Overview

The purpose of this general review of the profession of interpretation is to educate and enlighten graduates of the South Carolina Master Naturalist Program in order to better prepare them for becoming practitioners. One of the stated goals of the Master Naturalist Program is “…to train people so that they can volunteer with nature-related projects and programs, such as serving as docents at local nature centers and parks or assisting with conservation or biological monitoring projects.” The Master Naturalist Program arose from the need for a corps of volunteers to provide education, outreach and services that promote proper management of local natural resources.

Successful completion of the Master Naturalist Program should give graduates a significant level of mastery of the subjects covered in the training program. In order to share that information with others in educational or recreational settings, however, some knowledge of the profession of interpretation can be most helpful. Being able to name every plant and animal along a forest trail is a valuable and commendable skill, to be sure, but knowing how to most effectively relate that scientific information to a group of children or adults is a skill that can be acquired.

The profession of interpretation has expanded dramatically in the past thirty years. The National Association for Interpretation estimates that there are now 20,000 professional, paid, full-time interpreters in the United States. Seasonal hires and volunteers number 500,000 people who work as naturalists and tour guides in nature centers, parks, and historic sites and as museum & zoo docents, to name a few. There are now entire organizations dedicated to separate fields within the profession; including interpretive writing, exhibit design and site planning. In addition to the interpretation of natural resources, large numbers of people now work in the areas of cultural and historical interpretation. For the purposes of this overview and in order to better serve the needs of graduates of the South Carolina Master Naturalist Program, the focus herein will be exclusively upon the skills and knowledge helpful in interpreting aspects of the natural world; including flora, fauna, and the biological and geological concepts presented in the Master Naturalist Program. In addition to providing background information about the profession of interpretation and how it relates to you as a Master Naturalist, this section of the training manual will include tips and resource material you can immediately incorporate into your own natural history programs and presentations. In addition, a limited list of reference books is included which would be invaluable reading for anyone wishing to expand their knowledge of the field of interpretation.
Objectives

- Describe how interpretation differs from formal education.
- Identify three goals of interpretation.
- Give examples of the three different questioning strategies.
- Describe the different roles of an interpreter.
- Explain two ways in which an interpreter can dissipate fear of speaking.
- Summarize Maslow’s Hierarchy and how it relates to interpreters.
- Describe the concept of ‘wait time’ as part of questioning strategies.
- Give an example of a teachable moment.

What Interpretation Is and Is Not

You might ask yourself, “What is the difference between a ‘nature guide’ and an interpreter?” This is not an easy question on the face of it as the founders of the profession struggled with a ‘definition’ in the formative days of the discipline. There are currently more than thirty different job titles for people who interpret, including but not limited to: ranger, guide, naturalist, recreationist and outdoor education specialist.

The dictionary defines (to) interpret as follows: 1. To set forth the meaning of; explain; explicate; elucidate. 2. To translate. 3. To explain something; give an explanation (Webster’s New College Dictionary, 1996).

Freeman Tilden, who, in the latter half of the twentieth century taught the art of interpretation for twenty years, developed the following definition for interpretation:

[Interpretation] is an educational activity which aims to reveal meanings and relationships through the use of original objects, by firsthand experience, and by illustrative media, rather than simply to communicate factual information” (Tilden, 1957).

Certainly naturalists and nature guides ‘inform’ and ‘explain’ natural phenomena, geologic features, chemical processes, biological relationships and any manner of scientific observations. Why then the differentiation? Not unlike the classroom teacher, as naturalists, we have certain facts and information we would like our visitors to learn. Information is the knowledge gained from study, experience or instruction. While good interpretation uses information, interpretation is more than instruction in facts. It passes on the meaning of something and develops a deeper understanding (Knudson, Cable and Beck, 1995). Interpretation uses information as raw material, then works it and presents it in ways that entice, interest, and make clear what the information means to people. It answers the question, “So what?” with regard to the factual information we’ve chosen to present (Ham, 1992). Interpretation is an educational activity that aims to reveal meanings about our cultural and natural resources.
A Brief History of Interpretation in the United States

Enos Mills (1870-1922)

Enos Mills grew up on a farm in Kansas and at the age of 14 went to Colorado and built a log cabin at the base of a mountain. In his lifetime he led more than 250 parties up the 14,255-foot Long’s Peak. Mills was a naturalist, mountain guide, author and lecturer. He understood how important interpretation was to advance the cause of conservation. On a visit to California he met the famous Scottish-born American naturalist and conservationist John Muir and developed a lifelong friendship. Muir, founder of the Sierra Club and often referred to as “the father of the national parks,” helped Mills broaden his commitment as a crusader for parks and wilderness. Mills was best known as a patient observer of nature and a story was told about him that he took seven years to gain the trust of one big horn sheep. He also ran a Trail School in the Rocky Mountains and was called “the father of nature guiding” before his untimely death at the age of 52. He believed his mission as a guide was more than directing people safely through the wilderness. ‘Nature guiding’ as he saw it was more inspirational than informational:

A nature guide (interpreter) is a naturalist who can guide others to the secrets of nature. It is not necessary for a guide to be a walking encyclopedia. He arouses interest by dealing in big principles---not with detached and colorless information (Mills, 1917).

Freeman Tilden (1883-1980)

The first author and practitioner to define interpretation formally was Freeman Tilden. In his foundational book, Interpreting Our Heritage (1957), he wrote:

All interpretation includes information but the gift (of the interpreter) is in providing revelation.

and...

Information, as such, is not interpretation. Interpretation is revelation based upon information. But they are entirely different things. However, all interpretation includes information.

Interpreting Our Heritage was the first book written solely to define the profession of interpretation. It does not describe how to lead a tour, nor does it list the steps in preparing a talk. Tilden’s book does answer the question: why do we interpret? And thus, is highly recommended reading for any naturalist wanting to incorporate the six principles of interpretation that Tilden felt captured the essence of his profession.

Tilden’s Original Six Principles of Interpretation

1. Any interpretation that does not somehow relate what is being displayed or described to something within the personality or experience of the visitor will be sterile.
II. Information, as such, is not interpretation. Interpretation is revelation based upon information. But they are entirely different things. However, all interpretation includes information.

III. Interpretation is an art, which combines many arts, whether the materials presented are scientific, historical or architectural. Any art is in some degree teachable.

IV. The chief aim of interpretation is not instruction, but provocation.

V. Interpretation should aim to present a whole rather than a part, and must address itself to the whole man rather than any phase.

VI. Interpretation addressed to children (say, up to the age of twelve) should not be a dilution of the presentation to adults, but should follow a fundamentally different approach. To be at its best it will require a separate program.

It should be pointed out that Freeman Tilden was not a scientist, a naturalist, or an historian. Nor was he well grounded in the biological or physical sciences. He was a newspaper reporter, a playwright and a non-fiction writer. At the age of 58 he was hired by the National Park Service to tour the national parks and analyze how and to what degree interpretation was being used. He traveled for years, observing ranger walks, talks and other ways park professionals communicated with the public and then wrote about his observations. He would then spend the next 20 years of his life teaching the art and science of interpretation. Tilden served as a consultant to four directors of the National Park Service.

Modern Influences

Given the limitations of this short overview of the history of interpretation, it is impossible to provide an in-depth listing of all the professionals in the field and their many contributions to the development and growth of the profession. However, because the profession of interpretation continues to evolve it is important to provide master naturalists with resource materials developed in more recent times, since the important groundwork contributed by Enos Mills and Freeman Tilden. This short list is by no means an exhaustive list of the influential and major contributors to the field of interpretation in the past forty years. Most academic courses in interpretive methods would include the works of a limited number of writers, most of whom have also been frontline interpreters, including the following authors:

Beck, Larry --- Dept. of Outdoor Resource Management, San Diego State University
Cable, Ted T. --- Dept. of Park Management, Kansas State University
Grater, Russell K. (deceased) --- 33 years as interpreter at National Parks & Monuments
Ham, Sam H. --- College of Natural Resources, University of Idaho
Knudson, Douglas M. --- Dept. of Forestry and Natural Resources, Purdue University
Lewis, William J. (deceased) --- 25 years career-seasonal employee of the NPS
Sharpe, Grant S. (deceased) --- formerly Outdoor Recreation, College of Forest Resources, University of Washington
Ward, Carolyn W. --- Dept. of Environmental & Natural Resource Sciences, Humboldt State University, California
Wilkinson, Alan E. --- Calif. State Parks and Humboldt State Univ., California (retired)

Books by these authors that are used to teach interpretive methods at the college level are listed at the end of this chapter.

State of the Profession Today

When thinking of agencies or groups that provide interpretive services, the National Park Service (NPS) would often come to mind first for most people. Indeed, since its establishment in 1916 the NPS has paid interpreters. With more than 2,000 paid interpreters and 200,000 docents and volunteers, the NPS is the largest federal agency providing personal interpretive services for the public (Ward and Wilkinson, 2006). The NPS’s current philosophy on interpretation is that “people will care for what they first care about.”

*Through interpretation, understanding; through understanding, appreciation; through appreciation, protection.*

--- National Park Service Administration Manual (1953).

The NPS is not only the largest, but also one of the leaders in the field working to develop standards, competencies, and benchmarks of performance and quality. Their Interpretation Development Program ([www.nps.gov/idp_interp](http://www.nps.gov/idp_interp)) provides curriculum, standards, certifications, trainings, and accountability measures for interpreters.

For the thousands of nature guides, naturalists and interpreters who are not affiliated with, or employed by, the National Park Service, a professional membership organization exists which is called the National Association for Interpretation (NAI). The NAI was formed in 1988 by the merger of two existing organizations---the Association of Interpretive Naturalists (established in 1954) and the Western Interpreters’ Association (established in 1962). NAI provides training and networking opportunities for interpreters of natural and cultural history in non-formal settings (parks, zoos, nature centers, museums, botanical gardens, aquaria and historic sites). In 2008 the association included more than 5,000 members in 30 countries. The NAI sponsors a certification program designed to further the work of the profession, with nearly 18,000 individuals having obtained the CIG certification by 2012. Among the professional certifications available through NAI, the Certified Interpretive Guide training offers an opportunity for guides to receive training in interpretive techniques and obtain an internationally recognized certification. The CIG training program was created for those who interpret cultural or natural history but do not have academic credentials or field experience. This program was designed to increase basic knowledge and skills in interpretation for seasonal employees, volunteers, docents and others who lead tours or conduct interpretive
programs. It should be noted that individuals do not have to be members of the NAI in order to obtain the CIG certification. The training is offered several times a year at different locations throughout the United States. To learn more about the NAI Certified Interpretive Guide training or the benefits of becoming a member of the NAI visit www/interpnet.com.

The Role of the Interpreter

The chief aim of Interpretation is not instruction, but provocation (Tilden, 1957).

The NAI defines interpretation as “A communication process that forges emotional and intellectual connections between the interests of the audience and the meanings inherent in the resource.” In the late twentieth century there have been a select few who have created textbooks and training materials that are considered major aids to natural resource interpreters. Sam H. Ham, an interpreter since 1970 and currently a professor in the College of Natural Resources at the University of Idaho published a book in 1992 that is both a fantastic resource for the veteran interpreter, but also a goldmine of information for any beginning interpreter. Environmental Interpretation: A Practical Guide for People with Big Ideas and Small Budgets was written for beginners and experts alike. Ham spends a great deal of time in his book examining the role of the interpreter and offers this observation about the relationship between an interpreter and the audience:

Perhaps the best indicator of an interpreter’s success is not whether visitors can remember the facts the interpreter presents, but whether the interpreter has orchestrated a memorable experience that, in turn, can lead [people] to make their own conceptual associations (Ham, 1992).

Doug Knapp, who has conducted extensive research in interpretation and in 2007 compiled an anthology of applied research for the National Association for Interpretation, explains the role of the interpreter:

The interpreter, at times, is a facilitator, rather than orator. The interpreter and visitor (or learner, in the classroom) engage in an active dialogue. Visitors (learners) should have the opportunity to give input into the program or be able to ask questions about one or more of the topics presented in the program.” He goes on to say, “Interpreters everywhere (should) see themselves as provokers of profound personal meaning, rather than bearers of entertaining facts. When visitors make meanings, they make memories. And memories are a worthy outcome of any interpretive encounter (Knapp, 2007).

Both Ham and Knapp, in their observations, seem to be suggesting that the most effective interpreters craft their interpretation to elicit an emotional response from their audience; astonishment, wonder, inspiration, contemplation and sometimes, action. The important distinction to keep in mind is that the interpreter does not try to impose his own feelings about the subject matter onto the visitor, but rather, allows the visitor to make their own meanings.
Two other important authors in the field of interpretation in the late twentieth century, Larry Beck and Ted Cable, identified another important aspect of the interpreter’s role. In their view, the best interpreters convey a fuller appreciation and understanding of a place, historical figure or event. Both men worked as “frontline” interpreters before pursuing careers in teaching interpretive methods (and related subjects) at major universities. Together they have written several outstanding books on the subject of interpretation. In their most recent book, *The Gifts of Interpretation: 15 Guiding Principles for Interpreting Nature & Culture*. They add the role of ‘gift giver’ to the definition of an interpreter:

*Interpreters are “gift givers”; they give memories. Interpretation is a process of profound gift-giving (Beck and Cable, 2011).*

And later in the same book:

*Among the roles of an interpreter is to prepare visitors to feel “wonder”; to be receptive to the ‘unlimitness’ of nature.*

As an aspiring master naturalist, you are more than likely a lifelong learner; someone who has had a lifelong quest to learn about and experience the natural world. Or perhaps you are newly retired and for the first time in your life have free time to dedicate to finding answers to the many questions you have about aspects of animal or plant life, geology, hydrology or the many other fascinating components of natural history.

This ‘gift’ of enthusiasm and the desire to share your knowledge with others will stand you in good stead with the young people in your life, as well. In addition to sharing your naturalist skills as a volunteer in a national, state or county park, zoo, public garden, museum or other venue, you may be looking forward to being better prepared to introduce children and grandchildren to the natural world. After all, some of us come to the realization of the fantastic elements of the natural world “naturally.” Almost as if we possess an innate affinity to commune with nature and strive earnestly to take our place in “the natural world.” Other people are fortunate to have in their lives or in their community individuals who are capable of introducing them to the “wonders” of nature with great insight and enthusiasm. Many an aspiring naturalist, if asked, could name a favorite uncle or aunt, Scout leader, teacher, or parent who first piqued their interest in, and stoked their curiosity about some aspect of the natural world. In a collection of essays on interpreting nature and culture, authors Cable and Beck note:

*Interpreters are uniquely placed to enrich lives [by interpreting] those mundane miracles that they come in contact with every day. People are surrounded by beauty. With the help of interpreters they just need to stop and take in the mundane miracles---things we all take for granted. By looking at an insect, flower, or bird, even a “junk bird” more closely they become amazing things. Interpreters turn hearts toward beauty (Beck and Cable, 2010).*
No less than Ralph Waldo Emerson stated, “(it is)…an inevitable mark of wisdom to see the miraculous in the common.” What a ‘gift’ indeed, to be able to pass along to our children and grandchildren, let alone the many visitors we interact with in our role as interpreter.

The Goals of Interpretation

It is generally agreed upon among professionals in the field of interpretation that interpretation seeks to achieve three (3) objectives (Sharpe, 1976):

1. The primary objective of interpretation is to assist the visitor in developing a keener awareness, appreciation and understanding of the natural resource or site, to help the visitor “connect” to the resource.
2. Interpretation can be used to accomplish management goals for a natural resource or site by encouraging thoughtful use of the resource or site on the part of the visitor and second, interpretation can be used to minimize negative human impact on the resource. Interpretation can affect the behavior and attitudes of the visiting public concerning the wise use of natural resources, the preservation of cultural and natural heritage and respect and concern for the natural and cultural environment. One of the managerial goals of interpretation can be to influence negative human impacts such as graffiti, littering, trail damage and destruction to vegetation, trails or artifacts.
3. Interpretation can promote public understanding of an agency’s goals, needs and objectives for a natural resource or site. It can be used to increase public understanding and support for an agency’s role in the community, state or region. A quality program of interpretation can attract financial, volunteer, political and/or administrative support.

Interpretation for the 21st Century

In 1998, interpreters, educators and scholars Larry Beck and Ted Cable took a closer look at Freeman Tilden’s “Six Principles of Interpretation” which were first published in 1957 and outlined earlier in this chapter. The two educators decided that Tilden’s principles did indeed stand the test of time, but that with the rapid growth and professional development within the field of interpretation in the last half of the twentieth century, additional ‘principles’ would be useful, and perhaps even necessary. Beck and Cable identified the following nine (9) additional ‘guiding principles’ for interpreting nature and culture:

- Every place has a history. Interpreters can bring the past alive to make the present more enjoyable and the future more meaningful.

- High technology can reveal the world in exciting new ways. However, incorporating this technology into the interpretive program must be done with foresight and care.
• Interpreters must concern themselves with the quantity and quality (selection and accuracy) of information presented. Focused, well-researched interpretation will be more powerful than a longer discourse.

• Before applying the arts in interpretation, the interpreter must be familiar with basic communication techniques. Quality interpretation depends on the interpreter’s knowledge and skills, which should be developed continually.

• Interpretive writing should address what readers would like to know, with the authority of wisdom and the humility and care that comes with it.

• The overall interpretive program must be capable of attracting support—financial, volunteer, political, administrative—whatever support is needed for the program to flourish.

• Interpretation should instill in people the ability, and the desire, to sense the beauty in their surroundings—to provide spiritual uplift and to encourage resource preservation.

• Interpreters can promote optimal experiences through intentional and thoughtful program and facility design.

• Passion is the essential ingredient for powerful and effective interpretation—passion for the resource and for those people who come to be inspired by the same.

Managing a Guided Nature Walk or Tour: Attributes of a Successful Interpreter

A nature guide (interpreter) is a naturalist who can guide others to the secrets of nature. It is not necessary for a guide to be a walking encyclopedia. He arouses interest by dealing in big principles—not with detached and colorless information (Enos Mills, 1917).

Developing the skills of an accomplished interpreter of natural resources has two major challenges. There is the challenge of ‘knowing the material,’ incorporating well-founded ‘guiding principles’ and acquiring the interpretive methods to share your wisdom enthusiastically. There also exists the equally important aspect of knowing how to manage a group of visitors of different ages in surroundings unfamiliar to them. The following ‘tips’ have been gleaned from a number of professional resource materials.

Overcoming fear as a presenter. Fear of public speaking is the number-one fear in humans, according to WebMD. There is no substitute for allaying your fears of speaking to a group like that of being thoroughly prepared for your presentation. Make sure you ‘know your science’ and know your site. It is also helpful to keep in mind one of the major tenets of interpretation is to think of yourself as a ‘co-learner,’ not in the role of an
all-knowing ‘sage upon the stage.’ Being an interpreter is a lifelong quest to add to your knowledge base and you should be open at all times to learning something new from your visitors and with your visitors. If you do not know the answer to a visitor’s question, it is all right to tell them so, but take the opportunity to ask others in the group if they know the answer. This will validate those individuals in the group with specialized knowledge and has the added benefit of encouraging them to contribute. If no one in the group knows the answer to the visitor’s question, then reassure them that you will make a note of the question and find an answer or, if it is appropriate at that point in your presentation, help the visitor use a field guide to find the answer. Part of the interpreter’s role is to know how to use field guides and to encourage visitors to use these valuable resources to find answers to their questions. There is no harm in admitting to visitors that you do not have all the answers, but there can be negative results from “faking” an answer or providing misinformation. Acknowledging to visitors that you do not purport to know ‘everything’ can have the affect of visitors perceiving you as more “approachable” and receptive to their questions. Remembering that “provocation” is a major goal of interpretation, to provoke visitors to deeper thought with resultant questions about the subject matter is a significant accomplishment.

*How many of us hesitate to take children outdoors, for fear they will ask a question we don’t know the answer to? It is better to say “no” if you don’t know, but it is best to focus on how to find out, so children learn more than just the answer.* David Stokes, *Reaching for Connections*, (1986).

*Preparation: know your material.* Have the objectives of your presentation firmly in mind. What is the main theme of your presentation or guided nature walk? What is the one thing you wish your visitors to take away from their visit? Have you targeted your theme and the information you’re sharing to be appropriate for the age group? Research your topic thoroughly. Research helps you ensure accuracy, establish credibility with the visitors and achieve the objectives you’ve identified for your nature walk or presentation. The rewards of any interpretive activity will be commensurate with the amount of effort that went into planning and preparation (Beck & Cable, 2011).

*First Impressions Count.* A famous business entrepreneur once said, “You only get one chance to make a first impression.” Always arrive at the meeting place for your guided tour with ample time before the visitors arrive. This serves the practical purpose of assuring the arriving visitors that they are in the ‘right place at the right time’ for the formal program. Equally as important is that your early arrival to greet the visitors signals that you are enthusiastic and interested in being their interpreter. Arriving early at the meeting point will also give you the opportunity to talk informally with the visitors as they gather and identify their expectations, concerns and special interests. This can be one of the ‘keys’ to helping allay your fears of leading the group. Just as professional public speakers use as one of their ‘tricks of the trade’ finding ‘one friendly face’ in the front row to speak to, if you have conversed with the visitors prior to a program and perhaps learned one or two of their names, this simple exercise can help boost your confidence about leading the group.
Be a Good Host. Perhaps a succinct way to describe the role of an interpreter as relates to making visitors feel welcome and appreciated can best be summed up in the phrase, “Be a good host.” Keep in mind at all times that it is your job, as interpreter, to do what is necessary to help visitors feel comfortable, safe and welcome at your site. Part of being a good host is introducing yourself, formally welcoming the audience, providing information about the theme and subthemes of your presentation or guided walk. In their book, Regnier Gross & Zimmerman (1992) outline what being a good host entails:

Arrive at least 15 minutes early. Meeting people before your guided nature walk or presentation achieves two purposes: 1) you can obtain valuable insights into visitors’ interests and backgrounds which enables you to “tailor” your program and, 2) mingling with visitors prior to the program will go a long way towards dissipating your anxiety.

According to professional interpreter, educator and author Sam Ham (1992),

Hosts are the most successful tour guides. They don’t see themselves as cops (even though they’re very concerned about protecting the site), as machines (even though their tours are well-planned and rehearsed), nor as know-it-alls (even though they’re very knowledgeable about their topics). Hosts project the kind of personality that most people project when they invite new friends into their home. Hosts consciously try to establish a friendly atmosphere that’s conducive to two-way communication and that makes the visitors glad to be there.

It is important to be aware of the fact that frontline interpreters serve as the key image of the site, agency or natural resource. Knudson, Cable and Beck (1995) explain this role of the interpreter in this passage: “As far as the public is concerned, the interpreter may be the only professional person they encounter during their visit. As the host and the ambassador of the site the interpreter needs to project enthusiasm, pride and courtesy.”

Not having an interpreter in a park is like inviting a guest to your house, opening the door, and then disappearing.


Maslow’s Hierarchy: Visitors need to feel safe & comfortable in order to be attentive. In 1954 psychologist Abraham Maslow developed a “hierarchy of need” to help educators understand human behavior. Maslow’s theory is widely accepted and utilized in educational pedagogy today. Succinctly put, Maslow’s theory states that a person’s most basic requirements must be met before he is ready to learn. Maslow identified three categories of human “basic needs;” psychological, love & belonging and safety & security. Until these three basic needs are met, it was Maslow’s premise that humans cannot focus on their “growth needs” which he identified as: knowledge and understanding, aesthetics and self-actualization. For the interpreter who is passionate about sharing his enthusiasm for the natural world and whose responsibility it is to keep visitors safe on a guided nature walk, it is helpful to have a basic understanding of this educational theory. For example, a visitor may not be receptive to educational opportunities if she is frightened or lost. A visitor who has a fear of snakes may not be
able to focus on information you are sharing about the upcoming guided walk if you are handling a snake while doing so. The principles of Maslow’s Hierarchy are why, at the beginning of a guided nature walk, the experienced interpreter points out the restrooms and provides the visitors with an overview of what the experience will entail; including such details as length of experience, estimated time of return, a preview of what will and will not be seen, and what visitors should and should not touch. Basic instructions to allay any fears and inform visitors as to how they can remain safe will enable them to better concentrate on the knowledge/wisdom you want to share. In a nutshell, as it relates to the role of interpreters, Maslow’s Hierarchy simply means, “A visitor who feels safe and well-informed is a more receptive visitor.”

**Enthusiasm.** As the old adage goes, “Enthusiasm is contagious.” Interpreters who seem energetic and truly excited about what they share create an atmosphere of inspiration. Interpretive trainers Beck and Cable assert that “…visitors are more likely to listen to someone who brims with enthusiasm, who is passionate about a place, and who is fired up about his work” (2011). Enthusiasm reveals the interest of the interpreter and sparks the interest of the audience. William Everhart, a former site manager for the National Park Service in the 1950’s, was once asked what he thought it took to become an interpreter and he replied, “There [are] few essentials. You have to be a genuine enthusiast, almost impelled to share your knowledge with others.”

Just as many other volunteer interpreters have gotten their start, William Lewis, author of the book *Interpreting for Park Visitors*, was a career-seasonal employee of the National Park Service during the last half of the 20th century. During the school year he taught Communication at the University of Vermont. As one might expect, he incorporated his academic knowledge of effective communication when working with other interpreters to help them relate to visitors more effectively. He reassured beginning interpreters, “We become interpreters because we love our subject matter, we have a burning desire to share what we know with the public, and we have an audience that’s very much interested in what we have to say.”

**Questioning Strategies.** In their Certified Interpretive Guide course, the National Association for Interpretation identifies four (4) types of questions used before, during and after an interpretive program or talk. If you have experience as a classroom teacher these concepts will be familiar to you.

- **Open-ended Questions:** This type of question has no wrong answers. An interpreter often uses these questions at the beginning of a program to begin to engage the visitors and to allow everyone, young and old, novice or experienced in the subject matter, to participate and feel included.

  “What do you see as you look at the hillside?”

- **Data-recall Questions:** This type of question is used to focus attention on specific information related to the main points of the interpretive presentation. Though you’re asking for specific information, try not to be judgmental in your responses.
There ‘are’ correct answers for these types of questions; however, there is room for interpretation on the part of your listeners. Your goal should be to encourage creative thinking.

“What are some of things that are helping the log decay?”

- Data-processing Questions: In using this type of question the interpreter is encouraging visitors to analyze the information he has shared. Again, there ‘are’ correct answers but be prepared to receive some unexpected, thought-provoking responses.

“How does the wood strength or texture of these two trees compare?”

- Application Questions: Using these questions the interpreter is encouraging visitors to summarize or predict outcomes based upon information shared in the interpretive program. Responses you receive will be an indicator of whether or not your objectives for the talk or presentation have been achieved.

“How would this area be different if the forest had not burned?”

Lisa Brochu and Tim Merriman, both trainers for the Certified Interpretive Guide certification through the NAI, advise that, “Developing a questioning strategy can help visitors process the information introduced. [Visitors] will be actively involved in the program through your questioning techniques and will then be more likely to retain the message.” Both trainers also caution that, “…questions can be overused and actually become a hindrance to the progression of a nature walk or interpretive presentation.” With time and experience beginning interpreters learn which questions work best with which visitors and how best to judiciously use questioning strategies.

**Answering Strategies.** In addition to teaching questioning strategies as an effective way to engage visitors, the NAI Certified Interpretive Guide course touches on the importance of answering techniques for interpreters, as well. The way you respond to questions sets the tone for your interpretive program or talk. If you are welcoming and receptive to visitor comments you will provoke more thought and hopefully, create a memorable experience for the visitors.

Remember the old adage, “Silence is golden?” Many beginning interpreters (and classroom teachers) feel one of the most difficult skills to develop is allowing adequate ‘wait time’ for an answer to a question you have asked. After all, at that point in the program you probably have everyone’s attention and ‘all eyes are on you’ anticipating the ‘correct’ answer. **Do not rush to provide a response.** Give the group adequate time to think through your question. Many educators recommend a ‘wait time’ of 15 seconds. Others suggest between 5 and 15 seconds, depending on the type of question and level of complexity. Be assured that the 15 seconds ‘wait time’ will seem a lot longer to you than it will to the group! Try not to answer your own questions. Keep in mind that once someone has provided the correct answer, or you have revealed it, all thinking stops. The
group will immediately ‘turn off’ their individual thought processes and cease trying to identify the answer you are looking for. Conduct your own experiment the next time you are a visitor in an outdoor setting, participating in a guided nature walk or interpretive talk. Monitor your own thought process and note your personal mental reaction when someone in the group answers the interpreter’s question with the ‘correct’ answer. It is human nature to experience an internal sigh of relief and a thought process similar to, “Whew---someone answered his (the interpreter’s) question so I can turn my brain off, now.” Education research studies have identified this reaction to informal group questioning regardless of age, whether involving elementary age children or adults of retirement age.


• Always rephrase and repeat a question received from a member of the group. This strategy has two benefits; it helps ensure that you understand the question and that every one in the group heard the question correctly. This is especially important when working with older visitors who may have hearing difficulties.

• Sometimes it is prudent to not directly answer a question. As interpreters, with a strong desire to share our knowledge, this can seem counter intuitive. The unanswered question can create suspense and further pique the curiosity of the group. This technique can also be very effectively used to lead the visitors to discover the answer for themselves, with limited prompting from the interpreter. Often, discovering the answer for themselves will result in a more effective learning experience for visitors, regardless of age.

• Accept answers to questions gracefully, even if the answers are wrong. Never make someone feel foolish for participating in the program. Passive acceptance can be indicated by simply nodding your head or saying okay without judgment or evaluation of the answer offered. Gingerly accepting a wrong answer is a skill an interpreter develops over time, depending on his personal style. Using phrases like, “I never thought about it that way,” or “That’s an interesting perspective,” can be helpful for the beginning interpreter. It is equally important that the interpreter skillfully uses follow-up questions or rephrases the original question to arrive at the correct answer before moving on to other subject matter.

• Direct questions to, and encourage responses from, different visitors or members of the group. Do not allow one or a few individuals to dominate the conversation and interaction.

• Do not put any individual “on the spot” by directly singling them out, unless you are sure they will answer the question correctly.
Observation Skills

The moment one gives close attention to anything, even a blade of grass, it becomes a mysterious, awesome, indescribably magnificent world in itself.

--- Henry Miller, playwright (1891-1980).

Perhaps one of the most important skills an interpreter can help visitors develop is that of “seeing” what there is to see. Some people are born lucky enough to have a natural curiosity about nature and the out-of-doors. Others, like Rachel Carson’s grandnephew Roger, are fortunate to have a caring adult in their lives who might be an “untrained naturalist,” but nonetheless has a passion for the many wonders of the natural world and shares their enthusiasm for watching, looking and closely examining.

If a child is to keep alive his inborn sense of wonder...he needs the companionship of at least one adult who can share it, rediscovering with him the joy, excitement and mystery of the world we live in (Carson, 1956).

Steve Van Matre, founder of The Institute for Earth Education and internationally popular ‘nature educator,’ coined the phrase “enriched perception” to describe the role interpreters play in ‘helping people take in more’ in outdoor settings.

Many people visit the natural world today, but return empty-handed. Their perceptions are so clouded, or they are so full of themselves, that they miss much of what surrounds them. As if emerging from a cocoon, they come to the natural world wrapped in layers of gauze. In earth education, we have to help them peel away those layers, to reach out to the world with a fresh perspective, and like a young child, to look long and lovingly upon the earth, to explore again the smallest interstices of life. To rediscover the earth and renew our relationship with it we need to rebuild and refine some of the natural skills and senses that we have let atrophy inside our artificial cocoon (Van Matre, 1990).

An old axiom rings true, “We only find what we’re looking for.” Interpreters have the important role of helping visitors “see” what there is to see.

The Teachable Moment. Take advantage of teachable moments when something out of the ordinary occurs during your presentation or guided nature walk, even if it is not at all related to the theme. Most of us have had the experience of participating in an outdoor program when something totally unexpected happens; a hawk drops out of the sky and pounces on its prey right in front of your group or you approach a stream and see a box turtle laying her eggs on the stream bank. Whatever you do, don’t just ignore the occurrence because the hawk or the turtle don’t fit into your prepared remarks. At the very least, take the time to let your visitors savor having just witnessed an out of the ordinary experience. Be flexible and challenge yourself to make a connection between the event and your prepared commentary. Keep in mind that for those visitors who rarely get outdoors or for whom “nature encounters” are infrequent, the unexpected event on the trail may be the highlight and an unforgettable moment during their visit to the site. With time and experience interpreters learn to weave these unexpected occurrences into their
presentations and talks. They also present a wonderful opportunity for the interpreter to urge individuals in the group to “be on the lookout” for other unusual things they may see, which has the affect of helping visitors develop their observation skills.

*Incorporate Your Personal Style and Talents.* Style is a very personal thing, and it is molded more by your personality and what feels comfortable to you, than it is by a list of communication “rules” or standard techniques. Some interpreters are very animated and energetic---excitedly pointing out points of interest along a trail with a seemingly inexhaustible sense of wonder. Other interpreters are quietly understated and share their knowledge in a confident and composed manner. It is important that beginning interpreters understand that neither style is “better” or more desirable than another. The key for the individual interpreter is to discover your own personal style of sharing your knowledge and enthusiasm with visitors. This takes time and practice. Making an effort to visit museums, public parks, botanical gardens, historic and cultural sites to observe the wide variation in “interpretive styles” is a good way to begin to identify what skills and techniques you may want to incorporate into your own interpretive programs. Sam Ham, former NPS interpreter, professor of interpretive methods and author, comments on the importance of personal style:

*Each of us is unique. We come to our jobs with our own personalities, our own knowledge, our own attitudes, values, and beliefs and with our own faces and voices. The important thing to remember, and this is especially true for less experienced interpreters, is that no style is inherently more effective or better than any other style. The best style for you is your style (Ham, 1992).*

One very effective way to develop an individual style of interpretation is to incorporate into your presentations or programs a talent or skill that you already possess. Do you sing, write poetry, mimic bird calls or whistle? Do you sketch, paint, play a musical instrument, tell nature stories or like to do a few magic tricks? String art can be a great way to introduce the subject of spiders and the different types of spider webs. The use of any of these types of artistic skills, and many others, is a great way to begin a program or to help visitors focus on a particular aspect of your presentation. Each interpreter should weave into their presentations and programs not only knowledge, but their individual talents, experiences and imagination in order to find his own special voice.

**Summary**

Near the beginning of this chapter early practitioners of the art of interpretation were identified, individuals such as Enos Mills, Freeman Tilden and John Muir, but surely there have been literally thousands of unnamed ‘nature guides’ who have influenced and inspired many an individual to develop a closer relationship with the natural world. As a master naturalist you have the exciting opportunity to join the ranks of interpreters who have influenced people to “care about so they will care for” places of extraordinary beauty and cultural significance. In this section the idea has been introduced that the interpreter’s job needs to be more than a series of ‘canned’ talks and sterile presentations.
Interpreters have the responsibility of not only educating and informing visitors, but also inspiring them and provoking further thought or investigation of the ideas and subjects introduced.

Beck and Cable (2010) wrote a book entitled *The Gifts of Interpretation* in which they identify no less than fifteen (15) “gifts” they feel interpreters and the art of interpretation proffer the world. It is their view that interpretation is a process of “profound gift-giving.” Interpreters can spend a lifetime enjoying nature’s beauty and the out-of-doors while advocating others to protect, appreciate and advocate. Not unlike the traditional classroom teacher, as interpreters we never know when we may inspire a 21st century John Muir or Aldo Leopold.

*How much of my enjoyment [of nature] springs from my knowledge I do not know. The joy of knowing is very great; the delight of picking up threads of meaning here and there, and following them through the maze of confusing facts, I know well. When I hear the woodpecker drumming in the woods, and know what it is all for, why, that knowledge, I suppose, is a part of my enjoyment. The other part is the associations that those sounds call up, a voicing of the arrival of spring; they are the drums that lead the joyous procession. To enjoy understandingly, that, I fancy, is the great thing to be desired.*

--- John Burroughs from his essay *The Gospel of Nature (1912).*
General Interpretation (Interpretive Methods) Resources


**A Select List of Sources for Lesson Plans, Interpretive Programming Ideas and “How to” Interpret**


**Recommended Reading for Deeper Understanding of the Value/Impact of Interpretation**


