Promoting and Restoring Kincaid’s Lupine (*Lupinus sulphureus* ssp. *kincaidii*) and Willamette Daisy (*Erigeron decumbens* var. *decumbens*) at Baskett Slough NWR

by

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Abstract approved:

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Kincaid’s lupine (Lupinus sulphureus ssp. kincaidii) and Willamette daisy (Erigeron decumbens var. decumbens) are rare Willamette Valley, Oregon endemics. Conservation of Kincaid’s lupine and Willamette daisy may require considerable amounts of time, economic, and intellectual resources. This study investigated different propagation methods and prairie management practices to minimize the resources needed to promote and preserve these two species. Plants were propagated by growing scarified and nonscarified seeds in the field, by growing scarified seeds in the greenhouse and transplanting them into the field, and by propagating them vegetatively. Study site enhancement was investigated by planting seeds in plots that had either been burned, mowed, or received no treatments. Direct sowing of seed into field plots was the most effective (2.1% seedling survival rate) and efficient ($18.42 per seedling) method for promoting Kincaid’s lupine. Growing seedlings in the greenhouse was the most effective (16.6% seedling survival rate) and efficient ($16.11 per seedling) method of promoting Willamette daisy. The burn treatment within the study site yielded the greatest number of seedlings but this treatment effect was not statistically significant.