

## Adding a Preposition Can Improve Readability and Avoid Ambiguity

Prepositions are small words that connect thoughts. They help maintain the smooth progression of concepts in technical writing. Nouns and pronouns serve as objects of prepositions. One object commonly goes with each preposition. However, a single preposition can have more than one object. When this happens, the number of prepositions that a sentence could have is reduced. English grammar also allows prepositions to be omitted completely. Instead of "control of barnyardgrass" it is proper to eliminate the "of", rearrange the words, and write "barnyardgrass control". Care must be taken so that reducing the number of prepositions does not cause confusion or ambiguity.



**Example of clear use of multiple objects for one preposition:** Herbicide residues were found in leaves, stems and roots. It is clear that "leaves", "stems", and "roots" are all objects of the preposition "in". Thus, there is no need to write ". . . found *in* leaves, *in* stems, and *in* roots.

**Another example:** The water managers controlled submersed weeds with acrolein or xylene. There is no need to write ". . . controlled submersed weeds *with* acrolein or *with* xylene", because both nouns are clearly the objects of "with", even though the preposition is stated only once.

**Another example:** Wild mustard is a problem in wheat, barley, oats, and flax. Again, the preposition "in" need not be repeated before each of the four objects.

**Example of ambiguity from too few prepositions:** The experiment addressed the effects of tillage on distribution and persistence of atrazine and tomato and carrot seedling survival. In this sentence, "tomato" seems to be, along with "atrazine", the object of the preposition "of". Simply repeating the preposition "on" improves the sentence.

**Improved version:** The experiment addressed the effects of tillage on distribution and persistence of atrazine and *on* tomato and carrot seedling survival. Although improved, the sentence is still confusing, because "survival" not "tomato" is the object of the second "on". Adding another "of" and rearranging the words so "survival" is next to its preposition "on" eliminates the confusion.

**Further improved version:** The experiment addressed the effect of tillage on distribution and persistence of atrazine and *on* survival *of* tomato and carrot seedlings.

**Another confusing example:** Uptake, translocation, and metabolism of metribuzin in potato and barnyardgrass response to the herbicide were determined. At first reading, "barnyardgrass" appears to be an object of the preposition "in" along with "potato". The confusion can be eliminated by restoring the eliminated preposition "of" and rearranging some words.

**Improved version:** Uptake, translocation, and metabolism of metribuzin in potato and response *of* barnyardgrass to the herbicide were determined.

In general, the more complex a sentence is, the greater is the probability that adding prepositions will improve readability or eliminate ambiguity. Because appropriate addition of prepositions usually increases exactness and seldom decreases readability, they should usually be added, especially in complex sentences, even if they do not seem to be absolutely necessary.

**Examples of desirable repetition of prepositions:** Two weeks after treating the ponds, residues of the herbicide could not be detected *in* the water, *in* the bottom soil, or *in* fish. Weeds must be controlled because they reduce the benefits crop plants derive *from* sunlight, *from* soil moisture, and *from* fertilizer elements. Objects of the experiment were *to* determine depth of emergence of seedlings, *to* measure longevity of seed viability in soil, and *to* determine the sequence of seedling emergence throughout the year.

### Remember:

To write with utmost clarity,  
Is the author's prime ambition;  
Clearness can sometimes be increased,  
By a little preposition.

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