INTRODUCTION TO PANEL ON MOVEMENT OF SEED FROM SOURCE IN THE DOUGLAS-FIR REGION

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Last fall, a forester called me from our Calapooya Tree Farm east of Eugene, Oregon. He said, in effect, "I have a piece of cutover at 4,000 feet that should be direct-seeded to Douglas-fir this spring. But I don't have any seed from that zone for any Calapooya source. I have local seed from 2,500 feet, and I can get some from a 2,500-3,000-foot zone just north of the Columbia River. What should I do?"

This question may sound familiar to many of you here. And this type of question is pleasing to most geneticists, because it indicates an on-the-ground interest in seed source that is comparatively recent in our region. But, when I am confronted with the choice between moving seed 1,500 feet upward or 120 miles to the south, perhaps into a different climate, as in the above question, I find it difficult to choose with assurance. My research work is not closely connected with provenance or seed-source movement. I must, therefore, depend on published works for information. But provenance literature for this region is sparse, and consequently my recommendations are oftentimes based more on intuition than on information. In such cases, any decision is vulnerable because the decision's validity cannot be backed by evidence. Most foresters probably, and here and there a geneticist or two, will confess their decisions regarding seed source to be similarly vulnerable. Consequently, there appeared to be three obvious, practical reasons for organizing a panel on seed movement: (1) For geneticists, it would provide opportunity for extracting the latest information from specialist colleagues. (2) For foresters, it would provide opportunity to find out how much experimental evidence, or how little, is behind a geneticist's seed-source recommendation. (3) For those in the group not tied to practicalities, the material might be sufficiently stimulating to breed questions that would actively seek basic scientific solutions. As the morning session progresses, I think it will become obvious that the field isn't crowded with investigators. Physiologists are welcome.

Each panelist is handling a part of the subject about which he has special information, or a particular interest or talent. The panel's organization is probably evident from the paper titles, but, in reiteration, the main points are: (1) What is the problem, why is it, and how big is it? (2) What information pertinent to the problem is available from local work or from other sources? (3) Can we use climatic data to predict performance

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of off-source seed? (4) What monetary gains or losses are likely when off-source seed is used? (5) Summary and recommendations.

Most papers are short and the allotted time should permit considerable discussion. To complete the program's objectives, we need discussion, and expect it, and wish for it, particularly from Kim Ching, Tom Greathouse, Larry Roche, Ray Steinhoff, and any others who have special interests in provenance. For reasons not at all related to ability, all provenance workers haven't been included in the formal program this morning. They can contribute greatly by actively participating in the informal discussions, and we will be disappointed if they do not.

Finally, I wish to commend the people appearing on this panel. It is always difficult to write a paper, and sometimes downright odious. It is particularly so when the paper has to be written on a topic or schedule not to one's choosing. So, my wholehearted thanks to each of you for your gracious response to my request for a paper.