

GRAZING & BLUE OAK REGENERATION

- Cattle reduce the growth rate of small blue oaks and can prevent them from escaping browse height.
- Natural refugia exist on many ranches in rocky areas where grazing pressure is reduced and oaks are better able to regenerate.
- This project examined oak regeneration on over 20 cattle ranches in Northern California, encompassing over 75,000-acres of blue oak woodland all under 1,500' elevation.



THE BASICS



ROCK HELPS

- Recruitment occurred more often in rocky areas
- Dung counts were lower in rocky areas, suggesting that rocky areas provide shelter from grazing pressure, effectively reducing the grazing rate. Many of these trees had escaped the browse trap.
- In rocky areas, middle size trees are less likely to be used for scratching, which often breaks off new growth through repeated pruning.
- Caging existing small trees can allow immediate relief from browse pressure.



'YOUNG' TREES?

- While there might be small trees on ranches, these trees were not necessarily young.
- Of 60-trees sampled, those measuring a half-inch diameter at their base could be 3 to 32 years old. Most notably, a 17" tall tree was 64-years old.
- Tree growth is affected by grazing. On ranches with low grazing, trees would take around 85 years to clear browse height and under medium-high grazing around 135 years.
- It is possible that many oaks will die before escaping browse pressure.



A RULE OF THIRDS

- Lower grazing levels allows for natural oak regeneration.
- Of all ranches surveyed, one property showed wide-ranging regeneration.
- This ranch grazed pastures on a rotation only once every three years and in those years only for 120 days.
- This could be adopted with newly fenced areas, existing paddocks, or to entire properties.

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