

WRITING IN NATURAL RESOURCES

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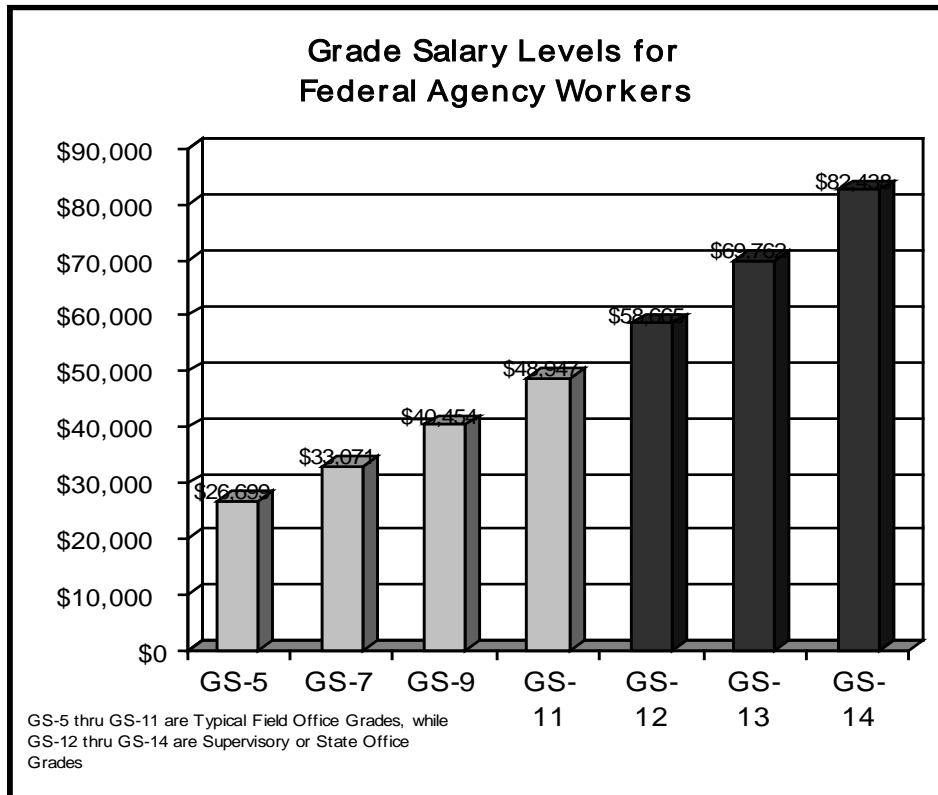
The ability to communicate is a fundamental quality that employers look for in their employees. The ability to communicate effectively is important in getting any job, large or small, accomplished in the right way. Communication takes place in many different forms. Two of the most effective forms of communication are oral communication and written communication. We see evidence of written communication in many different fields of natural resource study. Some fields of study tend to use written communication more than others. In most cases, oral communication can be just as effective as written communication; however, there are some instances where written communication is absolutely necessary. Effective written communication is not only necessary but essential to completing everyday tasks in the field of natural resources.

Natural resource study encompasses many different disciplines. While all disciplines are unique and involve different aspects of the natural world, they are also very connected. These disciplines include: range, forestry, wildlife, fisheries, recreation, geography, watershed, ecology, and environmental studies. As rhetoric associates and peer writing tutors pursuing degrees in natural resources, we will explore the writing struggles that are apparent in the majority of natural resource students' writing.

As RAs in natural resources, we sense an attitude that students majoring in natural resources find little value in the need for good writing as they enter into the work force. Students aspiring to a degree in the field of natural resources typically see themselves working outdoors, away from the office, and more specifically, away from writing. The view that field work will take precedence over office work continues to exist in the minds

of natural resource undergraduates. Many believe that when they enter the work force, the majority of their time will be spent away from the office and away from the computer. While this may be true, especially in entry level positions, our experiences reveal that even for the most sun-weathered worker of the backcountry life written communication skills are absolutely necessary in any natural resource discipline.

Several natural resource students intend on working for a federal agency. Working for the government entails filling out a lot of paper work. Writing skills are necessary for advancement in any federal agency.



Most people starting out with a college degree will be a GS-5. However, if a person has their college degree and previous experience with the federal government, then they could start a little higher. Normal career progression for entry level jobs is

based on two-grade intervals that take place with professional or administrative occupations. For example, in a professional or administrative occupation, the progression would be a GS-5/7/9. Greater competition is generally required above the GS-9 level (Bureau of Land Management, 2001).

It is true that entry level positions (GS-5) are more outdoor-oriented, but office jobs provide an increase in salary. If natural resource graduates want to make decent money, they will have to sacrifice time spent in the field for time spent in the office. More time in the office includes more responsibilities that require oral and written communication skills. The bottom line is if natural resource students want more money, they must be capable of mature and effective communication.

We interviewed Lisa Church, a GS-11 Step 5 Wildlife Biologist working for the Bureau of Land Management. She explained that when she first started working for the Bureau of Land Management as a GS-5 she worked in the field (out of the office) a lot more than she does now. She stated that 85 to 90 percent of her career is spent writing technical papers and reports. She also said that she does a lot more writing than she expected to when she initially started working for the Bureau of Land Management. She stated, "I wanted to be outside all the time but that quickly changed." Church is often placed on job hiring boards and expressed how solid written communication skills are sought after when hiring for any position. She clearly articulated the importance of good writing when she explained that bad grammar, even in emails and memos, will get put on evaluation reports. Church stated, "Good written skills are needed to be successful in this line of work and in [one's] career." Church's comments support the absolute necessity of obtaining and honing professional communication skills.

Natural resource professionals from all different fields would likewise testify to the importance of having good writing skills in the workplace. In almost every career, the ability to write is crucial to success. A report from the National Commission on Writing entitled, “Writing: A ticket to Work...Or a Ticket Out, A Survey of Business Leaders,” states the significance of competent writing skills in professional employment. Bob Kerrey, president of New School University, asserts that “People unable to express themselves clearly in writing limit their opportunities for professional, salaried employment...writing is both a marker of high wage and high skill” (National Commission).

Developing effective communication skills takes time. Therefore, greater emphasis should be placed on writing from kindergarten through college. Gaston Caperton, president of the College Board, supports the need for an increase in writing in schools: “While trying to improve math, science, and technology in our schools, we’ve neglected writing...if students want professional work, they must know how to communicate on paper clearly and concisely” (National Commission). To reach this level of writing proficiency, educational institutions preparing students for professional work should make writing a key element across the curriculum.

Are natural resource students prepared for or even aware of such necessary communication requirements? In order to gain a better understanding of natural resource students’ feelings towards writing, we created a short survey for natural resources students to answer. This survey has helped us to assess their feelings towards writing, the problems they struggle with in writing, and most importantly, how they feel about writing in their future career.

Ninety surveys were distributed to six classes: Human Dimensions of Natural Resource Management, Environmental Studies Professionalism, Natural Resource Interpretation, Wild Land Recreation Behavior, Geographic Information Systems, and Fundamentals of Recreation Resource Management.

The survey asked the following ten questions:

- What is your major?
- What year are you in school?
- What is your career goal?
- Do you enjoy writing?
- How much writing do you expect to do in your future career?
- What is your main problem with writing? (Choices given were content, grammar, structure, and other).
- How would you rate yourself as a writer?
- How important do you think writing is in Natural Resources?
- Would you like to see more or less writing assignments given in the NR classes?

While some of these questions were open-ended, the majority of the responses to the questions were based on a scale of 1 to 4 (see attached survey). The data gathered from the surveys was entered into a statistical software called SPSS and analyzed. The results revealed some surprises as to the feelings about writing in natural resources.

The survey results show that the majority of students in the College of Natural Resources consider that they are fairly decent writers. The results also show a high percentage of students believing in the importance of writing in their future careers. Despite these high percentages, natural resource professors still question many of their

students' competencies in writing. Many, if not all, professors believe that natural resource students' writing skills are not where they need to be. Professors see and understand that the ability to write well is an absolute imperative to succeeding in the real world.

We interviewed one professor to better understand the views on the importance of writing in natural resources. Dr. Steve Burr, professor in Recreation Resource Management at Utah State University, provided responses asserting the significance of writing in natural resources. He confirmed that writing will be a significant component in any of the natural resource disciplines. He explained that while some disciplines will use writing more than others, everyone will be involved in writing within their field in one way or another. In the papers he assigns in classes, he notes that grammatical errors, sentence structuring, and formatting are common problems. Burr said writing is a great way to test critical thinking skills and comprehension of the material being covered. He believes that more writing assignments would benefit natural resource students and stated that natural resource students do not have the written communication skills they will need for professional careers. Burr confirmed that writing is very important in natural resource study.

Burr also reiterated that entry level positions in natural resource fields will see less writing, but employees will still be exposed to writing and will need to have written communication skills. He made it clear that as one is promoted through an agency and gains more responsibility, she will find herself at the desk and in front of the computer more and more. He explained that writing is not only a reflection of the person, but also a reflection of the agency that one works for.

According to our survey results, most Natural Resource students recognize the importance of writing, yet indicate a desire for less writing assignments given in class. More meaningful writing assignments given in natural resource classes may be unpopular, but highly beneficial. The development of a scientific writing class for NR majors may prove to be of great value. Future research, assessing the perceived problems and benefits of such a class, should be conducted.

Natural resource writing is different from other forms of writing. One natural resource teacher states, “writing in the natural resources has certain common elements: it seeks to inform, to present and analyze relevant facts, to present and analyze different courses of action, and to persuade the reader concerning a particular recommendation” (Writing in Natural Resources, 1997). We can see that in order to be an effective professional, one must be able to write well. The ability to write well will have a profound affect on one’s success. Furthermore, natural resource writers must always assume that anything they write will become public information, particularly if they work for a government agency; therefore, it is essential that one says exactly what he means when writing.

As employees in natural resource fields, we have experienced first hand the writing that goes into getting specific tasks accomplished. Angie Cannon, co-author of this paper, states that writing for a non-profit organization, Tread Lightly, was an essential function of the job. Writing for this organization was in the form of interpretive writing, Public Service Announcements, grant proposals, newsletters, thank you letters, research articles, and guidebooks. Cannon also states that editing for contract writers was a huge part of the job.

Megan Miles, the other author of this paper, notes that writing was also an essential element in her work with a federal agency. Although she was working as a backcountry ranger as a GS-4, she still spent much of her time in the office reporting on her work in the field. The Bureau of Land Management expected quality writing in her emails and memos about road and field conditions. In addition, she was often asked to do interpretive writing on brochures and handouts and editing for newspaper articles. Writing in the natural resource field can be seen in many different forms and can be very dynamic. From these experiences, we can attest to the importance of writing in the field of natural resources. While these two agencies may be structured differently and require different skills and abilities, effective written communication is critical to success.

Depending on their profession, people in natural resources write proposals, technical reports, data summaries, research findings, progress reports, agendas, journal articles, educational messages, memos and e-mails to co-workers and managers, and the list goes on. Time spent in the field is inevitably followed by more than twice as much time spent in the office, organizing and communicating field data findings. To effectively communicate findings, proposals, and various ideas, natural resource writing should be exceedingly clear and concise. Unnecessary and extravagant words should be avoided. Straightforward, easily understandable word usage and overall structure is desired. Content must present relevant and accurate information. Critical thinking should be manifest throughout the writing. Correct usage of citations is critical.

As rhetoric associates, we have noticed common problems in natural resource papers. One such problem is lack of clarity. Students tend to use wordy and vague phrases, taking ten lines to present a simple fact or finding. Concrete and concise words

can easily replace such unclear phrases. Our job is to help them recognize clear versus unclear writing. Most students are surprised when we point out the large amount of unnecessary words in their papers. First, we bring their attention to the problem – awareness is the first step to progress. Second, we show them a better way by providing examples and explanations. Third, we hope they get the idea. Grammar and spelling is of course always a common problem. Content is critical. Often, students focus more on trivialities rather than the meat of the subject. They have a difficult time identifying the main points of a scientific process or subject. Discussion between the tutor and writer is most beneficial in correcting this problem. Having the reader explain the subject matter to the tutor leads to better understanding of what the key elements are. As peer writing tutors, we can help writers understand the writing processes better and improve upon their writing.

In the end, it is absolutely critical that natural resources students learn how to communicate effectively through writing. Natural resource writers need to be encouraged to improve their writing so they can be competitive in the work force. Learning to write effectively now will be beneficial to all natural resources students as writing will be an essential function of any job. Rhetoric associates and peer writing tutors can play a key role in helping natural resource writers learn to communicate more effectively.

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Presentation Proposal

“Writing in Natural Resources”

Angie Cannon and Megan Miles

Utah State University Rhetoric Associates

Effective written communication is essential to completing everyday tasks in natural resources. However, natural resource students take writing fairly lightly. There is a common attitude among natural resource students that more time will be spent working in the great outdoors than working in the office. We will show survey results of natural resource students' feelings towards writing. We will also illustrate the importance of writing in the natural resource field. We will show how peer writing tutors can help natural resource students become better writers. (20 minute presentation)