### Paying it Forward: Engaging Scientists in Communicating Ocean Science to Volunteer Interpreters

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## Volunteers and docents are integral to public science education

Volunteers and docents in informal science education settings, such as parks, aquariums and science centers, are "front line" communicators of science to the visiting public. Often a significant proportion of staff in these settings, their understanding of how to meet the learning needs of visitors influences how educational goals are fulfilled (Patchen & Grimes-Rand, 2007). Thus in training such audiences, conversation around practice is equally as important as conversation around science content.



Master naturalist participants during a beaches and dunes field experience in Florence, OR

#### Scientists instruct volunteers in the Coastal Master Naturalist Program

The coastal master naturalist program (CMNP) teaches participants about the natural history of Oregon's coast and develops a corps of knowledgeable, skilled and dedicated volunteers. Local scientists are recruited as both workshop developers and instructors to provide participants with current, accurate and research-based ocean science content, while promoting scientist engagement in marine education and outreach activities (COSEE PP, 2010). Evaluation of the pilot program took place between 2010 and 2011.

#### Benefits of CMNP

- 1. Scientists gained valuable insight into public audiences while working with interpretive audiences
- 2. Interpretive audiences benefit from the recognition that they are not only learners, but also communicators of science

#### What is Interpretation?

An educational activity aimed at revealing meanings and relationships to people about the places they visit and the things they see and do (Tilden, 1957)

# Scan to view online

# Both instructors and participants gain from talking about interpretation

Instructors noted gaining a valuable learning Experience from interacting with these highly motivated and interested adult audiences, who asked questions relative to both their own experiences and interpretive practice. Changes in participant conversation and engagement occurred when workshop instructors were explicit about their needs as communicators. Participants desired interactive and inspirational learning experiences that both discussed and modeled naturalist practice.

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"Wordle" breakdown of participant definitions of a "master naturalist", important for future program development

#### Challenges of CMNP

- 1. Workshop instructors required better guidance with understanding the needs of an interpretive audience
- 2. Definitions of a "master naturalist" differed between workshop participants, instructors and organizers, limiting facilitation





