

Applying the Adaptive Cycle Model to the Past, Present, and Future of SRM

By Katie Santini, Kody Menghini, and John Malechek

Introduction

Change is just as fundamental to human communities as it is to the plant and animal communities that we deal with daily on our rangelands. However, we humans do not like to confront our own change because it is often uncomfortable. We pay little attention to models of organizational change, but deal daily with models of plant community change, for example, states and transitions. In view of this disconnect, we were particularly challenged when Director Joel Brown proposed last August using the state-and-transition (S&T) model to describe change within the SRM as the basis for the first Rangeland Cup competition.

We began our discussions in October by reviewing recent publications on states and transitions (particularly Briske and coworkers¹) and recent (Brown²) as well as early (Pehanec³) papers on the status of SRM and the range profession in the public lands states of the West (Stoddart⁴). These papers strongly indicated that although there has been change in SRM and the range profession since the inception of SRM in 1948, there has not been the kind of radical change we would liken to a “state change” across some threshold into a new stable state as described by the S&T model.¹ Ironically, Stoddart and Pehanec were talking about many of the same things 40 years ago that SRM members are discussing today (eg, increasing urbanization of the American public, the place of livestock on public lands, is the SRM about cows and grass or the land, lack of recognition of the range profession, etc.). Rather than the S&T model, we found the “Adaptive Cycle” described by Holling⁵ and elaborated by Holling and Gunderson⁶ to better describe our understanding of the various changes that have occurred in SRM and in the range profession and where they may be headed in the future.

One of the appeals of Holling’s adaptive cycle model⁵ is that it takes into account functional change, whereas the S&T model largely addresses structural change. Holling states that the adaptive cycle can provide a model of complex systems ranging from cells to ecosystems, societies, and cultures, and it can help us to understand how systems move and change. The adaptive cycle model incorporates concepts from population ecology to better describe the functionality of each of its 4 major stages. We illustrate this in Figure 1, using the sagebrush–bunchgrass ecosystem as an example (left panel) to demonstrate the model, and from that we apply the model to SRM and the range profession (right panel). We feel that the cycle provides a dynamic framework for assessing past and current phases of SRM and provides insight to potential futures of the organization.

The Adaptive Cycle

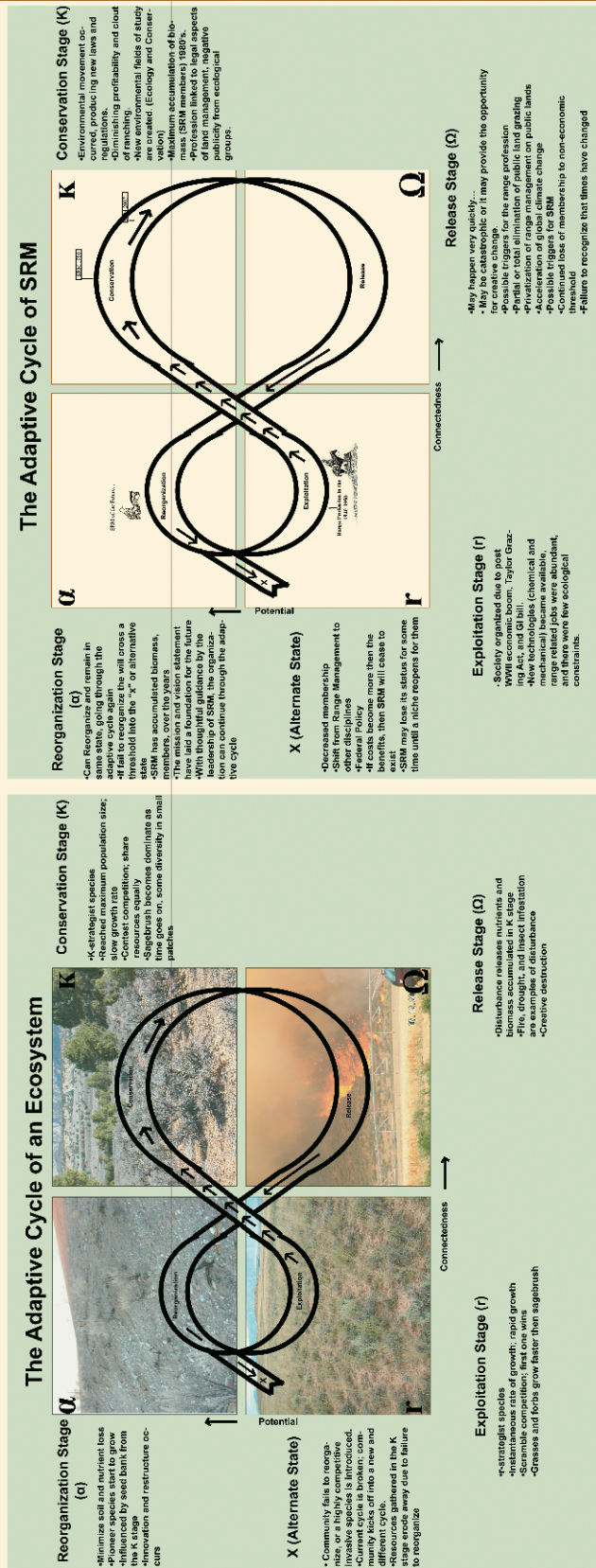
There are 4 stages of the adaptive cycle: reorganization (α), conservation (K), release (Ω), and exploitation (r). As a system moves through the 4 stages, *potential* and *connectedness* vary in strength. Potential can be thought of as “wealth” or factors that set limits for what is possible. In Holling’s⁵ words, it “...determines the number of alternative options for the future. Connectedness, or controllability, determines the degree to which a system can control its own destiny, as distinct from being caught by the whims of external variability.” Importantly, the movement through the 4 stages is not uniform; short arrows on the figure-8 pathway suggest slow movement (perhaps over years or decades), whereas long arrows suggest very rapid change (Fig. 1). Readers must note that the above and following are highly abbreviated descriptions of this model and its implications. For a detailed treatment, see Holling⁵ and Holling and Gunderson.⁶

The “Adaptive Phases” of SRM and the Range Profession

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Abstract: State and Transition models represent structural, but not functional thresholds (Briske et al. 2005). The adaptive cycle as modeled by Gunderson and Holling (2002), gives us a functional framework to show how identities of the Society for Range Management (SRM) have and will continue to change in the future. The Society for Range Management has been going through an adaptive cycle since its inauguration. Ideally SRM will not cross a threshold, but continue through the adaptive cycle, keeping a positive identity as a society that is concerned with the management and overall health of rangelands. If SRM does cross a threshold, it may cease to exist or have such low membership numbers that it cannot function as an organization.



Conclusion:

- SRM has been in an adaptive cycle since it was founded
- If SRM crosses a threshold it will:
 - o Cease to exist
 - o Function at a low level
- It is possible to guide SRM through the omega phase and, allowing us to transition back into the adaptive cycle.

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Figure 1. The Adaptive Cycle model for a sagebrush-steppe ecosystem (left) and SRM (right).

An Ecological Example: Sagebrush-Steppe Ecosystem

In a sagebrush-steppe ecosystem the adaptive cycle starts in the exploitation, or r , stage. Here, after a disturbance such as fire, pioneering species, characterized by short life spans, high reproductive rates, and fast population growth rates rapidly expand, filling the niches created and taking advantage of the resources available. Available resources might include soil nutrients, light, and water. Many of these pioneering species are grasses and forbs. In this stage there is relatively low connectedness and potential. Though the species are in competition for resources, they have not yet accumulated sufficient numbers or biomass to fully occupy all the space or resources (ie, there are still vacant niches). Over time, these species, as well as new immigrants, expand and continue to increase into the conservation (K) stage.

In the K stage, long-lived woody species such as sagebrush gain dominance of the ecosystem. Diversity-adding species, such as forbs and grasses, are represented in scattered patches throughout the system. K species have long life spans, low population growth rates, and high resource-use efficiency and are more specialized than are r species. These species grow in abundance until they find the carrying capacity of a system and then level off. This stage may continue for long spans of time, provided that no major perturbation occurs. Accumulated biomass reaches a maximum level. Resources within the system become limited and must be shared among community members. This creates very high connectedness among all members in the system. Potential in the current system, as well as for future systems, is high. During this stage the seed bank that will be drawn upon by future generations is further augmented.

The release stage (Ω) of a sage-steppe community might be represented by a wildfire. Once the fire is started, it clears away woody biomass and releases nutrients accumulated during the K stage. Potential is low during this brief stage because of all the unused nutrients and vulnerability of the site to external factors such as invasions, erosion, etc.

The last stage is the reorganization (α) stage. It is also a brief stage. Here, some new pioneer species may attempt to capture opportunity in order to utilize available nutrients, thereby increasing potential. The species that were previously dominant in the conservation stage are still represented in the seed bank, but are mingled with the new species, reducing the connectedness that previously existed. Through the recombination of these species, the new future is created.

As the community moves through reorganization into exploitation, there is risk of radical change. This is depicted as a kick-out point (X). If a system fails to reorganize because of intrusion of some external factor(s), such as invasion and domination by the nonnative species cheatgrass (*Bromus tectorum*), the system may kick out into an alternate state, ie, it would cross a threshold into a new and undesirable stable state, in the words of S&T theory.

The Adaptive Cycle: SRM Model

The Society for Range Management was born in 1948, its r stage. The founders of SRM saw an open niche not being filled by other organizations such as the Society of American Foresters, the Ecological Society, etc.³, and range scientists, range managers, and practitioners rapidly filled it. Several national and world events interacted to promote rapid growth of both the range profession and SRM. These included the post-World War II economic boom stimulating the livestock industry, the GI Bill providing the means for large numbers of veterans to attend college with many majoring in range management, and the enactment of the Taylor Grazing Act creating a demand for range managers in the Forest Service and Bureau of Land Management. The advancement of new technologies such as herbicides (2,4-D and 2,4,5-T) and mechanical treatments (chaining and rangeland seeding) also created job opportunities for range managers and increased activity in other range-related fields such as ranching. With relatively few environmental constraints and policies on these practices, large-scale land manipulations proceeded rapidly, and SRM continued to grow and fill its niche in the r -stage until the late 1960s and early 1970s.

As the country moved into the 1970s, we saw the birth of the environmental movement with the enactment of many new laws and regulatory policies. These included the Endangered Species Act, the National Environmental Policy Act, the Clean Water Act, and the Clean Air Act. These regulations substantially reduced the public land management agencies' involvement in large-scale range improvement projects, especially those done for the purpose of increasing forage for livestock.

This period also witnessed an increase in the number of "environmental" degrees offered by universities, thereby diverting at least some students who may have otherwise majored in range management. Job slots for young, upcoming range managers were also on the decline because most of the available positions had been filled by post-World War II graduates. Also, during this time, several new natural resource professional organizations emerged, offering alternate professional affiliations for professionals.

All of these events caused SRM to enter the K (conservation) stage where both potential (wealth, in a broad sense) and connectedness (controllability, linkages to other "competitors" and to the environment) are at their maxima. Membership peaked in 1980 and was followed by a decline until the recent past.

We believe that the SRM is still somewhere in the K stage today. Recall that movement from stage r to K can take a very long time. Some may argue that SRM has already reached its "carrying capacity" in its present form. Biomass (membership, finances) is high, but there are still high amounts of potential (influence) and connectedness (ties to other organizations, range uses, and values) to be gained.

The next stage that SRM may enter somewhere in the indefinite future is the release stage (Ω). Should a release occur (the model predicts that this stage is relatively brief), it would create a change that might be either catastrophic or beneficial, depending on how it is handled. Possible triggers of undesirable change might include a continued loss of membership to the point of financial insolvency, the removal of livestock grazing on public lands, creation of more environmental and legal constraints, or a failure to recognize that times have changed (Pehanec³ was lamenting this latter point 40 years ago). On the other hand, the change can be highly beneficial if it is brought about by foresight and creative leadership.

After a release (Ω), reorganization (α) might, and ideally would, occur. This is where SRM could reorganize in a major way to continue through the adaptive cycle and into the exploitation stage again. Reorganization might take the organization into a whole new future, building upon the knowledge, financial, and influence capital now in its metaphorical seed bank, while minimizing its soil (goodwill of its members) and nutrient (finances) loss. However, if these nutrients, biomass, and biodiversity that were accumulated in the conservation stage are eroded away, then SRM might cross a major threshold to enter the X stage (alternative state) and begin an entirely new and unknown adaptive cycle. Or it might simply cease to exist.

Discussion

There are multiple indications that SRM is changing and is continuing to build upon its influence and service to membership, but, for the most part, it is still residing in the conservation stage. The mission statement and vision of SRM include laudable concepts of continuing education, collaboration, sustainability, societal values, and balance. Publications in *Rangeland Ecology & Management* reflect a diverse variety of topics, not just those dealing with historic range topics of cows and grass. The Reno meeting was entitled "Traditions and Transitions," reflecting both the legacy and future of the profession. The Reno meeting's logo was an outline of the trail boss with recreationists, livestock, wildlife, water, and managers in it. Membership demographics are changing also, especially with regard to the growing (but still too small) number of women professionals.

Our research on this topic leads us to believe that although positive change is under way, it is not occurring at the same rate and with uniform enthusiasm throughout the organization. The Board of Directors is obviously confronting the need for change, as indicated by the article by Director Joel Brown in the August 2006 issue of *Rangeland News*. (This article apparently sparked the Rangeland Cup competition topic.) It might even be argued that they are moving into the beginnings of the release and reorganization stages. However, many SRM members have not made this move and are still deep in the conservation stage.

What is the nature of this disconnect? Turning again to an analogy from ecology, Briske and coworkers¹ state the

following: "Structural and functional thresholds are inter-related to varying degrees, but functional thresholds are anticipated to lag behind structural thresholds based on the time required to modify ecosystem processes." Most of the structural components of SRM (leadership group, national office, sections, committees, etc.) have been in place for many years, but a new and important component (a "structural threshold"?) was implemented in February 2002, with the adoption of the Strategic Plan for the Society for Range Management. This plan outlines everything that we believe needs to be done in order for SRM to continue as a great organization. However, we sense that the membership, in general, has not signed on. What is our basis for this statement? Although we had been researching this topic since October of 2006, working with knowledgeable people involved in range management and SRM, we had not heard about this plan until late January when we stumbled upon it and found it very similar to what, by then, we thought SRM should do. The fact that we had worked with several SRM members (consisting of past board members, past presidents, and current committee members) and had never heard of this plan indicates that there is a major lack of communication about and commitment to what we feel is a very sound plan for the future of a vital and relevant organization. Lag time between structural and functional change is natural, but can hamper SRM from becoming the organization it deserves and needs to be. SRM must address this lag and start functioning in the reorganization state, preparing for the next exploitation state. Being proactive and having predetermined actions to accomplish the mission and vision of SRM can reduce the distance between structural and functional change in SRM.

In conclusion, we believe that the adaptive cycle model accurately describes the history of SRM and, importantly, provides some insights into at least 2 possible futures. The desirable one of these—constructive, proactive change through the release and reorganization stages—can be achieved by energetically implementing the strategic plan that is already in place. This will require improved communication throughout SRM and building of commitment and enthusiasm within the membership at large.

Acknowledgments

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(Editor's Note: This is a short narrative of the winning poster of the Rangeland Cup competition.)

Society of Range Management - Drivers of Sustainability

Advisor: Jason Brengle
Presented by: Cole Lambert, Adam Heinle, Ashley Whitman and, Alison Iroz from the University of Wyoming

Youth Education

- Currently**
- Involvement with collegiate students
- Future Potential**
- Teach grade school students
 - Challenge high school students
- Benefits**
- Children become future members
 - Parents will support and may become members

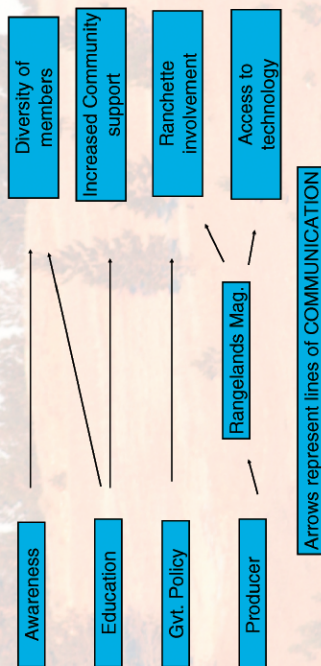
Government Policy

- Currently**
- Partnerships with wildlife and habitat conservation groups working for a common interest.
 - Lobbyists in Washington influence policy
- Future Potential**
- Form new partnerships with nontraditional allies
 - Modify 2007 Farm Bill in order to make grants available for renewable resources
- Benefits**
- More funding available for renewable resource related projects and research.

Technology

- Currently**
- Only limited amounts of resources and contacts
- Future Potential**
- Create research pool between producer and informational resources
 - technology
 - numbers of businesses and dealers
 - web links to acquire more information
- Benefits**
- More people will become familiar with the SRM and see it as a beneficial society for reaching producers and expanding new techniques and methods.

A special thanks to the following: Jason Brengle, Jack Issac, Justin Derner, Carrie Burke, Dr. Frank Galey, Dr. Stephen Ford



Public Awareness

- Currently**
- Distribution of *Rangelands* to members only
- Future Potential**
- Wide spread distribution among general public
- Benefits**
- More people would become aware of the SRM and the issue's its involved in
 - More support nation wide

Rangelands Magazine

- Current**
- Looks great!
 - Lots of color
 - Journal or science related articles
 - Producer stories
- Potential**
- Lets get it out there!
 - Include articles targeting ranchettes and small land managers
- Benefits**
- A diverse group of new members and increased awareness of SRM goals.

Land Managers

- Currently**
- Local agencies connect with the public
 - Mini-seminars discussing local issues
- Future Potential**
- More local mini-seminars
 - Target individual groups – Ranchettes
 - Create a list of resources that is easily accessible by the people including: articles, numbers, names, and websites
- Benefits**
- The goals of the SRM will only be accomplished if they can reach the people controlling the land



Society of Range Management – Drivers of Sustainability Jason Brengle, Cole Lambert, Adam Heinle, Ashley Whitman, and Alison Iroz, University of Wyoming



Application of State and Transition Model to SRM

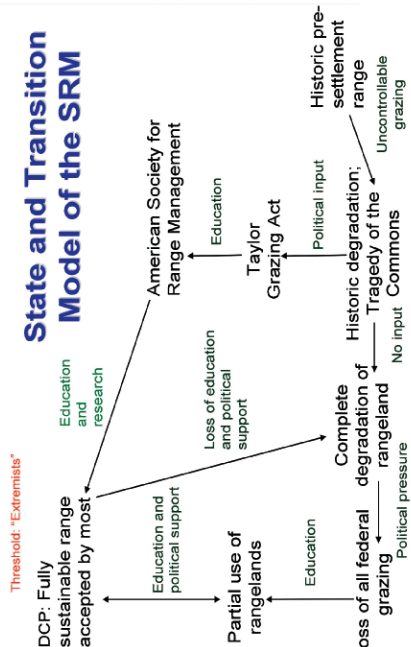
By: Kimmy Mott, Craig Eddie, Dan Ruterbories, and Jenny Walker
Mentor: Charles Butterfield
Chadron State College, Chadron, Nebraska 69337



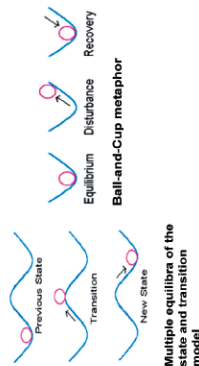
Abstract

The intervention of grazing problems on the western range began in 1898 and really took a hold with the Taylor Grazing Act. It was the development of acts such as these that led to the overall improvement of public range resources in the 1950's. From the 1960's to present there have been multiple land use mandates set up for government lands. The American Society of Range Management first came about in 1948 as a way to bring range management professionals together. State and transition models are useful tools in describing the current "state" of the rangeland. States are a vegetative condition. There are factors that cause change, transitions, which can be natural or human induced disturbances. Thresholds minimize change and are difficult to overcome because of the amount of time and energy needed. When applying the state and transition model to the SRM, a state is something such as a fully sustainable range accepted by most; transitions consist of movements through educational, environmental, and political pressures; thresholds can be rangeland limitations or a person's ability to change their minds. Our model explains how the state and transitions of the SRM has changed through education, research, and political issues to improve the resource.

State and Transition Model of the SRM



Examples of Models



The 1900 to 1930 Period

- Intervention into grazing problems on the western range began in 1898 when the Department of Interior granted grazing permits to limited producers on federal lands.
- In 1905, the Forest Service was set up in the Department of Agriculture and the process of forage allotment was initiated.
- Between 1915 and 1920, the cattle prices were high during World War I and severe overgrazing took place.
- Between 1910 and 1920 grazing laws were put into effect on National Forest lands.
- In 1923, the first textbook on range management was written.
- By 1925, approximately 15 colleges were offering courses in range management.
- Research in the 1920's investigated the effects of different stocking intensities on forage and livestock production.

Application of State and Transition Model to SRM

Kimmy Mott, Craig Eddie, Dan Ruterbories, Jenny Walker, and Charles Butterfield, Chadron State College

Introduction

We applied the state and transition model to help explain the various stages of the SRM as a whole. States when related to rangeland, are a vegetative condition. There are factors that cause change (transitions) which can be natural disturbances or grazing. Transitions are consistent movements through education and political pressures. A threshold is when people are able to change their minds on different issues. We felt that the desired plant community (DPC) in relation to the SRM would not be the historical climax community, which in the past lead to uncontrollable grazing of rangelands. Through the development, and increased membership of the Society of Range Management we believe we are transitioning into a fully sustainable range accepted by most. Based off of this, we were able to determine what the individual states, transitions, and thresholds would be in retrospect to the history of the SRM.

Conclusion

In using the state and transition model to explain the various stages of the SRM as a whole, we concluded that the DPC, rather than a historical climax plant community (HPC) in relation to the SRM would be a fully sustainable range that would be accepted by most. The HPC would be the historical pre-settlement of range which would lead to the uncontrollable grazing of rangelands. We achieve these states through continued education and political influence. Based off of this, we were able to determine that one of the states would be the development of the SRM. The transitions were mostly driven by education and political environmental pressures. We concluded that the thresholds were when people were able to change their minds on different issues.

The 1930 to 1960 Period

- At the request of ranchers, the Taylor Grazing Act of 1934 placed administration of remaining public lands under the Grazing Service, later becoming the Bureau of Land Management.
- The Soil Erosion Act was passed in 1935. It set up the Soil Conservation Service to deal with soil erosion problems on private lands.
- The 1930's showed improvements in the range resource on public lands, and increased range research in range livestock production.
- The Multiple Use Act of 1960 mandated that Forest Service lands be managed for several uses, such as grazing, wildlife, timber, and recreation, rather than for a single use such as grazing or timber.

The 1960 to 2000 Period

- During the 1960's, public concern over environment and natural resources increased because of the growing opposition to livestock on federal lands.
- The National Environmental Policy 1969.
- The Federal Lands Policy and Management Act of 1976 provided a similar multiple use mandate for Bureau of Land Management lands.
- Methodologies for range nutrition and ecological studies have been improving since the 1980's. Due to better technological resources and advances research and education have been greatly improved.
- In 2006, the SRM established a presence in Washington D.C. to better communicate with the public, political group, NGO's, and government agencies.

Society of Range Management in Transition

Joe Martin, Matt Lucas, Justin Read

Chadron State College
Mentor Chuck Butterfield

Mission Statement: to promote the professional development and continuing education of members and the public and the stewardship of rangeland resources.

Introduction

The formulation of a state and transition model involves identifying the vegetation states, determining which of the states are linked and describing the transitions. The thresholds maybe the resistance to change from a cool season dominated pasture to a short grass, warm season dominated. To get to this desired state it requires a lot of energy through grazing and management techniques. State-and-transition models have widely replaced the range condition model because they can describe vegetation change in response to numerous variables, including fire, weather variation and management prescriptions, in addition to grazing intensity.

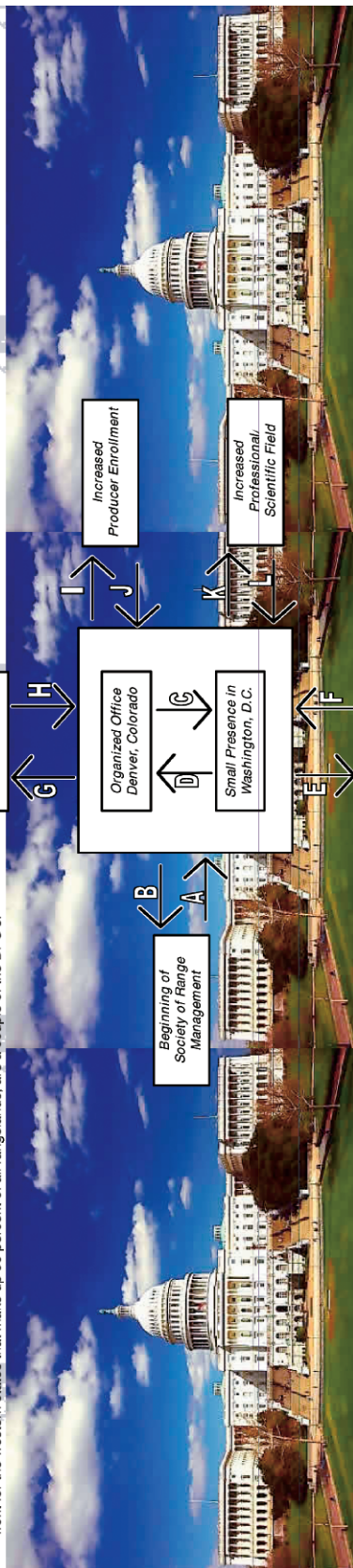
The Society for Range Management is a professional society dedicated to supporting persons who work with rangelands and have a commitment to their sustainable use.

We are applying the state and transition model to the SRM to "describe the SRM's current and potential future identities as an organization." Our HCPC is a present day with a centralized office in Denver Colorado, and a small political presence in Washington D.C. Our DPC is to have a larger voice in Washington D.C. with an office, interns, and fellowships positions. The threshold that has to be overcome, would be to convince the membership of the organization of the added benefits of a higher presence in Washington D.C. Our opinions are stated as to where the SRM could possibly go and what thresholds would have to be crossed to obtain these future identities. In our opinion increased membership in the society and a larger voice in the political front for the western states that make up 90 percent of all rangelands, are a couple of the DPC's.

Abstract

State-and-transition models have widely replaced the range condition model because they can describe vegetation change in response to numerous variables, including fire, weather variation and management prescriptions, in addition to grazing intensity. We can apply this to the Society for Range Management by looking at what HCPC the Society is at right now and with manipulation of membership and increased knowledge of the members to transition into our proposed DPC. Our opinions are stated at where the SRM could possibly go and what thresholds would have to be crossed to obtain these future identities. In our opinion increased membership in the society and a larger voice in the political front for the western states that make up 90 percent of all rangelands, are a couple of the DPC's.

Increased Student Enrollment



HISTORY OF SRM

- March 28-30, 1946 the first meeting was held in Moscow, Idaho.
- January 29-31, 1948 the organizational meeting was held in Salt Lake City, Utah. Details of organization and functions were determined for the Society.
- August 1947 Organization Committee choose the name "American Society of Range Management" (ASRM)
- 1949 Society became registered as a corporation under laws of the State of Wyoming
- 1950 "The Trail Boss" was first used and in 1951 first appeared on the journal cover.

Thresholds

- A) The large amount of diverse grazing practices in cattle.
- B) The consistent want and lack of information given to public membership.
- C) Increased income and employment of persons in Washington D.C.
- D) Pull funding of person(s) in Washington D.C.
- E) Increase employment (internships/shops) with congress to increase SRM contact with key people in congress. Help increase the SRM's influence with rangelands/rangeland issues.
- F) Decrease funding
- G) Reduced amount of student activities and learning experiences. Eliminate a student section in states sections.
- H) Increase in student activities.
- I) Help producers with political issues pertaining to governmental and private rangeland/grazing issues. Provide a program to help implement grazing strategies on a one-on-one basis for producers with membership in the SRM.
- J) Decrease support to producers.
- K) Increase publications, begin funding studies
- L) Decrease knowledge to professional and educational groups.

Conclusion

Our HCPC is a present day with a centralized office in Denver Colorado, and a political presence in Washington D.C. Our DPC is to have a larger voice in Washington D.C. with an office, interns, and fellowships positions. By convincing the membership of the Society for Range Management that through increased lobbying, interns, and fellowships, positive affects would result from the increased SRM presence in Washington D.C. would cause a shift from the HCPC to our DPC

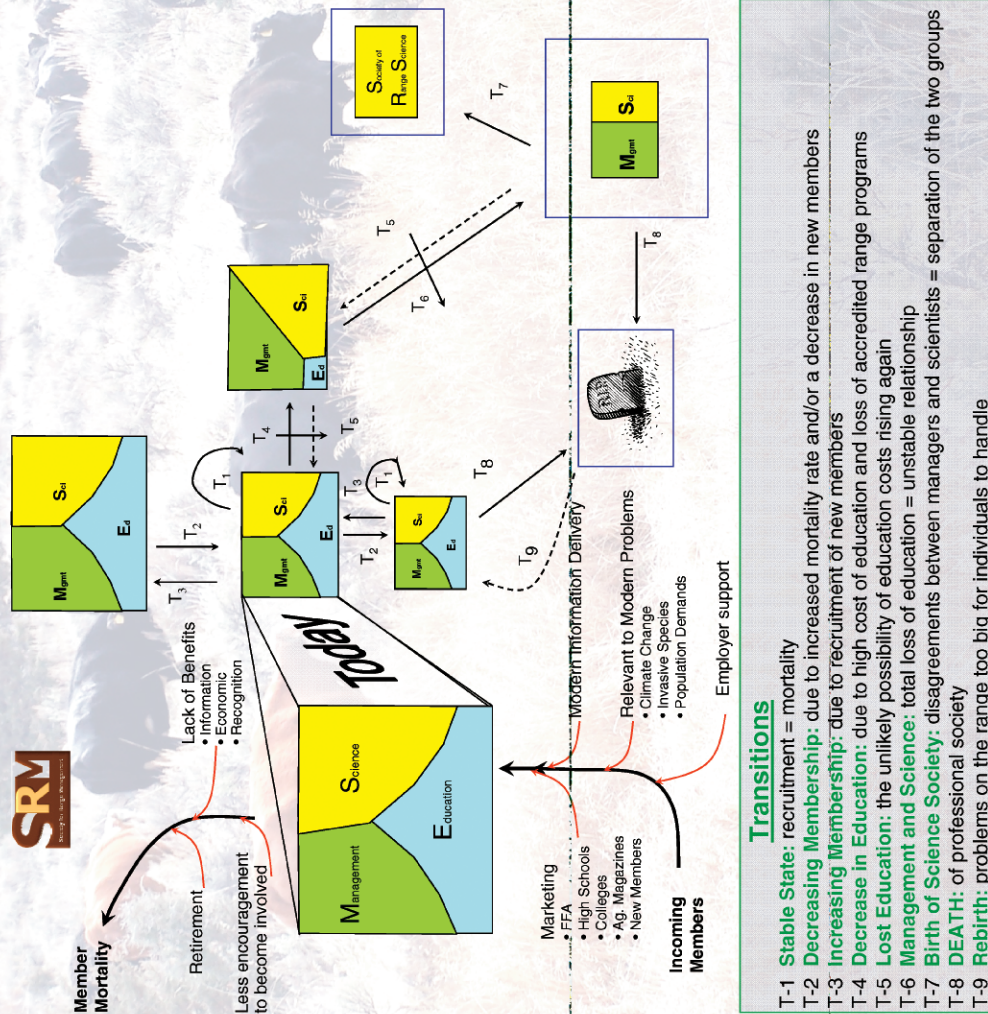
Society of Range Management in Transition Joe Martin, Matt Lucas, Justin Read, and Chuck Butterfield, Chadron State College

SRM Foresight 20:20

SRM Mission Statement: To promote the professional development and continuing education of members and the public and the stewardship of rangeland resources.

University of Idaho
College of Natural Resources

Jeff Stackhouse ♦ Steven Doverspike ♦ Ruth Luke ♦ Crystal Dannar



Abstract: Transitions in the Society for Range Management are going to be determined by the membership. Education is essential to keep the scientists and the managers together. The growth of the Society depends on recruitment and marketing of new members, employer support, and modern information delivery systems.

Introduction: Conceptual models provide a framework for describing events, illustrating potential inputs and outputs. The model helps us examine the full spectrum of possibilities – providing the big picture. The model that we developed will allow us to visit with our colleagues and committees within the Society and strategize how to maintain education and membership within the SRM.

Narrative: Currently, SRM people and programs are about an equal mix of science, management, and education. We believe that education is the glue that holds our Society together and are concerned about the future of University rangeland education programs. We also believe SRM needs to aggressively attract new members and provide services and programs that maintain current members. Climate change, invasive species, and human population demands are issues facing rangelands and SRM. The future is bright if SRM helps members address the contemporary issues.

"Since what the future holds depends largely upon us as members, we must determine what we want the Society to be, lay plans to that end, and then see that these plans are carried out."

Joseph F. Pechanec
SRM President 1949

SRM Facts:

1948 – first meeting with 650 members. Widespread membership throughout the U.S., Canada and South America.

Birth Place of Range: Idaho

1919 – first description of a range curriculum.

1946 – first Interagency Range Management Conference with 66 attendants.

Today – 48% of Idaho's land is characterized as grasslands, shrublands, and woodlands

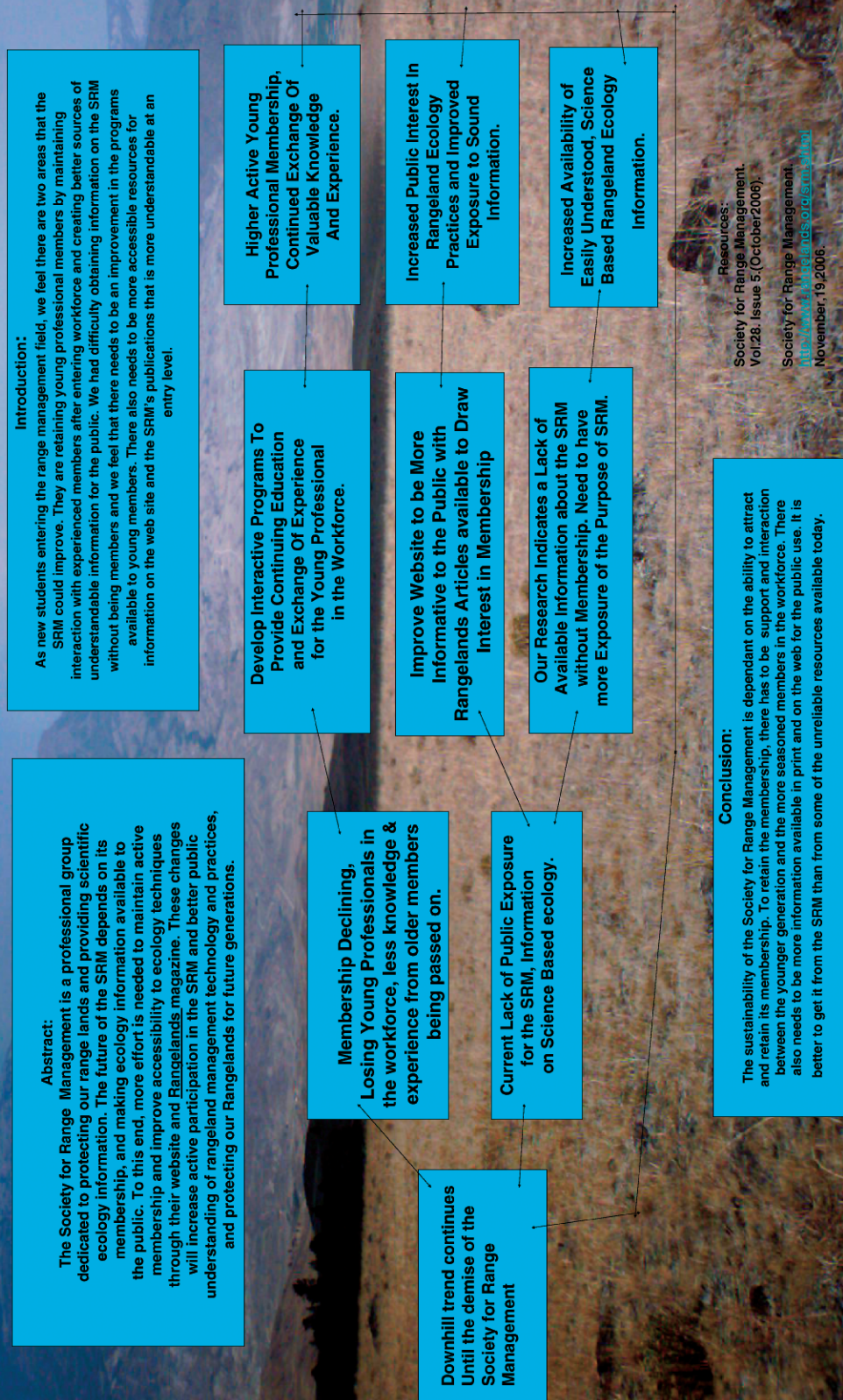
SRM Foresight 20:20 Jeff Stackhouse, Steven Doverspike, Ruth Luke, and Crystal Dannar, University of Idaho

The Future of the Society of Range Management.

Where do we go from here and how do we get there?

Spencer Otto, Scott Steiner, Paula Wagner ,Dennis Phillippi. ²

Northwest College, Powell ,WY¹.
First Vice-President, Society of Range Management.²
Certified Range Management Consultant, SRM.²



The Future of the Society of Range Management Spencer Otto, Scott Steiner, Paula Wagner, and Dennis Phillippi, Northwest College

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Society for Range Management: What Lies Ahead?

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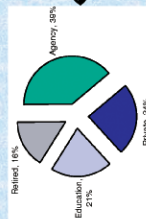
Questions to be Answered

- Where is SRM now?
- Where do we want to go?
- How do we get there?
- What are the obstacles?

Drivers

- Social
- Environmental
- Fiscal
- Political

2002 Membership
Society for Range
Management



Ball and Cup Diagram

- SRM organized in 1948
- Current SRM is where the ball is
- At this position, we are pushing towards the Clementis SRM
- Super SRM is a threshold that needs to be crossed to achieve the flexible SRM
- Flexible SRM is a stable state and is adaptive to new conditions
- No interest is a large obstacle to cross because there will always be an interest in natural resources
- Once there is no interest it is easy to slip to demise and not return

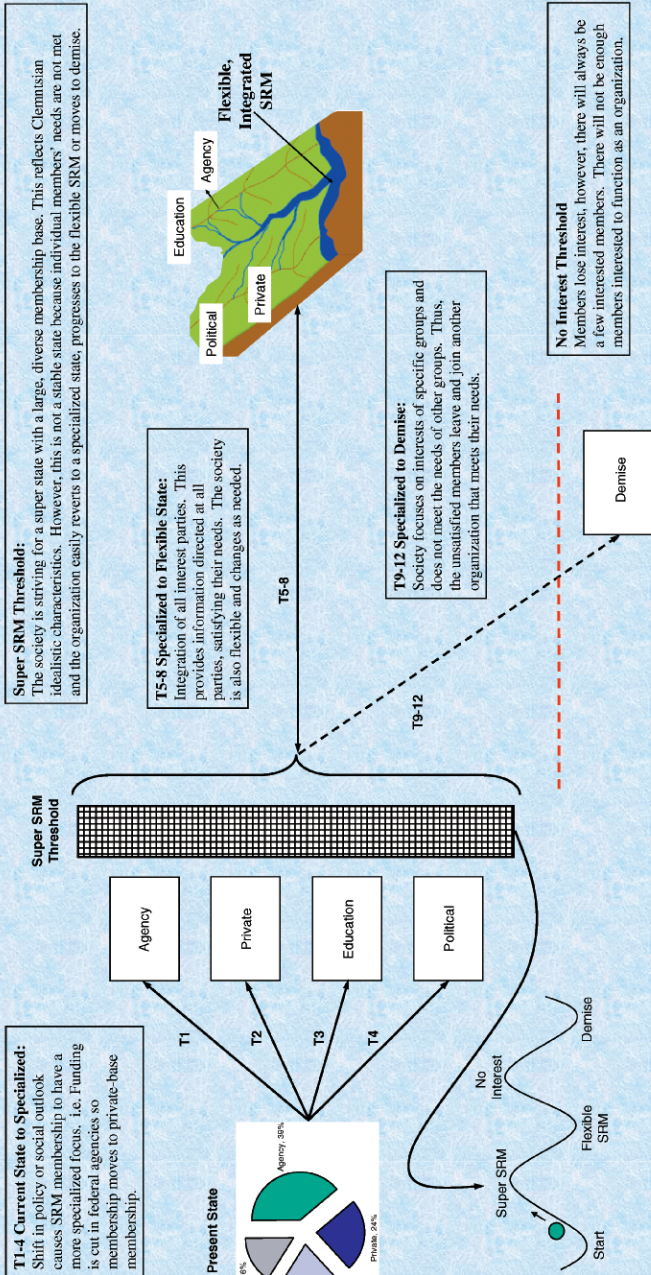


Figure 1. State and Transition Model for the Current and Potential Future States of the Society for Range Management. There are four states in the specialized category. Another state is the flexible, integrated SRM. The Super SRM Threshold is a positive threshold where there is a large membership but reverts quickly to a state. The threshold to demise is where members lack interest and the SRM ceases to exist as a functioning organization. The ball and cup model shows the challenges to move between states and over thresholds.

Discussion

Where is SRM now?
The Society for Range Management currently has the majority of the membership affiliated with a government agency but with other groups represented. The current goal of the society is a Clementis ideal state "the Super SRM" that tries to be all things to all members. This is comparable to a climax community that has a set percentage of each interest group that does not change over time. However, this can not be a stable state because it is so difficult to maintain and satisfy all of the members. Therefore, this Super SRM quickly reverts back to another state indicating that it is a threshold instead of a state.

Where do we want to go?
The preferred alternate to the "Super SRM" is a flexible, integrated state possessing qualities similar to watersheds in a natural ecosystem. Like tributaries in a watershed, the interest groups contribute to the overall power and success of the SRM. In this state, the SRM responds to the terrain and other influences by moving with the flow rather than against it.

How do we get there?
The SRM could achieve this state through more public awareness and involvement, communication among members, sensitivity to issues affecting natural resources and willingness to remain open-minded. The flexible state can only be achieved through a positive balance between fiscal, political, environmental and social drivers.

What are the obstacles?
Obstacles include: small membership base, increasing costs, loss of interest, traditionalists and negative pressures on natural resources. If these obstacles are not addressed and overcome, demise is likely. The Society for Range Management should continue to push forward in the quest of a more flexible and integrated organization.