Underwater Acoustics: Webinar Series for the International Regulatory Community

Webinar Outline: Potential Effects of Sound on Marine Fishes
Tuesday May 10, 2016 at 12:00pm (US East Coast Time)

Part 1: Sound and Fishes
Anthony D. Hawkins, Loughine LTD, Aberdeen, UK

Presentation Outline:
• Underwater sound and sound sources
• How well do fishes hear sounds?
• What kinds of sounds do fishes produce?
• How do fishes react to man-made sounds?
• Population impacts

Additional information on the DOSITS website:

Science of Sound > What sounds can animals hear?
http://www.dosits.org/science/soundmeasurement/soundsanimalshear/

Science of Sound > How is hearing measured?
(http://www.dosits.org/science/soundmeasurement/hearingmeasured/)

Science of Sound > What are common underwater sounds?
(http://www.dosits.org/science/soundsinthesea/commonsounds/)

Science of Sound > Why do sounds have different properties?
(http://www.dosits.org/science/soundsinthesea/properties/)

Science of Sound > How do people and animals use sound in the sea?
(http://www.dosits.org/science/soundsinthesea/peopleanimalsuse/)

Science of Sound > How does marine life affect ocean sound levels?
(http://www.dosits.org/science/soundsinthesea/marinelifeaffectoceansound/)

Science of Sound > Advanced Topics > What is intensity?
http://www.dosits.org/science/advancedtopics/whatsintensity/

Animals and sound > Why is sound important to marine animals?
(http://www.dosits.org/animals/importanceofsound/whyissoundimportant/)

Animals and Sound > How do marine animals use sound?
Part 2: Sound Exposure Criteria and Their Development
Arthur N. Popper, University of Maryland & Environmental BioAoustics LLC

**Presentation Outline:**
- Current “criteria”
- Experiments on the effects of sound on fishes
- Guidelines on effects of sound on fishes
- What are the gaps in what we know?
- Putting mitigation into context

**Additional information on the DOSITS website:**

Science of Sound > Advanced Topic > Sound Pressure Levels and Sound Exposure Levels
(http://www.dosits.org/science/advancedtopics/soundpresslevelsandsoundexplevels/)

Animals and Sound > Potential Effects > How do you determine if a sound affects a marine animal?
(http://www.dosits.org/animals/effectsofsound/howdoyoudetermineifasoundaffectsamarineanimal/)
Animals and Sound > Potential Effects, Marine Fishes
(http://www.dosits.org/animals/effectsofsound/effectsofsoundonfish/)

Animals and Sound > Potential Effects, Marine Fishes > Behavioral Changes
(http://www.dosits.org/animals/effectsofsound/effectsofsoundonfish/behavioralchanges/)

Animals and Sound > Potential Effects, Marine Fishes > Masking
(http://www.dosits.org/animals/effectsofsound/effectsofsoundonfish/fishmasking/)

Animals and Sound > Potential Effects, Marine Fishes > Hearing Loss
(http://www.dosits.org/animals/effectsofsound/effectsofsoundonfish/hearingloss/)

Animals and Sound > Potential Effects, Marine Fishes > Physiological Stress
(http://www.dosits.org/animals/effectsofsound/effectsofsoundonfish/physiologicalstress/)

Animals and Sound > Potential Effects > How can we moderate or eliminate the effects of human activities?
(http://www.dosits.org/animals/effectsofsound/howcanwemoderateoreliminatetheeffects
ofhumanactivities/)