Recent Advances in Animal Nutrition – Guide to Authors for One Page Papers

One page papers should be structured logically and include:

A **title** that is relevant and descriptive. Where possible use and even begin your title with key words. The best titles are positive, brief and specific.

An **introduction**. The object of your paper is to present new information to your audience. Your introduction to that information should convince them that the story you are about to tell is worth telling. Your introduction should guide your reader logically through a piece of thinking that ends in a statement of what the experiment is about. If an introduction has done its job well, your reader will no longer be a passive reader but an enthusiastic searcher for information in your paper.

Most papers will require a **hypothesis** to be presented to the reader. There will be a reason you chose to conduct the experiment you are reporting and you will also have had some expectation of what you might find. This expectation is, in effect, your hypothesis. When presenting your hypothesis, present only the hypothesis that you intend to test in your paper. The hypothesis should be a statement that both fits the already known information and is testable.
For example, in an orange growing area it is known that:

1. Orange trees are showing signs of iron deficiency.
2. Fruit quality is improved through the application of lime.
3. Lime raises the pH of the soil.
4. Raised soil pH decreases the uptake of iron by the trees.

So we know that the trees need iron and lime, but the lime reduces the uptake of iron. You figure that there must be a level of lime application that will give the trees enough calcium without reducing the absorption of iron, so you form the hypothesis that “there is an optimum level of lime application that will provide enough calcium for orange trees without causing an iron deficiency”. If you presented this as your hypothesis, your reader would know exactly why you conducted the experiment and can assess the rest of the paper against these expectations.

The **Materials and Methods** are a straightforward section of the paper, but be careful not to exclude important information or to include irrelevant information that will clutter the paper.
Things that must be included in your Materials and Methods include:

1. Novel techniques or modifications to old techniques.

2. References to original papers where old techniques are used.
3. Details such as climate, bodyweights of test animals, diet compositions, treatments, animal management etc if they are required for the interpretation of the results.
4. Details of the statistical analysis. The amount of detail required will depend on the simplicity or otherwise of the analyses conducted.

Things that should be left out of the Materials and Methods include anything that is not required for the interpretation of the results.

The test for a well written Materials and Methods is that if your paper is given to a knowledgeable colleague, they should be able to repeat your experiment after reading your description. Before submitting your paper, have at least one colleague read your Materials and Methods and ask them if they would be confident to repeat your experiment. If they are not, ask them what further information they would need and add this to your paper. Also have at least one colleague read your entire paper and ask them if there was any information they felt they needed to interpret the results that was left out of the Materials and Methods. If there is, add this to the Materials and Methods.

Your **Results** need to be presented in a logical and concise manner. Only results relating to the hypothesis should be presented. If you feel there is an important exemption to this rule, you may include it, but give it very little space or you risk your paper losing direction. If you find you need to make a lot of exceptions, you may need to rethink your hypothesis. Results can be presented in any combination of text, tables and graphs. As a general rule for a one page paper you should use either a graph or a table were necessary, with some text. Your results should always be organised so that the key information is in the most prominent position. Some general rules for the results section of the paper include:

1. The text should be readable without the tables or graphs and vice versa. In saying this, the text should not repeat exactly what is presented in the table or graph, but rather it should reinforce the most important results relating to the hypothesis that will be later referred to in the discussion
2. Tables or graphs must be numbered and the title must provide the essential details of the information the table or graph contains. For example rather than writing “Table 1 – Faecal parameters of horses” you should write “Table 1 – Faecal ph and faecal starch content of horses consuming 0 g/kg, 5 g/kg or 10 g/kg bodyweight of oats/day”.
3. Try to avoid using abbreviations in table column and row headings or in graph legends. If abbreviations are used, explain the abbreviations in the table or graph’s title or in a footnote to the table.
4. Units used in the text, tables or graphs must be clearly specified and presented in metric format.

5. Statistically significant differences need to be clearly pointed out using superscripts with the level of significance (eg $P<0.05$) provided.
6. When presenting numbers use only the number of decimal places necessary to make your point clear. If decimal places are not required, don't use them.

The **Discussion** for your one page paper will only be a few sentences long. In the small amount of space you have, you need to interpret your results and present that interpretation to your reader either in support of or against your hypothesis that was originally presented. Develop your discussion logically by presenting the most important point first and ending with the least important. For a one page paper, you may only have space to discuss the most relevant point relating to your hypothesis. Some general rules for writing the discussion are:

1. Don't make generalisations based on your data, particularly if your sample size was small or there were other limitations to your experimental design.
2. Where statistically non-significant data is presented, resist the temptation to suggest that "It is possible that …" or "The possibility exists that …". Likewise, don't use expressions such as "There is a clear indication …" or "There was a marked response …" when only slight differences occurred.
3. Only use references where they support the argument presented in your discussion.

The **Conclusion** or final sentence of your one page paper should reinforce the key point you have been developing throughout the paper and where appropriate provide support for or against the hypothesis. The Conclusion may also point in the direction of future research.

It is important that you follow the directions in the Instructions to Authors closely to ensure your **References** are presented in the correct manner. You will also need to observe the word count closely. Papers exceeding the word count will be returned to the author for adjustment before any editing takes place.

Once you have written your paper, have at least two of your supervisors, fellow students or colleagues read the paper and suggest corrections before submitting it for consideration to the Recent Advances in Animal Nutrition editors.

Thank you for taking the time to read these guidelines and we look forward to receiving your papers. David Lindsay's *"A Guide To Scientific Writing, Second Edition' (1996)* was used to develop these guidelines for authors of One-Page Papers. This book is highly recommended reading for anyone considering submitting a paper for consideration in the Recent Advances in Animal Nutrition - Australia conference.