Grazing Management for Conservation Goals

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Is grazing good or bad?

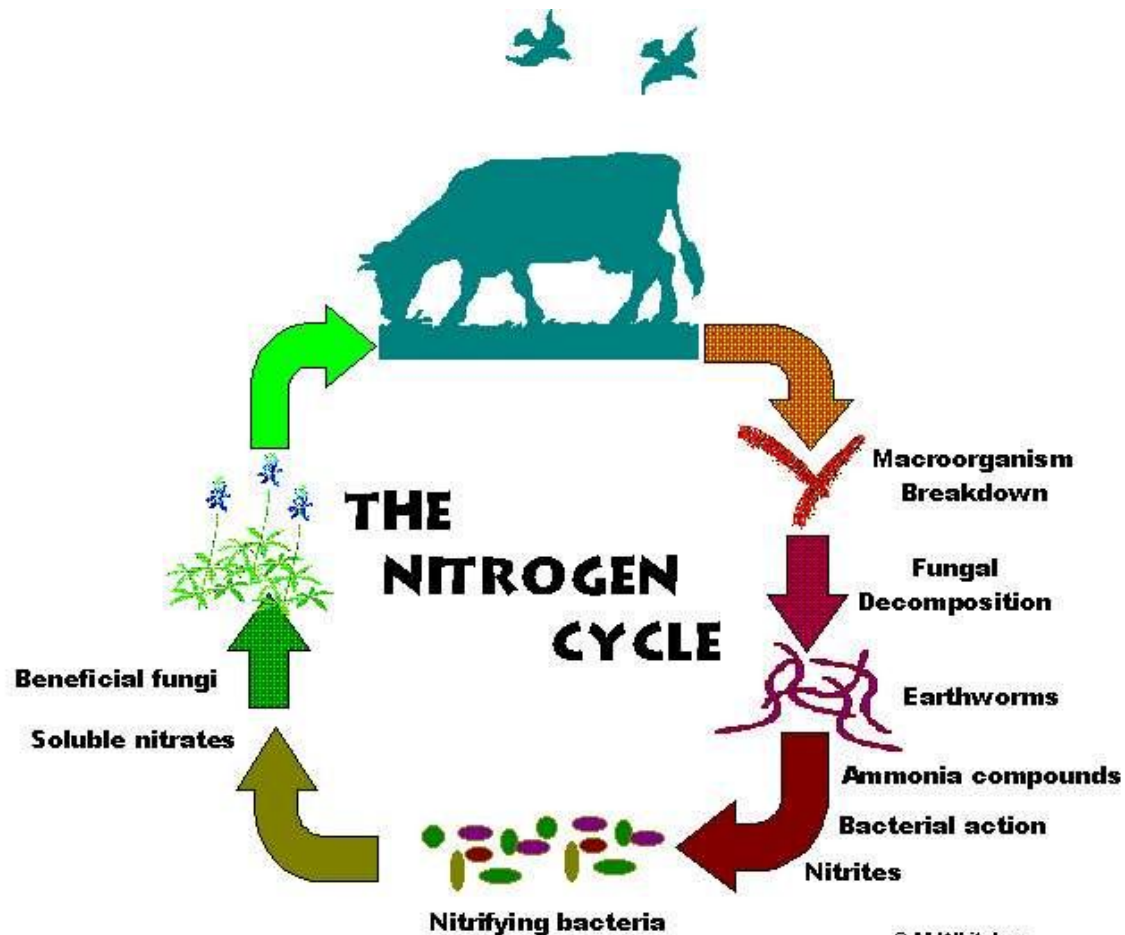Can grazing help me achieve my land management objectives?

THATCH – An unnatural situation.

Powering the nitrogen cycle in rangelands.

THE NITROGEN CYCLE

Macroorganism Breakdown

Fungal Decomposition

Earthworms

Ammonia compounds

Bacterial action

Nitrites

Nitrifying bacteria

Soluble nitrates

Beneficial fungi

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Grazing can be used to

- Alter species composition of site. Manage for forbs and wildflowers.

- Maintain or create specific habitat constituents for a species.

- Fuel reduction

- Target graze to reduce specific invasive species.

Grazing Systems

- **Sites are not simply grazed or ungrazed!**

- Variables include
  - Grazing intensity
    - Stocking rate
    - Length and season of use
  - Species and class of animal
    - Goats, Sheep, Livestock
      - Cow/Calf pairs, "stockers", different breeds.

Developing a grazing program.

Infrastructure needs:

– Fencing to contain cattle on site.

  • Very expensive if not present.

– Water sources.

– Access to bring livestock on and off property.

Goals and Objectives

- Goals – what you want to happen on the land.
  - "Increase percent cover of native forbs"
  - "Increase active SKR burrows"
  - "Increase or maintain native perennial grass cover"

- Objectives – what you are going to do to get there.
  - "Decrease annual grass biomass by 60% by doing winter, early spring grazing."
  - "Target graze mustard invaded pasture from May to July".

Developing a grazing program.

- Stocking rate = (number of head X length of time)
  - Results based, what do you want to leave on the ground.
  - Adaptive, not prescriptive.
- Season of use
  - Critical consideration to meet goals and objectives.

Developing a grazing program

- Other resources to include in a plan:
  - Riparian resources
    - Adaptive management – fence last approach
      - Season of use, water sources, supplements, herding all effective at limiting riparian impacts
  - Soil impacts (compaction and erosion)
  - Water quality
    - Lots of emerging research
    - Small buffers have big impacts.
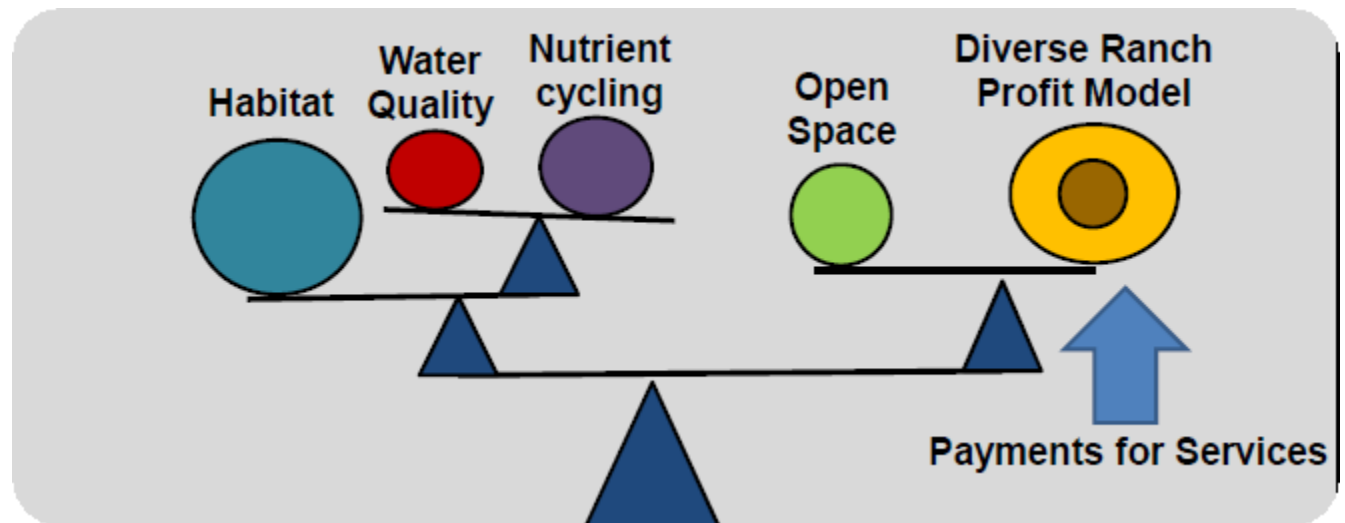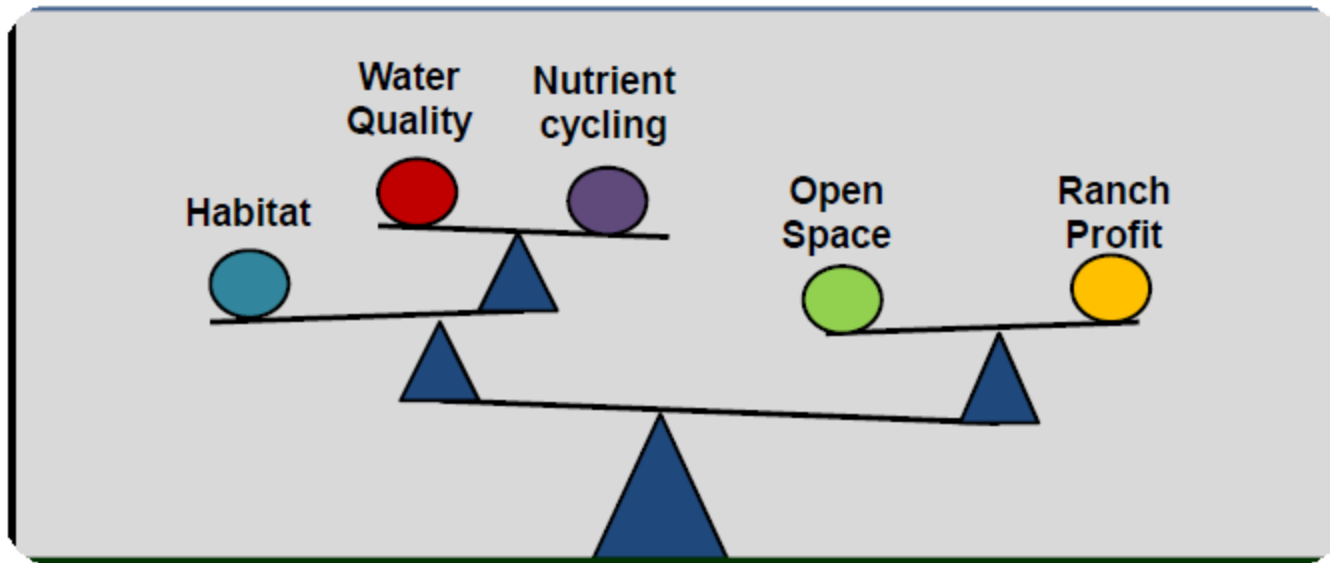 - Recreation
  - Chaparral and CSS

Developing a grazing program

- Relationship with operator
  - Grazing program must be economically feasible for operator to be sustainable.
  - They need some sense of security and flexibility in the relationship.

Including the operator in the sustainability equation.

Graphics shamelessly stolen from Dr. Ken Tate, UC Davis

Resources to help:

- Certified Rangeland Managers – CRM
  - Certified by California Dept. Of Forestry. Required to be involved with rangeland management activities on "forested landscapes".
  - List can be found at http://casrm.rangelands.org/
- University of California Cooperative Extension.
- Local livestock operators
- Your colleagues north of the grapevine

Working to Keeping Ranchers, Ranching!

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NEWS

March 5, 2012 – Rangeland Coalition signatories sent Senate Committee on Agriculture letter highlighting mutual priorities for 2012 Farm Bill. **Click here to read the letter.**

February 2, 2012 – Rangeland Coalition wrote a letter of support for 5 Dot Ranch for the Beef Improvement Federation Producer of the Year Award. **Click here to read the letter.**

FEATURE

Summit
January 19-20, 2012
UC Davis Freeborn Hall

Click here for event highlights, materials and presentations.

I Love California Rangelands
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California Rangeland Coalition – Homepage at http://www.carangeland.org/

Useful links

- UC Cooperative Extension: Livestock, Range and Natural Resources. http://ucanr.org/sites/uccelr/

- UC Davis, Plant Sciences: California Rangelands. http://californiarangeland.ucdavis.edu/

- California Rangeland Watershed Lab. http://rangelandwatersheds.ucdavis.edu/index.htm

- California-Pacific Society of Range Management. http://casrm.rangelands.org/

- Bush, Lisa. "Grazing Handbook". http://sotoyomercd.org/GrazingHandbook.pdf

- NRCS. "Conservation Benefits of Rangeland Practices". http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/technical/nra/nri/?&cid=stelprdb1045811

- The Landscape Toolbox, Tools and Methods for Effective Rangeland Management. http://methods.landscapetoolbox.org/