Effective review techniques of Animal Feed Science and Technology manuscripts, as well as successful methods to respond to editorial comments of your manuscript

1. Introduction

Although it often seems that it has been the system for a very long time, submitting and reviewing manuscripts on-line has only been common for about 5 years. In contrast to the old ‘paper-in-the-post’ system that preceded e-review and e-submission, current e-systems have largely eliminated the need to annotate manuscripts and return them by post, thereby saving substantial time in the overall review process. However in our modern ‘cut-and-paste’ writing, reviewing, editing and revising world, some of the fundamental principles of these processes seem to have been at least partly lost. The Co-editors in Chief (CEIC) of Animal Feed Science and Technology (AFST) have previously presented an editorial (AFST 134:181–188; 2007) on effective ways to write scientific manuscripts for submission to AFST, and they believe that this has improved the quality of manuscripts submitted to AFST, but nevertheless it is evident that many authors should have consulted the editorial before preparing their manuscript in the first place.

The purpose of this editorial is to continue that previous discussion of manuscript preparation into the manuscript review process, for use by AFST reviewers, as well as to the manuscript revision stage by AFST authors. The CEIC hope that this editorial will result in a higher quality of reviews, a more efficient manuscript review process with fewer manuscript versions required, more manuscripts successfully navigating the difficult journey from submission to publication, as well as less work for themselves.

2. Effective and time efficient methods to review manuscripts

The primary role of a reviewer of a scientific manuscript is, perhaps self-evidently, to evaluate the scientific merit of the manuscript that they have been asked to review. While all scientists develop a review style that they are comfortable with, these individual styles should all focus on assessing the scientific merit of the manuscript.

2.1. Initial manuscript assessment

When first asked to review a manuscript, by an e-mail request with a web link to the manuscript, it is respectful to your follow scientists (i.e., the authors of the article) to respond as soon as possible (generally within 24 h) by simply going to the manuscript and taking 5–10 min to do a rapid initial scan. If it is your area of scientific expertise and you have the time...
to complete the review, then let the editorial office (EO) of AFST know that you will handle the assignment by accepting it within the e-system. However if your area of scientific expertise and/or available time precludes review in a timely fashion, then decline the assignment by clicking the appropriate buttons. Not responding to a review request is disrespectful of your fellow scientists and the scientific review process in general.

2.2. Primary review

Once you accept the review assignment, create a note in your diary about 14 days in the future to create a target date to complete and submit the review. Whether you print a paper copy of the manuscript so that you can examine it in situations where your computer is unavailable, or download a copy of the manuscript so that you can read it on your computer at any convenient time is your decision as a reviewer. However whichever approach you take, your first task is to complete a primary review, generally within a few days of assignment. The purpose of a primary review is to evaluate whether:

- the subject is within the scope of AFST (see recent issue for any recent updates),
- the manuscript's overall scientific merit justifies publication,
- the absolute amount of data presented justifies publication,
- the grammatical quality of the English is sufficiently high to allow you to fully interpret the text,
- there are fatal flaws in the experimental design or statistical analysis (if in doubt, consult the AFST editorial on acceptable statistical designs and models at AFST 129:1–11; 2006),
- there is enough new information in the manuscript to warrant publication.

If the manuscript fails on any of these scores, then your (rejection) review can be prepared on that basis and no further review of the manuscript is required, although you should feel free to provide other comments to the authors if you feel that they might assist the authors in preparing manuscripts in the future.

The decision on whether it is likely that the authors can correct the issues identified as serious problems in the primary review is subjective, as it often weights several factors. Indeed, it is uncommon that a single issue will lead to a rejection recommendation. If your decision to reject is based on a 'fatal flaw', it is best to be sure that this is indeed fatal and not allowed by AFST rule (as outlined in the AFST Guide for Authors and/or one of the editorials that are available at the AFST website). If you are still in doubt, contact the EO of AFST (anifee@elsevier.com) for clarification. In addition, before judging that a method or approach is fatal, be certain that it is in fact not you that are misunderstanding the authors logic—this most often pertains to a biological flaw. Be sure that you are hearing what the authors are saying, and not allowing your preconceptions to create a misunderstanding.

2.3. Full review

Once the decision has been made that the manuscript meets the minimum criteria assessed in the primary review, then it is time to move on to a full review. Depending on the quality of the manuscript, the length of this review and time needed to complete it will vary. However, overall, your focus should be on clarity of the presentation of the hypothesis, and the discussion of the results in the context of scientific merit.

In the AFST review system, there are two text 'boxes' for comments as well as a list from which you can select a bottom line decision. Reviewers should be sure that their comments are entered in the appropriate text 'boxes' in order to avoid confidential comments to the CEIC being inadvertently sent to the authors. The upper text 'box' (i.e., Comments to Authors) should contain the full text of the comments that you wish the authors to see. In general, this should start with a general assessment of the manuscript that outlines its overall strengths and weaknesses. It is entirely appropriate to create a focus on strengths as well as weaknesses, although many reviewers appear oddly reluctant to praise authors’ efforts. The review should continue with a listing of specific queries and comments, generally referred to by manuscript line number, which highlights issues/statements that need to be dealt with in revision by the authors. However, these comments should focus on scientific issues and there is no need to comment (except in the general comments) on format, spelling or grammar unless specific cases interfere with interpretation of the authors’ ability to make their points clearly, as all of these issues will be dealt with later in the review process by the CEIC and/or typesetters. Finally, the review should conclude with a brief statement that summarizes your views of the manuscript relative to its overall scientific merit and importance to our science and society in general (i.e., its implications). Avoid making comments that reflect your overall decision (such as to ‘accept with revisions’ or ‘reject’) in this box, as that is indicated by the overall decision that you select. As this section is written directly to the authors, it is appropriate to speak directly to them by using terms such as ‘you’ and ‘your group’ rather than ‘the authors’. However, at all times, the tone of the comments should be professional and it is inappropriate to make insulting, degrading or vindictive comments.

The lower text ‘box’ in the AFST review system (Comments to Editor) is for comments that you do not wish the authors to see. These comments can be somewhat blunter and are best used to alert the CEIC to aspects of the manuscript that, for whatever reasons, do not seem to be sensible or are certainly incorrect. For example, if you feel that there may be plagiarism, as some text seems familiar to you but you do not have the time to track it down, or if the data seems to be too perfect, perhaps reflecting that it is not real, then let the CEIC know that as well. This section can also be used to briefly explain aspects
of your comments that you feel to be extremely important or issues that you feel to be so important that they absolutely must be corrected in revision. In a positive sense, the section can also be used to suggest to the CEIC that in spite of, for example, issues with grammar or format, that the study is a highly valuable addition to the literature and it is your opinion that the CEIC should work with the authors to create a publishable manuscript. This is your opportunity as a reviewer to speak directly to the CEIC. It is often appropriate to do so.

2.4. Final comments on reviewing

It is not uncommon for reviewers to take 6–8 weeks to review an AFST manuscript. This extended time is disrespectful to authors (i.e., your fellow scientists), creates extra work for the EO of AFST and, ultimately, is not required since an effective review that focuses on the scientific merit of the manuscript should take, in general, from 30 to 90 min. Reviews that evaluate structure, format, grammar and spelling are not required in the e-review system as they increase reviewer workload and frustration, while addressing issues that will be dealt with at a later stage of the review process. Even manuscripts with poor grammar and structure need not take longer to review than those with excellent grammar and structure if the reviewer can cut through those shortcomings to focus on the scientific merit of the manuscript. Keep in mind that many AFST authors from developing countries do not have access to the tools that many of us take for granted.

3. Responding to reviewer and editor comments

The CEIC of AFST strive to return a complete review to authors as quickly as possible. Such a review typically includes the comments of two reviewers (although occasionally comments of one or three reviewers will be included) as well as the comments of the CEIC who has been assigned to the manuscript. There will also be a bottom line CEIC recommendation on the manuscript that is, generally, revision with either minor, moderate or major changes, or rejection. Whatever the bottom line recommendation, the CEIC will provide comments, of variable length, especially in the case of revision needed, that either identifies other issues and/or emphasizes specific reviewer comments, or more fully justifies a decision of rejection.

3.1. Evaluating reviewer and editor comments

Authors receive reviewer and editor comments in an e-mail from the EO of AFST. It is common that irritation and frustration is the initial author response to reading reviewer and CEIC comments, especially in the case where a revised version of the manuscript has been requested by the CEIC. If the reviewer/editor comments are extensive, this irritation may be magnified and is often followed by the sinking feeling that hours of tedious work are ahead. However, and generally after further evaluation and consideration, the realization sets in that it was not the reviewers and CEIC that were at fault, but that it was author failure to clearly justify or describe or present or discuss the study which caused the bulk of the reviewer/editor comments. It is seldom a good plan to proceed to manuscript revision while still in the ‘irritation phase’, and much better to wait a day or three until the ‘acceptance of fault phase’ fully sets in.

3.2. Determining extent of the needed changes

A critical first step in manuscript revision is to determine if new data is/are required (e.g., new assays of feeds) or if a revised statistical analysis will be needed, as these changes will take more time and delay submission of a revised version of the manuscript. If these changes are needed, it is best to get them underway as soon as possible.

3.3. Revising the manuscript

Once the new data or statistical analyses are available, or if they were not needed and the irritation phase has passed, it is time to start manuscript revision. The first step is to find the copy of the manuscript that was originally submitted and remove all previous ‘tracked changes’ so that it is a ‘clean’ copy.

If new data or statistical analyses were required, then it is often best to insert that information and make text modifications based upon those insertions. The next step is to download the reviewer and CEIC comments from the e-mail that you received from the EO of AFST to a new ‘Comment’ file in ‘Word’ and remove all of the extraneous information at the beginning of the e-mail in order to isolate the reviewer and CEIC comments. A good strategy at this point is to have both the manuscript in revision and the ‘Comment’ file open at the same time so that you can easily move back and forth from one to the other.

A good starting point in manuscript revision is to deal with the least difficult issues first, although some persons prefer to start with the most difficult issues. However you do it, respond to the issues one by one in order to create an inserted response after each CEIC or reviewer comment that clearly specifies how each issue was dealt with. Some examples of responses to queries include:

RESPONSE: The value of 32.5 was changed to 36.5.
RESPONSE: This paragraph was removed.
RESPONSE: The description of the experimental design was revised to indicate how cows were blocked to pens.
RESPONSE: The statement was correct and no change was made.
RESPONSE: The authors do not agree with this comment, as Smith et al. (J. Res in Res.; 23, 34–56; 2003) showed that some pigs are not pink.
RESPONSE: Language has been revised by a professional English language expert.

It is critically important that what you say that you did (in the ‘Comment’ file) is consistent with what you actually did in the revised manuscript. CEIC lose faith in authors when there is a disconnect.

It is not necessary to make all changes requested by the CEIC or reviewers if they were not needed or are not appropriate, in your opinion. It is, after all, your manuscript. However when CEIC and/or reviewer changes are not made, it is critical that a rebuttal comment for this lack of action be made clear in a brief statement in the ‘Comment’ file, if a brief comment will suffice. However, if a brief comment will not suffice, it is generally not a good idea to write extensive treatises on the issue in the ‘Comment’ file, as a long response strongly suggests that the rationale needs to be inserted directly into the revised manuscript in order to avoid readers having the same interpretive problem as the reviewer.

If you receive comments regarding poor language, it is generally not sufficient to ask a colleague with only a slightly better command of the language than yourself. The Elsevier homepage (www.elsevier.com/locate/languagepolishing/) has suggestions on professional language editing services to which you can send your manuscript, or you can use other sources available in your own country.

This is the point in the revision process to be certain that the revised manuscript is consistent with all AFST format and terminology guidelines. If this was not done earlier, and it should have been, consult the AFST sample manuscript (available at the AFST website) as this step will prevent the need for subsequent manuscript revisions.

3.4. Submitting the revised manuscript

Once all of the changes have been made to the manuscript, and the ‘Comment’ file completed such that all CEIC and reviewer comments are completely responded to, then a brief (maximum length 1 page) overall response to the CEIC in the form of a letter inserted at the beginning of the ‘Comment’ file should be prepared. This letter may be very brief, such as to inform the CEIC that all changes have been made and that they are outlined in the text to follow (i.e., the ‘Comment’ file), or more extensive in that it outlines why key changes requested by reviewer(s) and/or the CEIC were not made (or could not be made) for logical scientific reason(s). This letter to the CEIC should be brief and only focus on issues or requests of reviewers that were not acceded to.

Finally, put the completed ‘Comment’ file and revised manuscript aside for 2–4 days and then return to it for a final edit. It is often surprising how often comments written earlier require modification.

3.5. The CEIC and reviewers got it wrong

The CEIC would like to state unequivocally that they are not infallible and that occasionally manuscripts are misjudged based upon CEIC interpretation of the assessments of reviewers, and/or their own assessments. This usually occurs either because the authors were correct and the reviewers/CEIC were incorrect relative to a fatal flaw in the manuscript, or that the authors can indeed deal with the problems in revision. If you feel that this has happened to you, then it is entirely appropriate to contact the EO of AFST and, logically and briefly, outline why the decision to ‘reject’ was inappropriate and request the ability to prepare a full revision with an appropriate rebuttal. Your comments will be considered by the handling CEIC, who will either reiterate their original decision, agree with you and allow a revision to be prepared (AFST manuscripts are rarely fully dead – exceptions are, for example, cases of plagiarism – and they can generally be brought back from the near dead), request another reviewer for the manuscript or, occasionally, pass the manuscript and its associated paperwork to the other ruminant or non-ruminant CEIC for adjudication. In fact, few CEIC decisions to reject a manuscript are reversed, but it does happen and it your right as an author to challenge the CEIC decision.

4. Summary

The review process has changed with adoption of e-review systems thereby creating a need for some changes in reviewing protocols. A major addition to the e-review process (versus the old paper process) is the ability of reviewers to speak directly to the editor in a text ‘box’ that contains comments that will not be seen by the authors. This allows reviewers to, among other things, raise potentially contentious issues that they are uncertain of, but could be major problems with the manuscript. However the key purpose of reviewers, to assess the scientific merit of manuscripts submitted for consideration for publication, has not changed with e-review and remains the focus of effective reviews of AFST manuscripts.

The revision process by authors of AFST manuscripts has also changed, almost certainly being made less time consuming relative to typing text, but some changes of revision protocols are also required. Effective revisions of manuscripts create consistency between actual changes and what authors claim to have changed, make most of the changes recommended by the reviewers and editor, logically rebut changes not made with a brief comment to the editor and, often, insert text to the revised manuscript that will prevent readers from making the same interpretive error as the reviewer.
The CEIC of AFST hope that the comments in this editorial will be of use to authors and reviewers of AFST manuscripts and that they will result in less time consuming reviews and manuscript revisions while increasing the scientific quality of both, as well as increasing the scientific quality of the resulting papers which are published in AFST.

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