



"Old Growth" - stands that are past maturity and showing decadence

- Value of old growth comes from _____
- vertical diversity produced by _____ of several species
- large trees large snags and logs
- patchiness from _____
(individual deaths of dominant trees)



Why is Old Growth a problem?

- The old growth problem exists because normal rotations managed forests are not allowed to develop into old-growth stands because they are not economical in terms of wood production.
 - Once ____% of Oregon, ____% of Washington now < 3%.
 - __% of forests are in young (small size) classes of trees



There is no universally accepted definition for old growth.

- A simple, idealistic statement defining the intent would be " a climax forest that has never been disturbed by humans ".
- **definitions:** those currently in use avoid the issue of exactly what constitutes human disturbance and tend to be fairly arbitrary about the question of age.
 - old-growth douglas-fir in the Pacific Northwest, a minimum age of 200 years (USFS Old-Growth definition task force 1986).
 - for Northeastern boreal forest minimum age is 100 years (Maine Critical areas Program 1983).



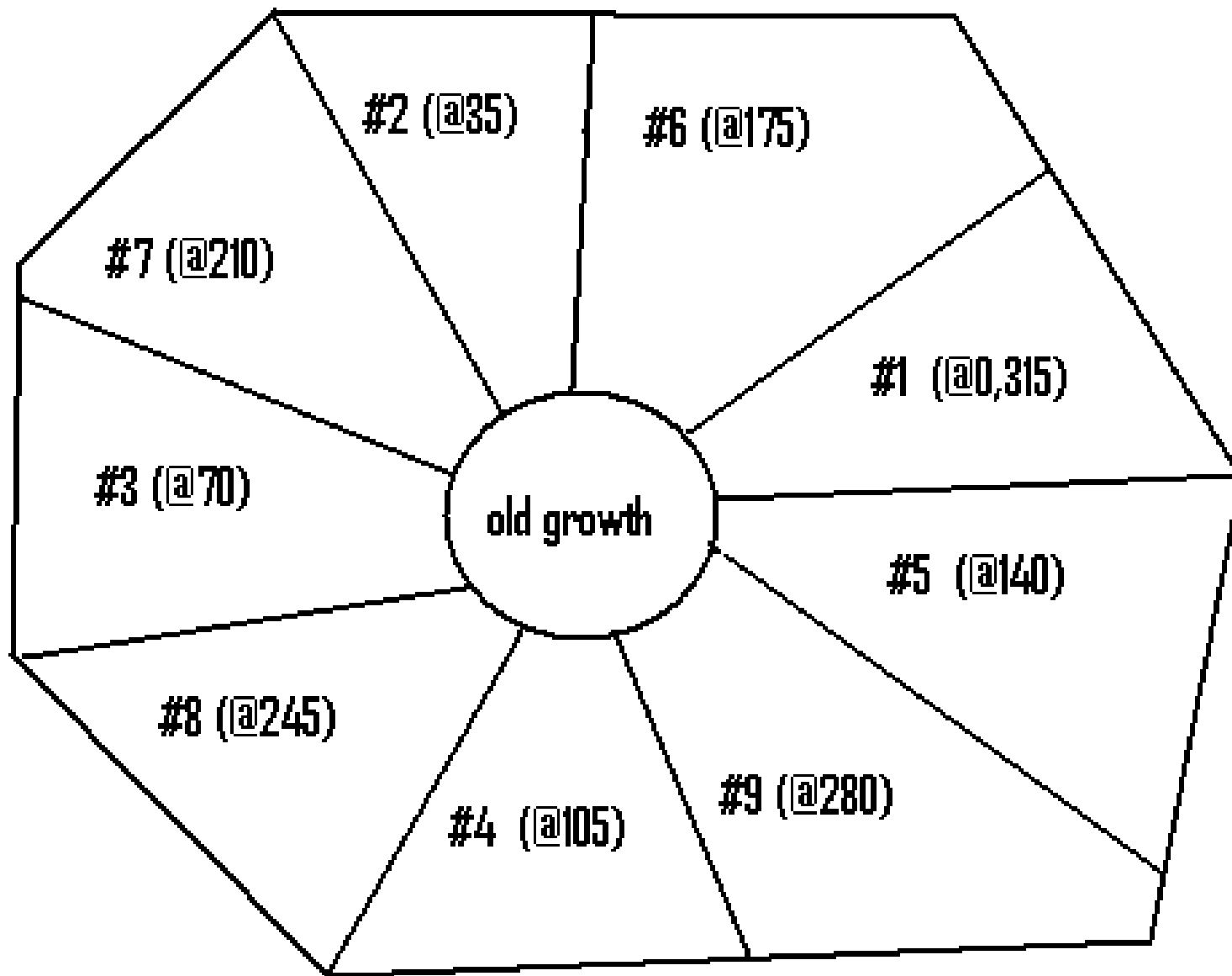
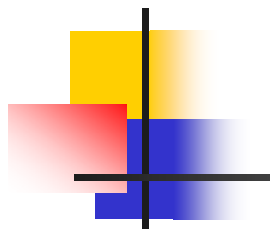
What should definitions include?

- species composition
 - definitions specific to forest type (e.g., douglas-fir, Engelmann spruce...)
- vegetative structure (size/density of live, dead standing and dead fallen trees)
 - (e.g. for Northwestern forests; old growth stands have at least 10 tons/ac. of fallen logs but 15/tons/ac on western hemlock sites)
- minimum area
 - average size 650 ac with a wide variance ranging from 62-1500 ac.
 - spotted owls MVP (20 pairs) requires 18,225 - 30,375 ha (73,000 ac)



A management plan for old growth (Harris 1984)

- A system of reserves and long rotation islands that contain them. (see Fig. 4.21 in P&B)
 - 20% of forested landscape be committed to long-rotations so that 5% could be maintained in perpetuity as old growth
 - Recommended that old growth comprise 25% and recruitment stands (long-rotation) comprise 75%.
e.g., 5% in 240-320 yr age class rotations in addition to old growth reserves core. maintain 50% surrounding area with dbh 28cm and 40% canopy closure
 - include 5 large logs, 5 large snags, 15 larger than average dbh trees which have wildlife value per hectare preferably 10% of surrounding forest 180 years old as late successional replacement stands.





Old Growth management – cont.

- Blocks of late successional and/or old growth habitats should be reserved as habitat conservation areas for old growth dependent species.
 - No _____ (including salvage) should be removed
 - BUT other management activities MAY be appropriate
 - _____ prescription/suppression
 - aquatic habitat _____
 - pre-commercial or _____ treatment of young stands



Old Growth management – cont.

- connecting corridors where cannot meet above prescriptions
 - Edge habitats (where we have most years of experience)
- Identify and describe management area
 - inventory, boundaries, typing stands and habitats
 - inventory wildlife spp. and habitat requirements
select 'featured species' to be used as guides to plan habitat needs
 - representative (may use guilds)
game spp., keystone spp., T&E spp.



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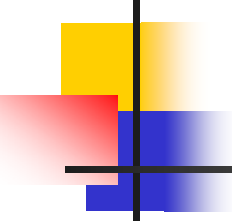
Old Growth management – cont.

- develop objectives for habitat management and habitat-treatment needs of selected species



minimum wildlife population level objectives

- developing prescriptions
 - area in unit
 - age at which stand will be regenerated
 - number years between re-entries
 - size of area to be treated
 - treatments needed to provide necessary structural stages
 - additional silvicultural practices needed
selecting prescriptions
- involves trade-offs and adjustments to standard treatments needed



A system of reserves and long rotation islands (see Fig. 4.21 in P&B)

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