

BIODIVERSITY - YOUNG GROWTH

Goal: Maintain ecosystems capable of supporting the full range of native and desired non-native species and ecological processes. Maintain a mix of representative habitats at different spatial and temporal scales. Provide for the continuation of timber uses and resources by the timber industry and Alaska residents.

Objective: Manage young growth to improve habitat for wildlife and commercial timber products. Review standards and guidelines for applicability to young growth stands.

Background: Even-aged management of timber lands significantly alters habitat suitability for wildlife species. The suitability of that habitat changes over time as natural restocking occurs. Near term, post harvest, many clearcut areas provide increased forage and cover for wildlife. However, as a dense, even-aged overstory becomes established and outcompetes understory species for resources, habitat suitability for wildlife is drastically decreased. A priority of the 2008 Tongass Land Management Plan is to use established silvicultural methods to manage young growth stands to increase future timber harvest potential and improve stand characteristics for the benefit of wildlife

Biodiversity Question 3: Are young-growth treatments improving other key habitat components for old-growth associated species?

Evaluation Criteria

The effect of young-growth treatments on other key habitat components for old-growth associated species will be determined by reviewing literature and research findings to assess if resulting habitat components are reflective of old growth forests. Other key habitat components include multiple canopy layers, standing snags, down woody debris, and a diversity of tree size, species and distribution.

Small Mammal Responses to Young Growth Thinning – Merav Ben-David with the University of Wyoming, in cooperation with the Forest Service, will be leading an effort to evaluate small mammal responses to thinning in conjunction with the Tongass-Wide Young-Growth Studies (TWYGS). Study objectives include assessing which TWYGS treatments and responsive variables and other habitat variables not measured in TWYGS are most effective in enhancing the abundance of small mammals. Data will be used to develop a predictive model of small mammal responses to thinning and to evaluate the response of ermine and marten as it relates to small mammals responses. Small mammals and ermine will be trapped in different thinning treatments and unthinned young-growth stands and adjacent old-growth habitat. Stable isotope and fecal analyses and the sampling of vegetative variables will be used to assess diet and food availability (Flaherty and Ben-David 2009). Field work is proposed to begin on POW Island in 2010.

Monitoring Results and Evaluation of Results

There is not enough information available at this time to assess how young growth treatments are affecting other key habitat components.

Action Plans

- Continue to review the results of young growth research.
- Develop a strategy to identify what key habitat components should be addressed and monitored.
- Review project level monitoring that is occurring and assess if there is a way to apply the results of this information forest-wide.

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