## THE DOUG LITTLE MEMORIAL LECTURE

THE DOUG LITTLE MEMORIAL LECTURE SERIES WAS INITI-ATED BY THE FACULTY OF NATURAL RESOURCES AND EN-VIRONMENTAL STUDIES AT THE UNIVERSITY OF NORTHERN BRITISH COLUMBIA (UNBC) IN THE FALL OF 1996. THIS AN-NUAL EVENT COMMEMORATES THE LATE J.D. LITTLE. FORMER SENIOR VICE-PRESIDENT FOR-**EST OPERATIONS, NORTH-**WOOD PULP AND TIMBER LIM-ITED. DOUG WAS A FOUNDING SUPPORTER OF UNBC AND A **RECIPIENT IN 1986 OF THE DIS-**TINGUISHED FORESTER AWARD FROM THE ASSOCIA-TION OF BRITISH COLUMBIA PROFESSIONAL FORESTERS. DOUG LITTLE'S PHILOSOPHY WAS THAT WITH APPROPRIATE FOREST MANAGEMENT. THE **RESOURCES OF THE FOREST** CAN BE SUSTAINED FOR FU-TURE GENERATIONS. THE LEC-TURE SERIES IS SUPPORTED BY AN ENDOWMENT FROM NORTHWOOD PULP AND TIM-BER LIMITED NOW CANFOR.

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# THE 2005 DOUG LITTLE MEMORIAL LECTURE

"Salvage Harvesting and Environmental Responses – Australian Perspectives"

## by

### Dr. David Lindenmayer

Professor, Centre for Resource and Environmental Studies at the Australian National University



Thursday, September 29, 2005 7:30 PM Room 6-213 - Canfor Theatre Prince George Campus

**EVERYONE IS WELCOME!** 

UNIVERSITY OF NORTHERN BRITISH COLUMBIA



Dr. David Lindenmayer Professor, Centre for Resource and Environmental Studies Australian National University

THE QUALITIES OF OUR "TARGET GRADUATE"

#### **Biography**

David Lindenmayer received a Ph.D and a DSc. from the Australian National University. He was nominated for both the Crawford Thesis prize and the Bollinger Award for his thesis entitled: *"The ecology and habitat requirements of Leadbeater's Possum"*. Dr. Lindenmayer began his career as a Consultant Scientist 11, at the Department of Conservation & Environment in Victoria Australia, followed by an Australian Research Council post-doctoral appointment at the Centre for Resource and Environmental Studies at ANU where he holds his current position. He has received numerous awards and scholarships including the Leading Principal Investigator for Earthwatch Institute in 2004 and Australia's top innovative thinker in Environmental Science by "The Bulletin" in 2003. His research interests lie in forest ecology and management, habitat fragmentation, applied wildlife and conservation management, landscape ecology and natural resource management. Dr. Lindenmayer's latest collaboration is with Environment Australia and the ARC Linkage Project where his research focuses on the Jervis Bay Fire Experiment.

#### Abstract: Salvage Harvesting and Environmental Responses – Australian Perspectives

Large-scale natural disturbances occur at varying intervals in almost all ecosystems worldwide. These include wildfires, floods, mudslides, volcanic eruptions, earthquakes, tsunamis, insect attacks, windstorms, hurricanes, and cyclones. In many ecosystems, there are major efforts to "clean-up" after natural disturbances. This is particularly true in forest landscapes where salvage harvesting of disturbed stands of trees is widely practiced for such reasons as: (1) recouping economic losses before serious deterioration of trees occurs, (2) the perception of assisting ecosystem recovery (e.g. by speeding the re-establishment of forest cover), (3) the perception that naturally disturbed areas have limited value for biota, (4) the perception that damaged trees will attract insects that will then damage adjacent undisturbed stands, (5) the perception that damaged trees create additional fuels and an increased future fire risk, such as is believed to occur following major insect outbreaks, and, (6) the perception that naturally damaged trees are a threat to public safety.

The published literature is replete with studies of the impacts of traditional (non-salvage) forms of logging on individual elements of the biota, on the structure and composition of stands, on landscape patterns and composition, and on key ecosystem processes and functions. Considerably less work has been conducted on salvage harvesting and much of the work that has been completed is "grey literature" that can be difficult to obtain. A key issue is whether the impacts of salvage harvesting are different from, and/or potentially more (or less) detrimental than, the impacts of other forms of logging that are not preceded by a major natural disturbance.

This seminar discusses a range of key aspects of salvage harvesting, particularly from an Australian perspective of the issue. It examines problems in native forest and exotic plantation/water supply contexts and provides some key recommendations for ways in which salvage harvesting should be better managed from both a policy and on-ground management perspectives. The seminar also discusses how salvage harvesting might be better studied to provide the kinds of information needed to better inform future decision-making.

- ECOLOGICAL UNDER-STANDING
- INTEGRATED THINKING
  AND SKILLS
- EXPERIENCE AND WORK
- ATTITUDE
- PROBLEM SOLVING ABILITY
- A BIG-PICTURE PERSPEC-TIVE
- ETHICS & PROFESSIONALISM
- COMMUNICATIONS
- CITIZENSHIP

