

Fire Ecology and Behavior

Exam No. 3

May 8, 1981

- (20) 1. You may answer either of the two questions below:
- a. How would you manage 30,000 acres of California chaparral to optimize black-tail deer habitat?
 - b. How would you manage 30,000 acres of forest land in the Southeast to optimize habitat for the red-cockaded woodpecker?

- (20) 2. Discuss the historical role of fire on the four dominant pine species in the Southeast, and name the predominant understory species.

(20) 3. Explain why red pine is a fire susceptible species, yet it needs fire for its existence. Why is the Lake States Region ideal for growing red pine?

(20) 4. How does the management and role of fire differ for Sitka Spruce and Red Spruce?

(10) 5. How is the nutrient status of a soil affected in forests, shrublands and grasslands?

(10) 6. Why are pine trees generally more fire resistant than hardwood species?