



ISoP Newsletter summer 2022



Hello friends and colleagues. I hope you are all well and that your lives are more or less getting back to normal.

In case any of you contracted amnesia over the past 4 years, we should have been meeting in Guangzhou a month ago. That was the plan! But as with many “best laid plans” something went wrong that nobody could have predicted back at ICP6.

Unfortunately, ICP7 has not yet arrived as intended and we are still waiting on world events to find out exactly how and when the meeting will take place, whether that will be online or in person or a hybrid. Given the worldwide distribution of our membership, any of these options is going to present some level of a challenge for organisation in terms of access to the meeting.

So, let us hope that over the next few months the world situation improves, and we can all settle down to living normal lives and maybe even meeting face to face.

In the meantime, what is going on in the louse world?

Iron deficiency anaemia: Judging by the recent eruption of case reports of acute iron deficiency anaemia linked with intense and chronic head louse infestation, you wonder how the medical profession managed to miss this condition for all those years. Of course, as with so many other things in our world, they remain unknown until somebody starts to look for them and then it triggers a cascade of “discoveries” [1-14]. Iron deficiency is fairly widespread in many societies, mostly linked either with poor diet or poor absorption. Ectoparasites have previously largely been thought of as taking sufficiently insignificant amounts of blood that a cause-and-effect linkage has not been concluded [15].

If ectoparasite attack does have such a pathological effect it is a wonder that any slum-dwelling child of the 19th Century managed to survive at all, what with head lice, clothing lice, bed bugs, and human fleas infesting either themselves or their houses or both. Most childhood mortality of that age has traditionally been attributed to a wide range of respiratory tract and gastrointestinal infections and, although those may have been the

primary pathogens perhaps exsanguination by the arthropod occupants of the household was actually the underlying cause that was largely dismissed because it was so widespread and common. However, since that time nutrition for most people has improved enormously, although recently studies looking specifically at anaemia in U.S. populations (ones where nutrition should in theory be better than many countries) have shown an increase in anaemia from all causes, including iron deficiency anaemia during this century [16,17].

Since sucking lice appear to be able to have such a dramatic effect on humans, when left to their own devices, what about sucking lice of other mammals? Finding reports in the literature is a slow and laborious process. Many veterinary reports may mention anaemia in passing but this is often attributed to multiple causes and for some species there are no reports at all. One reason is that where stock keepers do not manage their animals well and permit louse infestations to proliferate to the level where the animals are severely impacted by the insects, and the infestations become an obvious problem, they are not so likely to encourage veterinarians to investigate too closely. What literature I found readily accessible largely centred on the effects of *Haematopinus eurysternus* [18-22], which because of its size is not so easily overlooked and which takes a moderately large blood meal.

Although many cattle living on ranges and open hillsides may be affected by sucking lice, it is primarily the young that are more severely affected and, just as with humans, appear more susceptible, in the case of cattle either through physiology or nutritional uptake, to exhibit pathologic effects of heavier infestations. I am sure if the veterinary aspects of sucking lice were investigated specifically with respect to anaemia and iron deficiency a similar pattern would emerge in most species to those recently flagged up in those few human cases.

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Louse-related publications in 2021

This year the publication list is longer than ever.

Not only are more people interested in researching lice, but I have been able to find citations and references from a wider range of resources than previously identified. No doubt I have missed quite a lot this time, as in the past, but more regularly now publications other than English and other European languages are showing up on listings sites.

This has resulted in a record number of louse directed publications (317 plus 23 missed in 2020) as well as a large number on other Psocodea (58 plus 4 missed previously).

As always I hope it proves to be a useful resource.

Best wishes to all

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