesticide-residue wool while maintaining the effectiveness of chemical control products. The FlyBoss website contains a number of decision support tools; one of these is undergoing redevelopment and another new tool will be published in mid-2020.

The current Products Tool, which is shared with LiceBoss, provides a listing of commercially available products for flystrike (and lice) prevention and treatment. The tool is being re-developed in line with the upcoming release of ParaBoss content for cattle, expected in late 2021.

ParaBoss content is currently being updated to include parasite information relevant for cattle, and the ParaBoss Technical Committee recently reviewed the existing Products Tool for flies and lice, as well as the worms Drench Database search tool, to see what improvements or additions were needed to also address cattle. The solution, in development now, will be a combined database of all commercially available sheep, goat and cattle products for all parasites, with seven separate search tools specific for each animal-host interaction. One of these will be fly control products for sheep and will be hosted on FlyBoss. All of the search tools will be very similar so that users who become familiar with one tool will be able to rapidly use any of the others, which will collectively deal with

sheep, cattle and goats (worms only), and their parasites: flies (blowflies of sheep and buffalo flies of cattle), lice, worms and ticks (cattle only).

A particular addition driven by the ParaBoss Technical Committee is to more prominently highlight resistance status of chemicals, so that users can make more informed chemical choices to help them in their quest to limit further development of pesticide resistance. The increase in pesticide resistance is seen as a major industry issue as there are relatively few new classes of chemicals in development by pharmaceutical companies. As such, it is imperative that producers are provided with the knowledge to use existing chemicals wisely so that they remain effective for as many years as possible.

FlyBoss also has two current tools that assist producers to assess the risk of flystrike during the year and to simulate management and chemical use decisions to maximise flystrike control.

Two key documents have also been added to the site. These provide guides on how to manage flystrike, either to delay the development of pesticide resistance or to manage flystrike in the face of existing pesticide resistance on a particular farm. They were developed in conjunction with AWI's Sheep Blowfly Resistance Management Strategy Working Group. The site has also included ongoing promotion to encourage sample submission for the AWI project conducting flystrike pesticide resistance testing.

The FlyBoss website itself was also re-released in a responsive format in 2019. This has greatly improved ease of use for the increasing number of users who access the site via mobile and tablet devices.

Google Analytics data (Table 1) shows a steady increase in use of the FlyBoss site from 2014 to 2018, but a drop during 2019. It is expected that the severity and extent of drought conditions nationally during 2019 would have resulted in a much lower incidence of flystrike, a substantial drop in the sheep population, many fewer sheep owners (as destocking occurred) and the opportunity to cull more susceptible sheep. As a result, it is not unexpected that site usage declined.

Table 1. Google Analytics for FlyBoss website use 2014–2019.

Year	Page views	Users
2014	28,877	11,579
2015	30,881	14,395
2016	39,042	18,513
2017	46,298	22,562
2018	58,904	30,918
2019	51,236	24,961

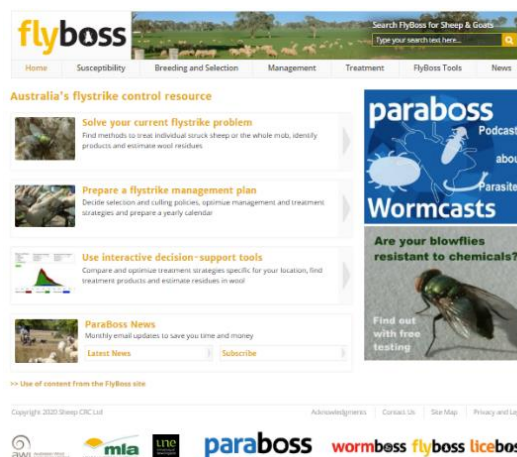


Figure 1. Screen shot of the FlyBoss website.

ParaBoss articles in AWI *Beyond the Bale*

ParaBoss contributed four key articles to AWI's *Beyond the Bale* magazine relating to flystrike prevention and management since the 2018 AWI Flystrike RD&E Technical Update:

- Flystrike treatments during drought (March 2019)
- Resistance management strategy for the Australian sheep blowfly (*Lucilia cuprina*) (June 2019)
- A fly in the ointment (managing flystrike when there is already evidence of chemical resistance) (December 2019)
- Parasite management plans (March 2020).

A small article was also published that encouraged producers to submit samples for pesticide resistance testing through another AWI project.

ParaBoss Facebook page

The page has been operational since 2016 and can be found at: <https://www.facebook.com/paraboss.com.au> Generally, about 4 posts per week are made, of which one per week is related to flystrike management and prevention. These posts are used to bring a wider audience to the FlyBoss website and the posts focus on topics relevant to the time when published. There has been a steady increase in followers to the ParaBoss Facebook page, increasing from about 1200 followers in June 2018 to about 1800 in May 2020.

AWI Sheep Blowfly Resistance Management Strategy Working Group participation

ParaBoss staff have taken a leading role in the work undertaken by the AWI Sheep Blowfly Resistance Management Strategy Working Group. This has included drafting, editing and publishing the two articles about pesticide resistance already described above.

Training for Advisors

Two ParaBoss conference/workshops have been held since the 2018 AWI Flystrike RD&E Technical Update. A fully subscribed ParaBoss conference was held in August 2018 that 125 industry advisors and service providers attended. This included a flystrike session. The first presentation was from Brian Horton (TIAR/UTAS) who described the FlyBoss tools and the flystrike component of the AskBill tool (also developed by Brian). The second presentation was from Geoff Lindon (AWI) on Improving lifetime welfare—breach strike. This covered breeding for reduced breach strike, including national flock progress, ASBVs and the search tools on the Sheep Genetics website; the National Wool Declaration; pain relief at marking; and factors to consider when moving to a non-mulesed flock. The presentations were followed by a 25-minute open discussion forum.

The March 2020 ParaBoss workshop, held in Adelaide, was also fully booked with 60 participating advisors and assistance from 10 producers and 10 technical experts/facilitators/presenters. The event included three workshop sessions: worms, flies and lice, as well as presentation sessions. During each workshop six advisors worked with one farmer and one technical expert to create a parasite management plan for the farmer. Approximately half of the invited advisor attendees were from rural merchandise stores, with the remaining made up of private and government veterinarians, pharmaceutical company staff, university lecturers and WEC service providers.

This workshop focussed on increasing the skills of industry advisors by providing them with a process (and practice) that would enable them to quickly and easily work with their customers and clients, asking the right questions and discussing the pertinent topics, so they could create a customised and well-informed flystrike, worm and lice management plan for those clients/customers. The workshop process could be repeated in other locations in future to target more advisors.

Sheep Parasite Management certificate course

In development is a Sheep Parasite Management certificate course for industry advisors from which participants will both learn and be assessed on every core topic in WormBoss, FlyBoss and LiceBoss. It will be the most comprehensive applied sheep parasite management qualification of its type world-wide. While this course was developed to target rural merchandise staff, who play a prominent role in providing advice (particularly about treatment products) to sheep producers, it will be promoted to all industry “advisors” and be accessible to anyone. It will be operated on a user-pays basis.

The certificate has worm, fly and lice modules and is presented as a series of quizzes that assess the participants. Each quiz not only assesses, but teaches, by providing the information required. It uses a contemporary well-accepted process already familiar to farmers (such as that used for online Livestock Production Assurance and

Chemical User accreditation) that allows participants to learn as they go, rather than in advance of the assessment stage.

The product will be completed by June 2021 in readiness for enrolments after this, in ParaBoss Phase III. The success of the activity hinges around ParaBoss certifying successful graduates and heavily promoting them to industry. These graduates will be able to demonstrate an advanced knowledge of sheep parasite management and should be sought after by both producers and employers, which will provide incentive for more participants to enrol. The standard required to graduate will be high and comprehensive and therefore the qualification will be meaningful.

Ultimately it will yield an increase in the quality of parasite management advice provided to producers.

Podcasts

In 2019 ParaBoss launched a series of podcasts (called Wormcasts) that included episodes relevant to flystrike prevention (www.paraboss.com.au/multimedia).

SUMMARY

ParaBoss continues to be the premier Australian source of independent, practical parasite management information, including FlyBoss for flystrike management. While FlyBoss is already mature, improvements are ongoing, ensuring this program remains a world-leading resource for the management of flystrike.

Published by Australian Wool Innovation Limited, Level 6, 68 Harrington Street, THE ROCKS, NSW, 2000

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