#### New Zealand Society for Parasitology Newsletter – September 2018

#### **President's Post**

Spring is here and although it has been unkind in some parts of NZ, here in the Waikato it has been kind. Calving and lambing have gone exceptionally well which is great news for the farmers, not so good for the vet's balance sheets! Parasites are rearing their heads with sightings of poor, dung-stained calves already. This year I've been pleasantly surprised that the 'you don't need to drench at docking' message is starting to get through to farmers. The Wormwise website is a great resource that I am always directing people to. How can we market this better do you think? Maybe a topic for the PAD day?

Thanks to Ian Sutherland who cast our vote at the recent ICOPA conference in Daegu, South Korea. We voted for the next conference to be held in Copenhagen, Denmark in 2022. Denmark were successful in their bid. Our conference organising committee of Tania Waghorn, Laryssa Howe and Sarah Riddy (née Lochore) are doing a fine job of getting our own conference organised for next month in Palmerston North. So far we have 46 confirmed registrations – keep them coming! We have included a list of the topics in this newsletter to pique your interest. Many thanks to our sponsors (Elanco, Boehringer-Ingelheim and PGG Wrightson) and also to SVS for distributing our conference flyers among vets.

The Society executive have approved a donation of \$500 to the Hinewai Reserve after hearing of Lloyd Whitten's passing. Lloyd was a founding member of our Society and will always be remembered with fondness and respect. We have included some information about the Reserve later in the newsletter.

I hope to see as many of you as possible, either at the conference or the Parasite Advisory Day. The organisers have secured two excellent international speakers so come and hear what they have to say as well as keeping abreast of the latest parasitology research from around New Zealand.

Cathryn Christie

**Call for Subs**: Your 2018/19 NZSP Subs are due now please. Invoices will be sent out very shortly – remember in order to vote at the AGM you need to be a paid up member. It won't break the bank and it means a lot to us to get it sorted. Thanks in advance!

**Call for abstracts:** Cut off day for conference abstracts is the 1st October! Keep them coming in, the 1<sup>st</sup> is this Monday!! Email them to <u>tania.waghorn@agresearch.co.nz</u> using the form attached [NZSP46confabstract2018.docx].

**Student Travel Grant:** As usual, NZSP may provide subsidies for students to attend the October conference. Any students wishing to attend and present your work, please get in touch with the committee. Note: you must have been a NZSP member for the previous year. So far we have approved grants for three students to attend conference:



# NEW ZEALAND SOCIETY for PARASITOLOGY CONFERENCE 2018

October 25-26, 2018 Hotel Coachman, Palmerston North

# Invited Speakers



#### "Equine Parasites"

Martin Nielsen, DVM, Ph.D., DipEVPC
Gluck Equine Research Center, Department of Veterinary Science
University of Kentucky, USA

# "The role of parasites in the evolution of host behaviour"



Vanessa Ezenwa, Ph.D. University of Georgia, USA



# From our conference committee:

Hi all

The NZSP conference is approaching fast and we are going to be having some interesting talks so get your registrations in soon. We still have spaces for more talks so please let Tania know ASAP.

Abstracts are due by the 1<sup>st</sup> of October

Registrations are due by the 8<sup>th</sup> of October

Here are some of the titles for the talks we have so far-

From our invited speakers

Vanessa Ezenwa - "Exploring the consequences of helminth coinfection"

Martin Nielsen - Equine parasite control – where are we heading? and "New take on an old concept: automated faecal egg counts"

Other interesting titles -

Nematode parasites are not a major cause of illthrift in adult ewes in New Zealand

Combination capsules will ACCELERATE rather than SLOW the development of multiple drench resistance

Vaccinology in the age of genomics

Host effects on Haemonchus contortus larval traits

Abomasal nematode species differ in their response to exsheathment triggers

Two cases of human myiasis in New Zealand

Exposure to a cyanobacterial toxin increases larval amphibian susceptibility to parasitism.

Looking forward to seeing you all there

# **Parasite Advisory Day**

24th October 2018

Venue: The Factory AgResearch, Grasslands Palmerston North

Cost: \$100

Limited to 45 people - a small number of spaces still available

Time	What	Who
9.00	Morning tea	
9.30	Welcome scene setting	
9.45	Practical application of TSTs for both sheep and cattle	Andy Greer, Lincoln
10.30	Workshop: TSTs	Simon Marshall Wormwise spokesman
11.15	FECPAK V2 & Sainsburys trial results	Greg Mirams, Techion
12.15-1pm	LUNCH	
1pm	Workshop: managing resistance on a triple resistant farm	Clive Bingham, Wormwise TAG
2.30	Information from the Paraboss conference	Clive
3.00	Difficult questions!	Panel/all
3.45	Wormwise update WIG & TAG	Simon and Clive
4.00	Wrap and actions	

Thanks to our sponsors:



#### **New Members**



#### **Marin Milotic**

I have always had an interest in disease, ecology and conservation. With an increase in interdisciplinary research, moving to Canada opened the doors to studying a combination of both parasitology and ecology. I researched how subtle downstream effects of eutrophication affect amphibians' susceptibility to infection, adding fuel to fire to the already dire situation of amphibians across the world. My academic journey led me to pursue a PhD at University of Otago where I will be researching the dynamics of

coextinction of hosts and their parasites. Especially important to coextinction is examining how conservation efforts of the host impact their parasites, which when removed from the ecosystem, could have insidious effects on a greater scale. Exciting research lay ahead, and I'm glad to be a part of it!



# Jean-François Doherty

I hail from the land of the Great Moose, also known as Canada. Born and reared in Ontario, I moved to Québec to return to my French Canadian roots, where I completed my B.Sc. and M.Sc. in biology at Université Laval. An entomologist at heart, I studied the effects of temperature on the development of arthropod pests found in Christmas tree plantations and developed models predicting their springtime eclosion. During this period, I happily discovered the fascinating subject of behavioural manipulation by parasites whilst writing a graduate course paper. Therefore, I

intend to pursue my doctoral studies in this area by experimentally infecting native cave weta (large nocturnal wingless orthopterans) with nematomorphs (horsehair worms) and conducting behavioural assays as infection progresses. In doing so, I hope to better understand how these parasitised cave weta end up "committing suicide" by jumping into water during their nightly escapades.

### Information on the Hinewai Reserve

Hinewai is an ecological restoration project on Banks Peninsula, privately owned and managed by the Maurice White Native Forest Trust, but freely open the public on foot.

Hinewai Reserve occupies 1250 hectares in the south-eastern corner of Banks Peninsula on the South Island's east coast. The reserve lies east of the town of Akaroa.

Initially 109 hectares were purchased by the Maurice White Native Forest Trust in 1987. Since then the trust has greatly enlarged the reserve through the purchase of Ōtānerito Station in 1991 and through several subsequent additions. Since 2016 the trust has also looked after the adjacent 192 hectare Purple Peak Curry Reserve, after its purchase in that year by the New Zealand Native Forest Restoration Trust.

Goals: The primary aim is to foster the natural regeneration of native vegetation and wildlife. We operate under a management strategy of minimal interference — that is, we allow natural succession to run its course towards a vegetation cover (nearly all forest) similar to that prevailing before the forest clearance by human settlers, first partly by Polynesian settlers from about 700 years ago, second and nearly completely by European settlers from around 1850 onwards. We remove alien elements that seriously impede the re-establishment of native flora and fauna — that is a few highly invasive and competitive exotic trees and vines and a few seriously deleterious animals, provided that their removal is practical. Otherwise we leave things alone. For example, exotic gorse is a hated weed of pastoral farming but is tolerated on Hinewai because it serves as a highly effective temporary nurse canopy for native regeneration.

A secondary goal is to allow the visiting public to enjoy the reserve through the provision and maintenance of a walking track network.

For more information visit https://www.hinewai.org.nz/