## Helpful Hints for Technical Writing=

## **Simple Things Can Affect Clarity**

An author must write clearly so the reader is always comfortable reading what has been written. Clarity assures that the reader will never have to stop, back up, and re-read anything to determine the meaning.

Articles in scientific journals are almost always free of grammatical errors. However, sentences can be grammatically correct, but be structured in a way that retards smooth and easy reading. We will consider some simple things that can create rough structure and impede easy reading.

**Modifiers too far from the words modified.** Because modifiers are closely tied in meaning to the words they modify, it is logical that they be close together in space.

Example: Control of field bindweed may be improved with glyphosate by using low spray volumes.

Improved: Control of field bindweed with glyphosate may be improved by using low spray volumes.

Rationale: The prepositional phrase "with glyphosate" modifies "control," but because of its position in the original sentence, it appears to modify "improved." A simple rearranging of the word order makes the meaning clear.

**Confusing modifiers.** Sentences must be constructed so that the word a modifier modifies is always clear. Situations may be confusing when more than one modifying phrase or clause modifies one word.

Example: The crop frequently provides cash incomes after production costs that fall below the poverty level.

Changed but not improved: Cash incomes after production costs from producing the crop may fall below the poverty level.

Improved: Producing the crop may provide cash incomes that fall below the poverty level after production costs have been deducted. Rationale: "After production costs" and "that fall below the poverty level" both modify "incomes." In the original sentence, and

in the unimproved changed version, "that fall below the poverty level" could be modifying "costs." In this situation, additional words were needed to write the sentence clearly.

**Confusing commas.** Commas have many important functions. The presence or absence of a comma can completely change the meaning of a sentence. Because commas fill so many different roles in English grammar, care must be exercised to use them clearly. Sometimes a comma can appear to have a function other than that intended.

Example: For consistent infection, temperature, free moisture, and protection from light often are critical.

Improved: Temperature, free moisture, and protection from light often are critical for consistent infection.

Rationale: The comma following the introductory prepositional phrase blends with those of the subject so that the reader has to pause to sort them out. Placing the prepositional phrase at the end of the sentence eliminates the problem.

**Confusing present participles.** The present participle is most commonly used with "to be" to form the progressive tenses (e.g. "the boys are playing football"). It can also be used as a noun or an adjective. If the intended form is not perfectly clear, a sentence may be confusing.

Example: The fish were feeding actively, and catching the bigger ones was fairly easy.

Improved: Catching the bigger fish was fairly easy, because they were feeding actively.

Rationale: The wording could suggest that the fish were "feeding and catching," even though the comma is intended to prevent such interpretation.

Words that can be more than one part of speech. Many English words can be two or three parts of speech. The context of the sentence usually makes the meaning clear. However, sometimes a second meaning could fit. Care must be taken to be sure that such ambiguity does not distract the reader.

Example: Crabgrass roots at the nodes.

This is a complete sentence with "crabgrass" as the subject and "roots" as the verb. However, adding three words to the sentence completely changes the meaning.

Example: Crabgrass roots at the nodes complicate the problem.

In this case, "roots" is the subject, and the noun "crabgrass" is used as an adjective to modify "roots." Each sentence is grammatically correct, but would have to be changed to eliminate the ambiguous beginning.

## Remember:

If the reader can read What you've written with ease, Then your style of writing The reader will please.

J. H. Dawson, Weed Scientist, Prosser, WA 99350

