

## SENATE COMMITTEE ON AGRICULTURE AND NATURAL RESOURCES

February 8, 1999 Hearing Room 50

4:30 P.M. Tapes 35 - 36

**MEMBERS PRESENT:** Sen. Gary George, Chair

Sen. Thomas Wilde, Vice-Chair

Sen. Tony Corcoran

Sen. Bill Fisher

**MEMBER EXCUSED:** Sen. Joan Dukes

Sen. Ted Ferrioli

Sen. John Lim

**STAFF PRESENT:** Brad Harper, Administrator

Kristal Hatton-Nease, Administrative Support

**ISSUES HEARD:** National Agricultural Aviation Association

Narrowing the Science ñ Policy Gap

These minutes are in compliance with Senate and House Rules. Only text enclosed in quotation marks reports a speaker's exact words. For complete contents, please refer to the tapes.

TAPE/#	Speaker	Comments
TAPE 35, A		
005	Chair George	Convenes meeting at 4:42 p.m.
<u>NATIONAL AGRICULTURAL AVIATION ASSOCIATION</u>		
020	Terry Witt	Northwest Food & Forest Education Foundation. Submits [EXHIBIT A]. Says he represents pesticide users. Explains the "Aerial Applicators and Safe Food"

		videotape and talks about the very heavily regulated pesticide industry.
070	Witt	Summarizes the Pesticide Environmental Stewardship Program. Comments on the successes of the program. Explains the re-certification licenses of pesticide applicators.
083	Sen. George	Comments on the changing technology in relation to aircraft and says he heard that nearly 86% of aircraft are equipped with global positioning satellite systems.
104	Witt	Comments he is not sure about that number but says technology is rapidly changing. Adds the agricultural industry has fewer people getting certified to be aerial applicators.
127	Chair George	Gives a personal experience of applying pesticides on his farm.
141	Sen. Corcoran	Asks who the partners of the grant are.
144	Witt	Replies the program is implemented by the U.S. Environmental Protection Agency (EPA) through their integrated pest management education network, which partners with groups throughout the U.S. Adds that in this case the partnership included the Oregon Wheat Growers Association, Northwest Food & Forest Education Foundation, and the U.S. EPA.
150	Sen. Corcoran	Asks how much the program cost.
155	Witt	Replies the grant from the U.S. EPA was for \$13,000 and the total cost was \$17,000.
159	Sen. Corcoran	Asks from where the additional \$4,000 come.
162	Witt	Replied the additional \$4,000 came from the Northwest Food & Forest Education Foundation and the Oregon Wheat Growers Association.
170	Video	Videotape entitled "Aerial Applicators and Safe Food" begins and explains the aerial applicator's growing role in the usage of pesticide. Gives information on the history of airplanes used in aerial applications of pesticides.
235	Video	Discusses crop protection, the levels of cancer risk, the amount of residue on left on fruits after application, contamination of soil and water, and the levels of nitrate in drinking water.
300	Video	Attributes the presence of carcinogens in food to the ability to research minute amounts of materials. Discusses the growing trend to ban chemical use and the problems with outlawing chemical use. Comments some problems would be lower yield and fewer crops. Adds apple farms would lose about 60% of their

		crop.
363	Video	Explains the solution is to continue regulated usage of farm chemicals. Discusses the mission of aerial applicators and says applicators cover 200-300 million acres annually. Describes the requirements to be an agriculture pesticide applicator.
420	Video	Suggests agricultural flying is one of the safest aviation techniques. Describes changes to on-ground equipment. Comments on the training workshops and seminars applicators must take to be re-certified.
<b>TAPE 36, A</b>		
020	Video	Discusses the safety and movement of chemicals involved in the re-certification process training and explains the characteristics of an agriculture application pilot. Video ends.
036	Witt	Comments on the video. Says much less pesticide is used that what it looks like in the video because pesticide material is diluted into water.
048	Sen. Fisher	Gives a personal experience of his father using pesticides.
074	Chair George	Comments on drift reduction agents and the video. Discusses a tour he and Sen. Wilde took in the Portland area. Says people have the ability to measure very small particles. Comments he hopes to see investigation conducted on the health of aerial applicator pilots.
<b><u>NARROWING THE SCIENCE to POLICY GAP</u></b>		
120	Stephen Kafoury	Represents the Wildlife Society and the American Fisheries Society. Introduces Dr. Gay Bradshaw and Dr. Jeff Borchers.
137	Bradshaw	Research Mathematician, U.S. Forest Service. Gives credentials. Comments on the uncertainty, risk, and decision making process. Explains the role of scientists in policy making. Discusses environmental risk of land use activities and practices.
170	Bradshaw	Explains how the severity of impacts is assessed and how to decrease the environment and social risk in the decision making process. Gives example of environmental risks in relation to an earthquake.
220	Bradshaw	Says the problem is to minimize environmental risk while minimizing the cost of the solution. Discusses environmental and social risk assessment and how it relates to the process.
270	Bradshaw	Comments science is often uncertain and that this uncertainty come in three

		types: opposing scientific opinions, statistical uncertainty, conflicting model output.
320	Bradshaw	Discusses the concept of a manageable uncertainty and discusses the conflicting opinions of experts. Comments on the constraints of impeding effective use of science in policy and how to come up with best and optimal way to carryout policies.
370	Bradshaw	States that when a person incorporates a formalized decisions analysis method linking science and values he/she allows for a more flexible, proactive, and anticipatory policy.
387	Chair George	Comments that in order to make decision basic research is needed.
394	Borchers	Forest Ecologist, U.S. Department of Forestry Science in Corvallis. Says this theory allows people to work with uncertainty. Adds it is meant to be something that is continually looked at and updated.
430	Sen. Fisher	Asks what research is being conducted at the Applegate site.
435	Bradshaw	Gives information on a monitoring plan for the adaptive management area at the Applegate site. The plan is monitor particular forest management decisions in the area to see whether they are meeting objectives or not. Adds the monitoring is used as feedback.
<b>TAPE 35, B</b>		
026	Kafoury	Comments on adaptive management.
035	Bradshaw	Says if there is not enough confidence in the research, a person would get feed back and progress in increments.
041	Chair George	Comments on a town hall meeting held recently in his district. Says one person described a situation in the 1920s and 1930s in which Oregon tried to cross breed salmon and thus moved them from one stream to another around the state. Adds that the Oregon Department of Fish and Wildlife (ODFW) killed about 6,000 coho salmon on a tributary to eliminate a non-native group of fish. Says something needs to measure this, to see if it is a scientifically valid idea.
070	Borchers	Agrees and says policy is as much a test as science.
075	Sen. Wilde	Comments legislators have one specific problem and that is to respond to the public need, especially financially. Says he would love to be able to take time to gather data, but many times the money and time are what drives policies. Asks how the witness suggests the legislators conduct the much needed research at a low cost and in a timely manner.

099	Borchers	Comments on the decision making analysis chart mentioned earlier in testimony.
115	Sen. Wilde	Comments he has a high level of confidence in the statistics presented in this presentation. Says he is glad to see people using proper statistics.
133	Bradshaw	States this theory of decision making in the science/policy area the social and economic objectives as well as the environmental ones and it shows how differences in the scenarios will affect each other and make a difference in terms of the decision.
147	Chair George	Discusses testimony heard from some eastern Oregon watershed representatives and how they adapted to certain practices. Says that what they found out is that as they improved the watershed they produced twice as much grass.
154	Bradshaw	Says that is a perfect example of what has been discussed and the only difference is that the formalization would be laid out beforehand and as new knowledge/experiences happened the data would be updated. Adds it is helpful because one begins to see what are the assumptions.
176	Sen. George	Comments on the chemical pollutants in the Willamette River drainage and wonders what type of sampling is being taken from the river.
192	Bradshaw	Discusses how to best monitor distribution in the Willamette River drainage area. Adds additional information could be attained to see where the focus needs to be.
219	Sen. Fisher	Expresses concern about smaller localities being fined for polluting water ways, while larger cities also pollute water and in higher doses and regulatory agencies are more lenient.
243	Borchers	Replies a decision model analysis in this situation. Says if the legislature wants no sewage in the river it must declare that. Says the policy question boils down to how much sewage can be allowed.
262	Sen. Fisher	Comments people do not have the resources. Says some people are getting away with one thing while others are not.
276	Bradshaw	Comments on the most optimal ways of using data in order to be most cost efficient.
293	Sen. Fisher	Discusses the freighter that ran aground in Coos Bay. Says environmentalists are upset over what will happen when the fuel on freighter leaks. Likens this situation to what happened during World War II. Says fuel leaked into the ocean and major water ways. Asks what statistics have been gathered in relation to how much fuel leaked and what its impacts were on the ecology of the water. Says there was a diesel spill in Salem a few years ago and people just shrugged their shoulders yet when the diesel truck ran off Interstate 5 in early January the amount spilled was very little compared to that of the Salem spill.

365	Borchers	Discusses the misplacement of priorities in such instances. Says people do not know where to draw the line for diesel fuel spills.
380	Kafoury	Comments if people didn't have television, no one would know about the grounded freighter.
386	Chair George	Agrees with Sen. Fisher's comments on tankers.
395	Kafoury	Comments people have different social and economic factors during a war.
419	Sen. Fisher	Says there was not measurable or visible effects from the war fuel spills. Asks why measurements should be taken if there were no effects.
<b>TAPE 36, B</b>		
010	Bradshaw	Responds that if no one observed effects from the World War II spills the scientific community can not know if there was an impact. Adds that there is a certain social segment worried about what might have happened. Says there are ways to dispel such worries.
027	Sen. Wilde	Describes coincidental indicators. Comments data, in a useful form, is needed.
051	Kafoury	Offers his help to the committee.
060	Chair George	Thanks Dr. Bradshaw and Dr. Borchers for testifying before the Senate Agriculture and Natural Resources Committee. Adjourns meeting at 6:10 p.m.

Submitted By, Reviewed By,

Kristal Hatton-Nease, Brad Harper,  
Administrative Support Administrator

#### **EXHIBIT SUMMARY**

**A ñ Written testimony, Terry Witt, 5 pp.**