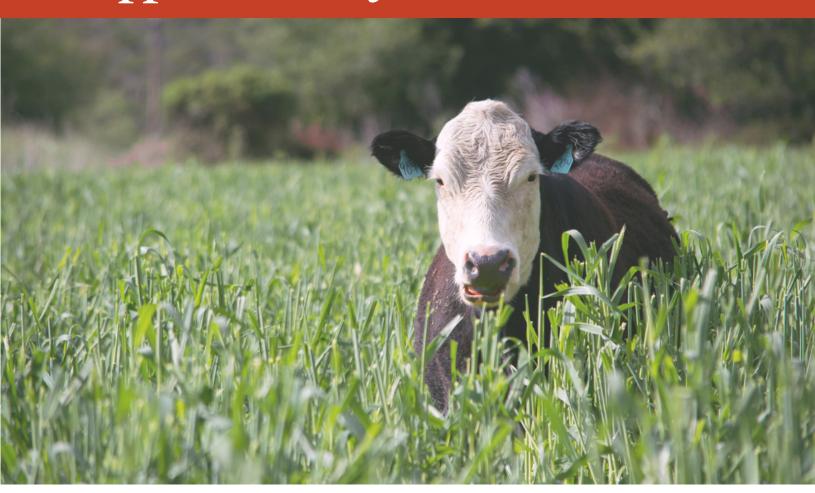
Guide to Regenerative Grazing Leases:

Opportunities for Resilience



2022





Acknowledgments

This guidebook was written during a time of immense challenge—a global pandemic and ecological, economic, and social crises; and immense opportunity—a growing community of passionate people and organizations committed to regeneration. It is more important than ever that we support land stewards to turn these opportunities for resilience into transformative change on the land and in our communities. Completing this document is cause for celebration and hope. We want to acknowledge and thank the advisors who spoke with us and offered their valuable insights for this guidebook.

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California FarmLink www.cafarmlink.org

TomKat Ranch Educational Foundation www.tomkatranch.org

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Guide to Regenerative Grazing Leases: Opportunities for Resilience

FOREWORD

Land managers steward the majority of our working lands across the planet. They have an essential role in promoting land health, ecological function, and biodiversity. These managers combat erosion, invasive species, water pollution, and climate change. The <u>Profiles in Land and Management Series</u> showcases how innovative land managers from across the country thoughtfully harness the impact of grazing livestock as a tool for ecological management to improve soil health, decrease bare ground, and increase water infiltration and retention.

This Guide is designed to empower private, nonprofit, and public landholders, as well as easement-holders and grazing tenants to create and maintain leases that incentivize management to foster and restore diverse and healthy ecosystems, just and thriving communities, and profitable

agricultural businesses.

Across the US today, nearly 30% of grazing land is leased. Typical leases rarely recognize or incentivize standards for caring for these lands. Over time, lack of long-term investment and ecological management of rangelands can lead to costly declines in soil health, biodiversity, and productivity—affecting landowners, lessees, and the human and wild communities that depend on these ecosystems.

Across the US today, nearly 30% of grazing land is leased.

FOREWORD (Continued)

Regenerative graziers use livestock to mimic and enhance ecosystem processes to improve the resilience and productivity of rangelands. By blending conservation and agriculture, regenerative grazing can produce valuable products, services, and synergies that are mutually beneficial for graziers and their livestock, landholders and land trusts, conservation groups and surrounding communities of people and wildlife.

Despite increasing interest and expertise in regenerative grazing, landholders and lessees often find themselves at a loss for lease language that promotes regenerative grazing and land management. This guidebook was designed to help landholders improve the productivity and resilience of their lands through strong and collaborative lease agreements, and to give innovative and skilled grazing managers guidance and support to build resilient, regenerative businesses.

HOW TO USE THIS GUIDEBOOK

This guidebook provides a framework for drafting rigorous grazing agreements that clearly articulate the shared agricultural, ecological, and social values of each party; foster effective communication to support adaptation and innovation; and align incentives so that the productivity and resilience of the lands are improved. In addition to the formal lease, this guidebook also provides guidance on creating

adaptive Agricultural Management Plans (AMPs)—to be used in conjunction with leases—that help landholders and lessees articulate the specific steps that will be taken to accomplish their shared goals. It concludes with a discussion of ranch succession, equity, and legacy.

It is our hope that this guidebook will help readers design and maintain regenerative grazing leases on California's rangelands that reflect and support the resilience, adaptability, and outcomes they wish to see.

It is our hope that this
guidebook will help readers
design and maintain
regenerative grazing leases on
California's rangelands –

California Farmlink and TomKat Ranch

FOREWORD (Continued)

IMPORTANT NOTE: The lease and planning concepts presented in this Guidebook are not comprehensive, and are not intended as boilerplate language. Instead, they should be used with other existing lease tools for the construction of rigorous regenerative grazing leases. Readers should consult with an advisor and/or attorney to draft and review any lease well before it is signed.

A Note on Land Trusts

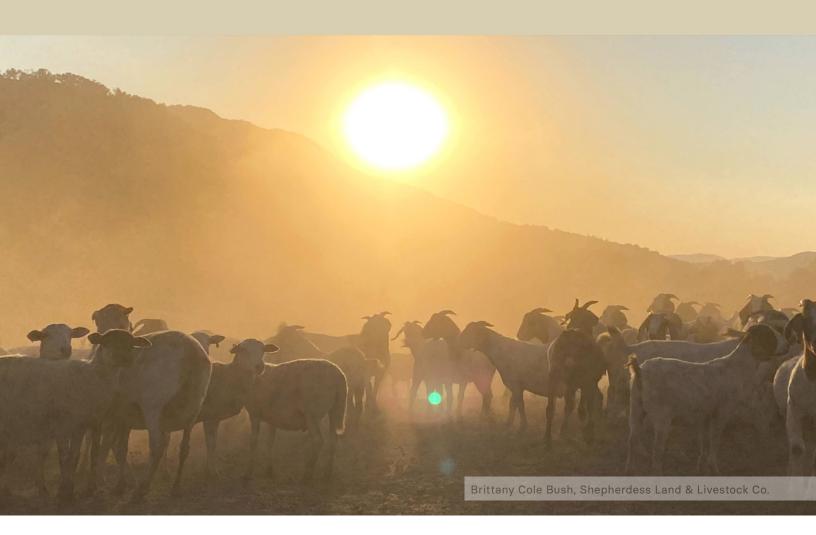


Conservation easements can protect important grazing lands from subdivision and development, preserve certain conservation values, and even prohibit grazing in sensitive areas. 'Affirmative' easement language is being used by some land trusts to require active grazing and management planning, but easements alone rarely promise regenerative outcomes.

Agricultural conservation land trusts must work in conjunction with landholders, lessees, and range managers to achieve ecological, social and economic goals. California's land trusts have protected over 2.5 million acres across the state, according to the California Council of Land Trusts, including over 320,000 acres in easements held by California Rangeland Trust.

Our public and nonprofit land trusts hold responsibility for stewarding these protected lands, even as they work to conserve more. By executing carefully considered grazing leases on rangelands they own, and by providing lease information to the landowners with whom they partner as easement-holders, land trusts can support working graziers and regenerative outcomes.

Guide to Regenerative Grazing Leases: Opportunities for Resilience



CHAPTER 1. Introduction

The Foundations of Regenerative Management and Grazing

CHAPTER 1. Introduction (Continued)

THE ROLE OF GRAZING ANIMALS IN RANGELAND ECOSYSTEMS

Rangelands represent some of the most diverse ecosystems on the planet, providing clean water, nutritious forage, and critical habitat to countless species of plants, animals, and microorganisms. Rangeland ecosystems—primarily grasslands, scrub, and woodlands—make up nearly half of California's approximately 100 million acres of land and are among the lands most vulnerable to development or conversion to agricultural cropland.

Many species of rangeland plants co-evolved with grazing animals and benefit from the impact of livestock browsing, grazing, trampling, urinating, and dunging. The fertile grasslands and rich soils of the Yukon, the Great Plains, the breadbaskets of Eastern Europe, and the Serengeti emerged, in part, due to the seasonal migrations of antelope, elk, wildebeest, zebra, gazelle, and more. During their migrations, these herd animals moved frequently in search of fresh forage (and to stay ahead of predators) and their disturbance benefited the soil, plants, and ecological processes.

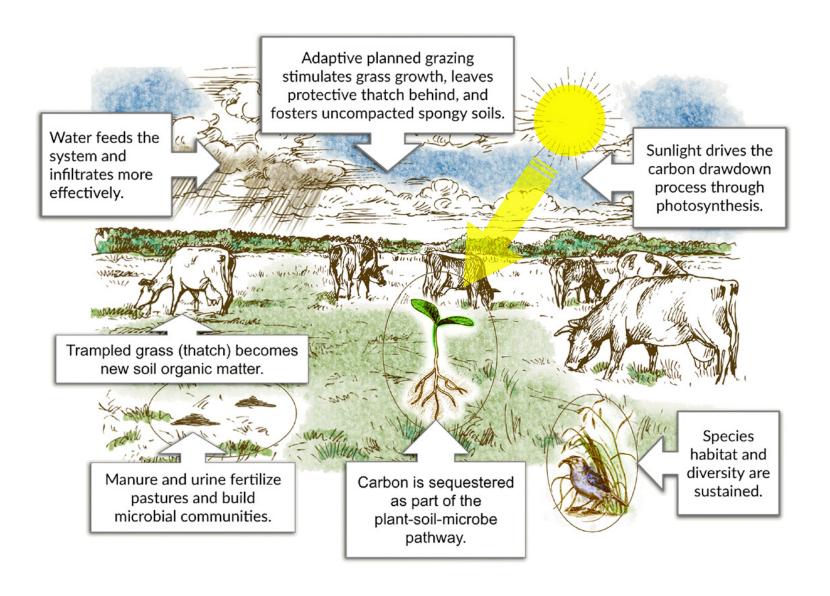
The constant movement of animals through the rangelands meant that they grazed only a portion of the plants before moving on, stimulating plant growth in much the same way that a farmer prunes a fruit tree to encourage productivity. The impact of large numbers of hooves trampling the ground, and the nutrients deposited from their waste, stimulated the microbial community, broke up soil, and created pores for plant seeds to take root and for water to infiltrate.

The practices and strategies of regenerative grazing mimic how nature grew some of the most abundant and lasting ecosystems on the planet, providing clean air and water, critical habitat, and life sustaining food, fiber, and employment.



CHAPTER 1. Introduction (Continued)

For millennia, the symbiotic partnership between plant communities and grazing animals has created healthy, diverse, and resilient ecosystems both above and below ground.



HEALTHY SOILS, HEALTHY RANGELANDS

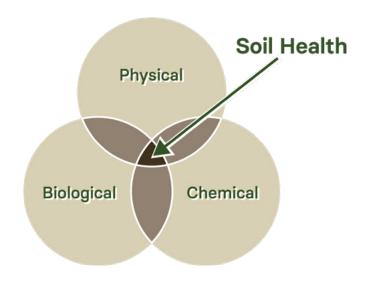
The ecological function of rangelands, which Point Blue Conservation Science defines in their Rangeland Monitoring Network (RMN) Handbook as "the capacity of rangelands to support life" includes the flow of solar energy and "the capture and cycling of water by soil and organisms." Rangeland ecological function generates plant productivity, sequesters carbon in the soil, supports robust wildlife populations, and can be viewed as a key factor in financial and ecological sustainability.

"Soil is the engine of life on rangelands." –
Point Blue Conservation Science

Soils are key determinants of rangeland ecological function. In fact, soils themselves are a living ecosystem that can be managed and monitored. NRCS defines soil health as "the continued capacity of soil to function as a vital living ecosystem that sustains plants, animals, and humans."

Point Blue's <u>Soil Health on Rangelands</u> report is a valuable tool for rangeland managers wishing to influence and improve soil health. Understanding how soil health is influenced by a range of biological, chemical, and physical properties can be a useful place to start. Inherent soil properties, such as soil texture, mineral content, and composition, remain relatively stable over time and are not easily changed by management. Dynamic soil properties, on the other hand, such as soil organic matter, bulk density, water infiltration, aggregate stability, and microbial community characteristics can be improved relatively quickly (over months or years) through regenerative management.

For more on the connection between soil health and rangeland health, see the USDA Natural Resources Conservation Service (NRCS) publication, Rangeland Soil Health.



REGENERATIVE AGRICULTURE

TomKat Ranch defines regenerative agriculture as "the science, art, or occupation concerned with providing ample, nutritious food; improving local economies equitably; building soil fertility; restoring biodiversity, water cycling, and water quality; and using natural processes to achieve climate stability by restoring carbon and other nutrients to the soil."

Soil health is the foundation of regenerative agriculture. The four principles of soil health management—1) minimize soil disturbance, 2) maximize biodiversity, 3) keep the soil covered, 4) maintain living roots—thus form the foundation of the principles-based approach of regenerative agriculture.

Principles of Regnerative Agriculture

Each principle of regenerative agriculture is scientifically informed, with many potential tools and management practices to be implemented (and continually adapted) based upon one's context:

1. Understand your context.

Develop a sensitive and on-going relationship with the environmental, economic, and social context of the land to identify which agricultural practices produce the most total value relative to their full range of costs. Keep in mind that context is in a state of constant change and can vary significantly across time and space. Traditional and indigenous land management practices can be an excellent reference point as they were developed and tested over generations by people with a strong desire and necessity to maintain and enhance the health of the ecosystem while supporting thriving human communities.

2. Minimize soil disturbance.

Preserve the integrity and structure of soil and limit the amount of mechanical disturbance that can damage roots, harm the health and diversity of microbiological communities, and create soil compaction.

3. Maximize diversity.

Support biodiversity above and below ground and limit the use of practices or chemicals that can damage it. Biodiversity in rangelands is critical to their productivity and resilience. Encouraging a variety of plant species and supporting macro- and micro-biological diversity can extend growing seasons, increase resilience to extreme weather, reduce livestock predation and health concerns, support wildlife habitat, and enhance ecosystem function.

CHAPTER 1. Introduction (Continued)

4. Keep the soil covered.

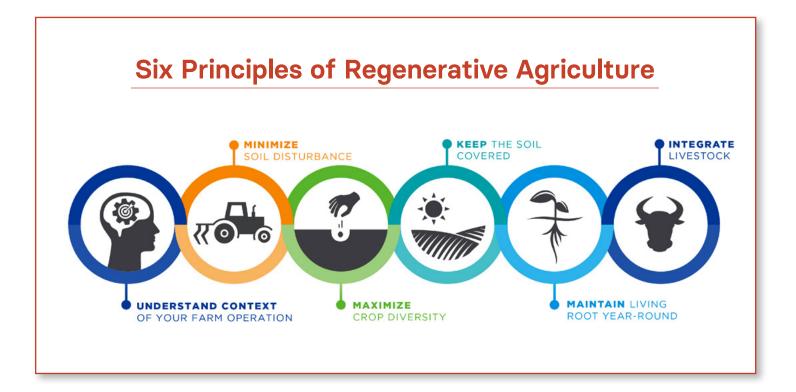
Keep soil covered with growing plants, ungrazed trampled litter, or supplemental covers like hay or mulch. Uncovered, or bare, soil is more susceptible to wind and water erosion and less able to absorb and retain water. Uncovered soil is also exposed to the sun, which can raise its temperature, killing beneficial microbes and evaporating soil moisture.

5. Maintain living roots for as long as possible.

Use grazing to prune plants and keep them growing, and provide sufficient recovery for grazed or mown plants. Living plant roots maintain healthy soil structure, increase water infiltration, support plant regrowth, and increase soil organic matter by exuding photosynthesized carbon into the soil. Many grasses will stop growing after going to seed and plants that do not receive sufficient recovery time after being grazed will begin to experience root loss.

6. Integrate livestock.

Use livestock to promote plant growth and nutrient cycling on the land. Carefully managed livestock can support or improve ecosystem function.



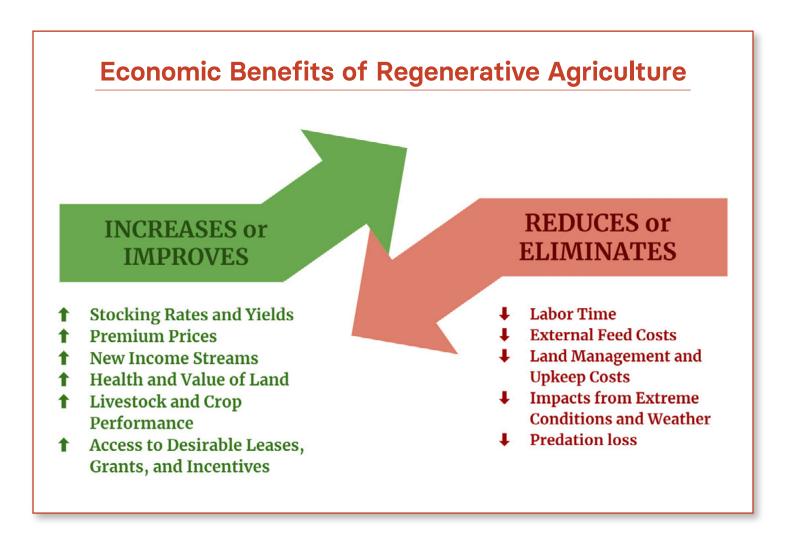
Source: General Mills, Regenerative Agriculture

CHAPTER 1. Introduction (Continued)

These regenerative principles inform management decisions and practices that help build healthy soils and, in turn, improve air and water quality, increase biodiversity and wildlife habitat, increase water infiltration and retention, reduce soil erosion, support plant and animal health, and build vital resilience in the system.

Improved ecological functioning can lead to improved economics and business outcomes, such as a reduction in input costs, improved crop and livestock performance, and greater resilience to market fluctuations and extreme weather. These and many other economic benefits have been observed and documented in the Profiles in Land and Management series at www.RegenerativeRanching.org.

The following chapters include specific strategies and lease elements that support landholders to realize the potential of regenerative grazing and effectively navigate the management and relational complexities of the context-dependent nature of natural and human systems.



Guide to Regenerative Grazing Leases: Opportunities for Resilience



CHAPTER 2. Grazing Leases

Elements for Consideration When Drafting Your Regenerative Grazing Lease

CHAPTER 2. Grazing Leases

LEASE BASICS

An agricultural lease is a real estate contract in which a landholder (a.k.a. landowner, landlord, or lessor) conveys specified agricultural property rights to a lessee (a.k.a. tenant or leaseholder). These may include rights to land, water, perennial crops, water, buildings, housing, hunting, and so on.

A good agricultural lease should include basic contract clauses for area and infrastructure, duration, remuneration, approved uses, responsibilities of each party, risk management and indemnification, dispute resolution, and termination. A regenerative grazing lease goes further by establishing the high-level values of the landholder and lessee. In its main-body clauses as well as any attachments or exhibits, a regenerative grazing lease outlines the goals, incentives, monitoring protocol, and communication structures that will support the parties to achieve those goals, and to adapt when needed.

This guidebook is designed to build on existing lease resources, not replace them. The clauses discussed in this chapter are not comprehensive; rather, they are meant to offer ideas, examples, and context for a regenerative approach to grazing leases.

For background on general agricultural leases, California FarmLink's <u>Resource Library</u> includes a number of accessible guides and templates. For a good foundation in grazing leases, see UC ANR's 2020 publication, "<u>A Guide to Livestock Leases for Annual Rangelands</u>." These resources and more can be found in a text box in the following section, as well as in the <u>Resources</u> section at the end of this guidebook.



When used in conjunction with other lease resources, this guidebook can help landholders and grazing lessees create agreements that encourage regenerative management and promote the regenerative outcomes, such as the production nutritious food, equitable improvement of local economies, increased biodiversity, improved soil fertility, water cycling and quality, and nutrient cycling, and improved climate stability and resilience.

WRITING, NEGOTIATING, AND MAINTAINING THE LEASE

The process of drafting a lease can build a critical foundation of understanding and trust between the landholder and lessee (or the lease 'parties'). A good way to begin is with an unhurried conversation about each party's values regarding land management and their intent for the lease. If these align, the parties can proceed as true collaborators.

With shared and/or aligned values to guide them, landholder and lessee can begin negotiating basic lease goals and stipulations—where the 'teeth' of the lease are found. The process of negotiating and drafting can set important precedent for respectful and regular communication. Parties are urged to discuss their desired goals for the lease negotiations from the outset, and then formalize their communication process in the lease itself. This will help them find common ground and avoid costly misunderstandings later on. It can take several meetings to build and finalize an equitable and secure agreement for both parties.

In 2010, The FarmLASTS Project interviewed a focus group of public, land trust, and institutional landowners on tenure and conservation practices. Landholders reported that "the most challenging aspect of drafting leases with environmental stipulations is finding a balance between making sure environmental goals are met while allowing farm lessees sufficient freedom and flexibility to introduce needed changes in their farming systems." A regenerative lease cuts through this conundrum by focusing on shared goals of land health. Thought of in this way, 'environmental stipulations' do not limit the lessee's success, but rather enhance success through mutual trust and win-win actions that build a healthier land base, business, and community.

Signing a lease is a significant step, but maintaining the lease is equally important. Each year—or at the end of a lease term, if less than one year—the parties are called upon to evaluate what worked and what did not, either through an evaluation process laid out in the lease or simply by reviewing the lease and making adjustments as needed.

An experienced professional can help both parties address issues and uncover questions that the individuals may not have thought to pose on their own. Working with a lawyer and/or advisor will also help the parties understand the lease language, implications, and how state law applies to the rights and responsibilities of each party. However they arrive at a completed agreement, each party should review the lease with a lawyer before signing to ensure that their needs and interests are met by the lease.

GETTING HELP WITH LEASE DRAFTING AND NEGOTIATION IN CALIFORNIA

Publications and templates

- » California FarmLink, Growing on Solid Ground: A Farmer's Guide to Land Tenure
- » California FarmLink, Elements of a Good Lease
- » California FarmLink, Agricultural Cash Lease Template
- » A Guide to Livestock Leases for Annual Rangelands
- » University of California Division of Agriculture and Natural Resources
- » Land For Good, Toolbox For Leasing Farmland
- » American Farmland Trust, Report on Non-Operator Landowners

Online lease education and lease-building tools

- » Land For Good, Build-A-Lease Tool
- » Center for Agriculture and Food Systems, Farm Lease Builder
- » National Young Farmers Coalition, Finding Farmland Online Course
- » Vermont Law School, Farmland Access Legal Toolkit

Individual lease drafting support

- » California FarmLink
- » Private realtor or attorney







REMEMBER, always have a lawyer review your draft. This will ultimately save you money and ensure both parties are sufficiently protected.

VALUES AND INTENT

A regenerative grazing lease begins with a clear Statement of Intent (or Values). This statement, agreed upon by both parties, serves as a "guiding star" for the parties as they collaboratively work to create a lease that helps achieve the intent or uphold the values they have stipulated. As time passes, or as unexpected events arise, this statement also provides guidance for agreement interpretation and context for adaptation.

The Statement of Intent, usually a few short paragraphs, ensures that the originating parties are aligned from the outset. It is also a good opportunity to recognize 'silent' stakeholders such as the land itself, other human stakeholders (ancestors, neighboring public, and future generations), and non-human living communities.

Drawing on the basic intent of regenerative agriculture described in Chapter 1, the parties to a regenerative grazing lease might arrive at something like this:

"It is the intent of Landholder and Lessee to steward this land and the livestock on it regeneratively – i.e., in a manner that supports the economic wellbeing of the Landholder and Lessee, grows healthy and delicious food, promotes the welfare of wildlife and livestock, supports and enhances the health of the ecosystem and watershed, and contributes to a thriving social community. The intent of this lease agreement is to provide optimal conditions for this ongoing regenerative management."

Additional values may be drawn from the core principles of regenerative agriculture (see Chapter 1), such as promoting biodiversity, or may reflect other community and social values such as creating rural economic opportunity, preserving open space, promoting land justice, producing healthy food, supporting viability for the next generation, and so on. TomKat Ranch, as an example, holds building soil health and restoring diverse and resilient ecosystem function as fundamental values of regenerative agriculture, and therefore makes them foundational values in their grazing leases.

What matters to you? The <u>Worksheet</u> at the end of this guidebook can help the parties to a lease identify and compare values, and prioritize a finite number of lease goals consistent with those values.

REMEMBER, a goal written into a lease is binding to the party responsible for meeting that goal. Lessees will be best able to achieve shared goals when they are empowered to make management decisions, and when the goals are appropriate within their operating context and lease duration. Landholders must beware not to set lease goals that are so rigid or binding that reasonable failures to achieve them would result in a breach of contract and threaten the lessee's land security.

Setting clear goals can be a highly effective tool for achieving desired outcomes; however, for the reasons described below, SMART (specific, measurable, achievable, realistic, time-bound) goals are usually best set in an Agricultural Management Plan. See Chapter 3, for more on goal-setting, monitoring, and evaluating.

AGRICULTURAL MANAGEMENT PLANS

An Agricultural Management Plan (AMP) can be thought of as an adaptive, practical road map to establishing specific goals (planning and implementation), measuring progress (monitoring), and making necessary adjustments (evaluation and adaptation). These processes of goal-setting, evaluating, and adapting can turn a standard grazing lease into a regenerative one.

A carefully written AMP that establishes reasonable goals and creates a sensitive cycle of feedback for monitoring and adaptation should be considered an essential component of medium- and long-term regenerative grazing leases.

Chapter 3 discusses Agricultural Management Plans at length. Our purpose here is to introduce the relationship between AMPs and grazing leases, as we will reference AMP's throughout the remainder of the chapter.

An AMP belongs not in the lease body itself, but attached to a lease as an exhibit to be revisited annually (or as often as necessary) and amended as needed, without disrupting the lease contract.

For example, let's say a landholder and lessee have agreed to a regenerative goal of increasing native grasses in a specific field by 20% in five years. A bad drought year might still favor weedy annuals over the native grasses, in spite of appropriately stocked and timed grazing and other good management decisions. By including the native grasses goal in an AMP rather than the lease body itself, lessee and landholder have a process by which they will revisit that goal together, respond to new information, and adjust the AMP without causing a breach of the lease for failure to achieve that goal.

Consider placing goals in an Agricultural Management Plan when:

- there are more than two or three goals;
- it becomes clear that monitoring and revisiting those goals will take significant investment by both parties;
- parties are experimenting with new techniques; and/or
- environmental factors are highly unknown.

When an AMP is attached to a lease, the lease should refer to the AMP wherever it applies, for example:

- In a designated lease clause defining and referencing the AMP as an Exhibit attached to the lease. This clause may:
 - » define the process and timing of drafting the initial AMP;
 - » specify the interval and process for reviewing, amending, and/or updating the AMP; and/or
 - » require that changes to the AMP be documented in writing and signed by both parties.
- Where the AMP offers more specificity (i.e., livestock handling, uses, operations, and practices, etc.)
- In sections requiring adherence to the current AMP, for example: Communication and Dispute Resolution, Monitoring and Evaluation, Rent and Rent Payments (if affected by AMP deliverables), Termination, etc.

The AMP, in turn, should reference the Values, Intent, and any specific goals put forth in the lease to ensure that the two documents are compatible and mutually-reinforcing.



TERM

The term of a lease defines the initial duration of the agreement, as well as any conditions for renewal. While livestock graziers can manage with annual or even monthly leases to meet immediate needs, <u>such short-term agreements create</u> uncertainty, discourage long-term investments and transitional practices, and increase the chance that graziers operate without a strong understanding of their context or commitment to improve the environment within which they are working. Medium- (3 to 10 years) and long-term (11 to 51 years, in California) tenure <u>encourages lessee</u> <u>investment</u> in infrastructure and business, as well as in regenerative management practices that build soil, conserve wildlife, and foster healthy grasslands.

In instances where a lessee and landholder are new to working together, or when grazing needs are seasonally limited, a short-term or 'trial' lease may be mutually desirable. When the future ownership or use of the Property is uncertain, it may also be necessary to work under a shorter term lease. At the other end of the term-length spectrum, a ground lease can convey highly secure, long-term tenure, allowing the lessee to own and earn financial equity in ranch buildings, infrastructure, and potentially even equity in ecosystem improvements.

Should permanent infrastructure be required, and investment of that infrastructure falls to the lessee, the duration of the term must be at least the length of the usable life of the improvement, and/or account for a buy-back of the remaining value of the investment at termination. For more detail, see Maintenance and Improvements.

Many conservation incentive and cost-share programs have minimum lease term requirements. For example, Natural Resource Conservation Service (NRCS) Environmental Quality Incentives Program (EQIP) will reimburse lessees for practices and improvements including cross fencing so long as their lease is at least as long as the term of the NRCS contract (often 3-5 years).

A lease may include a term renewal clause—either requiring the signatures of both parties or renewing automatically to easily extend the term. 'Rolling' and 'Evergreen' leases automatically renew unless terminated. This can remove the headache and cost of frequent renegotiating, and encourage commitment on both sides, but beware it doesn't also create a false sense of confidence. Short-term rolling leases are still only as secure as the length of their initial term, because they can be terminated by either party within a specified written notice period. If a short-term lease is a must, then consider a short-term lease with an automatic longer-term extension if predetermined targets are met and the lessee remains in good standing. This model provides the lessee with an incentive to invest in regenerative land stewardship, while offering the landholder flexibility should they find the lessee is not a good match during the trial term.

RENT AND RENT PAYMENTS

Rent and rent payment sections define the cash lease value—whether calculated per acre/per year or month, by flat rate, or by Animal Unit per Month (AUM), typically calculated as a price per cow/calf pair per month or an animal unit with equivalent impact. For guidance on calculating AUM, a common practice in grazing leases, see 'Tools for Calculating AUM' in the Resources section at the end of this guidebook.

Designed to begin low and increase over time, a progressive lease rate can offer a leg up to a lessee who is just getting started, or compensate for the impacts of degraded land at the lease outset (such as limited forage). The lower initial rate may allow the lessee to afford to rehabilitate the land with lighter stocking rates, more fencing/frequent rotations, etc., as the rate progressively increases toward an eventual 'fair-market' cap. When using a progressive rate it is important that the eventual rent increase is still seen as fair—not as punishment for improving the land.

There are also supporting clauses that define rent reduction incentives or credits for ecosystem services, regenerative management practices and milestones, and/ or achievement of certifications. Reduced lease payments, access to additional land, and extended lease terms can be offered to graziers who meet or surpass specific goals (e.g. increasing soil organic matter, increased prevalence of wildlife, reduced fuel load for fire risk). These options can take many forms. When employing one of these strategies, it is imperative to create a process for establishing baselines, adherence, monitoring, and verification. Here are some performance-related rent structures:

- » Cash + One-Year Rent Reduction for Early Conservation Improvements
- » Cash + Rent Incentives if Certification or Milestone is Achieved
- » Cash + Rent Reduction in Respect of Conservation Practices



Rent structure options should identify metrics for measuring and calculating rent reductions and incentives, eligible practices, improvement milestones and/or certifications, as well as any maximum or cap on rent reductions, and oversight. These important specifics may be found in the lease itself, but if an AMP is attached, they belong there—in which case this section must reference that attached AMP exhibit.

Other forms of grazing and land use agreements include licenses and contracts. Short-term grazing agreements on private and public lands are often structured as licenses, wherein the grazier is allowed to use the land according to very specific uses and means, but often with fewer use rights than provided by a lease. When specific services such as invasive species reduction or fire suppression are needed, a grazing contract may be more appropriate than a lease. In this case, the landholder pays a working grazier for regenerative land management practices using grazing animals. A lease often conveys exclusive right of occupancy, and is a better fit for multi-year agreements. This publication is designed for leases, but the lessons and best practices presented here may be useful to those using licenses and contracts as well.

COMPARING LEASE, LICENSE, AND CONTRACT

LEASE: As defined by Merriam-Webster, a lease is "a contract by which one conveys real estate, equipment, or facilities for a specified term and for a specified rent." A lease gives a person temporary interest and exclusive access to a property that can only be terminated under the terms of the agreement. The lessee exchanges rent to the landowner for use of the property during the term.

LICENSE: A license agreement gives a person temporary permission to use a property but no interest in it. This non-exclusive access granted by the license may therefore be revoked at any time. A license grants non-exclusive access to the property allowing the landowner to continue their use, including allowing others to use the property often for public access or recreational purposes. The licensee compensates the landowner for access to the property.

CONTRACT: A grazing contract is a Contract for Services between two or more parties agreeing to the performance of an express task or service. In this case, the landholder pays the grazier for the services provided by livestock on their property. These contracts typically last as long as it takes to complete the service and can be terminated by either party with notice.

USES, OPERATIONS, AND PRACTICES

This section of any lease body (regenerative or not) should set clear allowable uses, prohibitions, and basic practices that are legally binding and foundational to the lease.

Language requiring specific management practices (such as demonstrated regenerative management practices) should be used sparingly in shorter-term leases, but can be very meaningful over medium and longer timelines, in which case they should be detailed in a separate, annually reviewed and amendable Agricultural Management Plan (AMP).

Landholders should not make day-to-day, on-the-ground practical decisions about livestock grazing. Interfering with a grazier's timeliness, planning, or judgment can put the lessee's business at risk and erode trust between parties. Rather, lessees should be empowered to manage the land and livestock as needed for the holistic health of their businesses, their livestock, and the ecosystem, according to shared lease values and an adaptive decision-making process. Landholders who have questions about a lessee's judgment are advised to ask such questions according to the communication process set forth in the lease and/or AMP.

Below are some examples of allowed and prohibited uses, operations, and practices that can promote regenerative values when included in the body of a grazing lease. Remember, some of these may be addressed instead, or with more specificity, in an AMP. A rule of thumb is that if a use, operation, and/or practice is foundational to the lease and is expected to remain so, it should be included in the lease body itself. If, on the other hand, it is subject to experimentation, frequent monitoring, or unknown environmental or ownership factors, it would be better placed in an amendable AMP where it can be subjected to regular review and modification.

Allowed and Prohibited Uses

- Type of livestock, hay, and/or forage crops.
- Processing, packaging, storage, and selling.
- Mobile home/trailer parking and camping.
- Public and community uses such as agritourism and events, research projects, viewshed restrictions, public access, and responsibility for related signage, insurance, and liability.

Third-Party Certifications

- Require lessee compliance with third-party certifications such as organic, humane certified, food safety, welfare approved, etc.
- Require annual submission and updates to landholder of any 'management plan' submitted to a 3rd-party certifier.
- Protect lessee's ability to comply with third party certifications.
- Protect property certification(s) and determine consequences for either party triggering ineligibility or termination of certification(s).

Weeds, Pests, and Predators

- Require adherence to clearly-stated regenerative guidelines or pre-existing standards such as USDA National Organic Program standards.
- Requirement to reduce or prevent introduction of noxious and/or non-native weeds/plants.
- Prohibit the use of chemicals in managing weeds, invertebrates or other pests on the property, and/or specify allowable mechanical means.
- Prohibit or restrict the use of poisons, or require no-kill deterrent of pests or predators on property.
- Identify opportunities for compensation, financial assistance, or rent reduction for use of non-lethal predation management.

Soil, Land, and Biodiversity

- Prohibit or restrict certain types of amendments and/or fertilizers.
- Prohibit or restrict certain types of impact, such as tillage.
- Require specific soil building practices such as cover-cropping, re-seeding, or maintaining native perennial grasses, and/or planned grazing.
- Promote healthy biodiversity and encourage native and perennial plant communities. Avoidance of sensitive, threatened or endangered species and setting other conservation management expectations.
- Direct or limit grazing species, practices, and times in riparian areas to promote riparian health.
- Require lessee to mow road ditches and field edges in accordance with the law, and/or prohibit mowing ditches, field edges, grass waterways, or other areas of vegetation until after the nesting period for birds has passed, or other considerations for sensitive species.

Fire

- If managing wildfire risk, define responsibilities, methods and timing for goals such as:
 - » defensible space around buildings and structures;
 - » treatment of flammable materials; and/or
 - » management of dry fuels and/or ladder fuels.
- If using prescribed burning as a land management tool (e.g., for fuel load reduction, promoting biodiversity, or maintenance of cultural resources), specify:
 - » purpose of burning;
 - » responsibilities of each party;
 - » allowable conditions, including season and climatic conditions, duration and burn size limits; and/or
 - » required permits, notifications, and other regulatory compliance.

Livestock Handling

- Require lessee to submit a Grazing Plan (specifically or as part of a broader holistic management plan) for landholder approval annually.
- Agreed-upon intentions for specific practices. These can be outlined in the AMP and referenced in the lease agreement.
- Require lessee to use best management practices for livestock in the local community and that the treatment of animals be subject to all California laws.
- Appropriate stocking rates. Especially when lease rate is tied to AUM, the lease can specify maximum and minimum stocking rates and identify the appropriate agency(ies) for review, timing of monitoring, and adherence to rates. Best determined with lessee participation by a specified date each year.
- Periods of use (when a lease is seasonal/less than a year), including turn-in and turn-out dates. Periods should be subject to change with specific written notice by the landholder due to variable land-care factors.
- Preferred or required management techniques.
- Right to keep "livestock guardians" or "working dogs" on the property to assist with the management of the livestock. Supporting language preventing landholder, or landholder's agents or guests, from interfering with livestock guardian and/or working dog's ability to perform their duties is advised.
- Prohibit landholder or landholder's agents or visitors from handling (or harassing) lessee's livestock without lessee's express written consent.
- Identify lessee as the responsible party for the veterinary expenses and proper care of diseased livestock, as well as the appropriate permitted methods and timely disposal or movement of animal carcasses to appropriate locations for scavenger predation.

MAINTENANCE AND IMPROVEMENTS

There should be clear language outlining responsibilities for maintenance, repair, and replacement of existing infrastructure, constructing new improvements, and assigning these responsibilities to the landholder or lessee. This may be accomplished in a chart or directly in clause language. Infrastructure referenced in this section could include fencing, roads, water access and delivery sources, buildings, animal enclosures and other structures.

A lessee with short-term tenure cannot be expected to take on substantial infrastructure repairs and maintenance, or to invest in permanent infrastructure. A longer lease term, on the other hand, or a lower lease rate, may justify greater maintenance responsibilities for the lessee. A landholder who shoulders most of the maintenance and improvements can justify a higher lease rate.

REMEMBER, should permanent infrastructure be required, and investment of that infrastructure falls to the lessee, the duration of the lease term must be at least the length of the usable life of the improvement, and/or account for a buy-back of the remaining value of the investment at termination.

See <u>UC ANR's Guide to Livestock Leases for Annual Rangelands</u> for a sample table outlining a landholder's and lessee's responsibilities to construct and maintain infrastructure as part of a grazing lease.

Permission and responsibility for new improvements and infrastructure are also specified in this section. Permission for the lessee to construct improvements such as corrals, fencing, roads, and structures should be specified and consistent with

the length and terms of the lease. Maintenance responsibilities for lessee-constructed improvements generally lie with the lessee.

Construction of cross fencing, for example, may improve rangeland health and can qualify for NRCS cost-share funds. Lessees require sufficient tenure to qualify for such funds, so the terms of their application, use, and reimbursement should be detailed in the lease. If the landholder is expected to complete an improvement during the term of the lease or prior, the improvement



should also be outlined in this section. Shared expenses of new construction or maintenance can also be listed here, as can buy-back language for lessee construction of permanent improvements, payable upon lease termination. Please consult with an accountant to determine the depreciation and usable life of planned permanent improvements.

WATER ACCESS, CONSERVATION, AND QUALITY

Access. Property map(s) and lease language should clearly identify the source(s) of livestock water (and irrigation water, if applicable), as well as who is responsible for maintaining water infrastructure. A map attached as an exhibit should indicate the location(s) of water sources and infrastructure. If water must be trucked to the property, language should specify the responsible party to procure and pay for imported water. Rent amounts should reflect the quality and quantity of water access, and who pays associated costs.

Conservation. Faced with increased frequency, duration, and severity of drought, California ranchers and landholders are incorporating clauses into leases to a) conserve water resources, and b) mitigate for years when drought conditions materially interfere with the lessee's ability to graze the leased property. For example:

- Lessee may reduce acreage or herd size up to a maximum specific percentage (which could be a full destocking) with a rent reduction in proportion to the reduction in acreage or livestock head count, for as long as drought conditions persist and to allow for recovery of forage.
- Lessee may elect to import feed and/or water from alternative sources, and the landholder agrees to pay the lessee an amount each month equal to the defined percentage of the difference between the cost of the alternative supply and the amount the lessee paid for feed or water in the month the change was made.
- Drought mitigation measures and/or cost-sharing, including water use scheduling, use of more efficient water use technologies, construction of on-site ponds and catchments, use of recycled water such as treated municipal wastewater, agricultural runoff or tailwater, greywater or roof runoff, and other techniques as identified by the California Department of Food and Agriculture, the State Water Resources Control Board, UC Davis, and other reputable sources.

Drought mitigation language should require and identify a third party—such as Cooperative Extension or another mutually agreed-upon advisor—to confirm the beginning and end of drought conditions, healthy carrying capacity, and water availability. The parties may choose to define triggers for drought conditions; for example, if rainfall or forage is X% below the annual average, the herd shall be reduced within X days of recorded determination of drought conditions in the grazing year.

These enhanced details may be placed in an AMP and referenced in the lease body. The goal is to make a transition and determination of drought conditions as clear as possible to avoid conflict and allow for a quick adaptation in management.

Quality. For properties with riparian zones (rivers and streams), landholders and lessees should discuss target stream conditions and incorporate language that clarifies acceptable grazing practices. Target conditions may relate to bank stability, riparian health, and/or water quality. Clauses may require the lessee to:

- fence livestock out of sensitive areas, maintain a specified setback, or graze only in certain periods (Note: Permanent exclusion of livestock from riparian zones can have unintended consequences; before requiring permanent exclusion, consider whether carefully managed livestock access might be an appropriate tool to achieve target stream conditions.);
- maintain a minimum cover (e.g. 70%) on road banks and slopes at risk of erosion;
- create/maintain filter strips or other vegetative buffer; and/or
- monitor and respond to sediment and/or nutrient levels in streams.

To address nutrient contamination from manure (as in the case of on-site composting), the agreement may state that the lessee should optimize distribution of manure for nutrient cycling, soil health, and water quality. The lessee should make reasonable efforts to keep drift, flies, and other pests at a minimum and shall be responsible for following all local and state regulations with regards to manure handling and runoff.

The landholder is liable for compliance with Water Quality Control Board regulations, so any lease should require that the lessee comply as well.

MONITORING AND EVALUATION

Monitoring is the act of measuring baselines and subsequent outcomes as practices are deployed in order to determine the effectiveness of those practices in achieving stated goals. A consistent monitoring protocol is critical to understanding which practices are achieving stated goals and which are not. Like SMART goals themselves, monitoring and evaluation protocols are best located in an AMP (see Chapter 3 for details), where they directly reference the goals and can be adapted holistically.

A lease or AMP that sets measurable goals must be very clear about how success is measured, how it may vary according to site and conditions, how the information obtained from monitoring shall be evaluated by both the landholder and the lessee, and any consequences for failure to meet stated goals.

Whether outlined in the lease body or AMP, monitoring protocols should be realistic in terms of time and cost. The language addressing monitoring protocols should identify who is responsible for which activities, and who pays for monitoring expenses.

Proper monitoring can help landholders ensure that goals are being achieved on time and help lessees demonstrate the benefits of their practices. For lessees, demonstrated benefits can translate into competitive advantage for new lease opportunities, rent-reduction, or even cash incentives (see Rent and Rent Payments above). For landholders, measurable improvements may qualify for ecosystem service payments—and higher land values.

CONSERVATION EASEMENTS

The landholder who intends to convey a conservation easement during the term of a grazing lease should inform the lessee of this within the lease. A clause may be included that stipulates the landholder's right to grant an agricultural conservation easement on the Property during the term, so long as any such easement does not materially limit the agricultural activities under the lease. Once the easement is granted and the property encumbered, the lease may need to be amended to accommodate the easement, as we discuss below.

When there is an existing conservation easement on the Property, the lease must be consistent with the landholder's obligations to comply with that easement. It should first be stated that the lease is subject to requirements of the easement, and that the lessee must carry out activities in a manner consistent and subordinate to the easement and Agricultural Management Plan(s). Second, the landholder may be required to advise the lessee of notices received from the easement-holder and inform the lessee they must cooperate in responding to any such notices.

Sections referring to easements should also include language clarifying that the lessee is not in contract with the third-party easement-holder, and so does not assume liability for—or guarantee the performance of—the landholder under the easement or attached Agricultural Management Plan. Language indemnifying the landholder against liabilities that arise from the use by third-parties of any trail or other easement over the property should also be extended to a landholder's lessees.



ASSIGNMENT/SUBLEASING

Language to allow for subleasing can be beneficial for both parties—especially to support smaller graziers who may not use a larger property in its entirety. It is important to state a requirement for landholder approval of any sublessee and sublease agreement to ensure a transparent relationship and understanding.

INDEMNIFICATION/INSURANCE

Balanced, dual indemnification is recommended to support an equitable and secure agreement for both parties. It is prudent to identify that any loss, disease, or predation of livestock, or damage caused by escaped livestock from the Property be the responsibility of the lessee. A lease agreement or grazing contract for fee may also stipulate that the lessee is not responsible for any damage by animals to the landholder's perennial crops or landscaping. It is generally required that the landholder has property/homeowner's insurance, and that the lessee has liability insurance; in this way, both parties should be sufficiently protected against natural disasters, injury, and damages. The lessee should name the landholder as additionally insured on their policy, provide verification of coverage to the landholder, and maintain the policy throughout the Term. The lessee may be required to maintain additional insurance relevant to their operation, including but not limited to livestock insurance, automobile insurance, and workers compensation insurance.

COMMUNICATION AND DISPUTE RESOLUTION

Open and frequent communication can improve the success and longevity of any lease. Because the need for adaptability is inherent to regenerative management, communication is especially important to regenerative grazing leases. In fact, the lessee-landholder relationship is being increasingly recognized for its critical role in advancing soil health (see this article from Civil Eats).

Communication and Dispute Resolution clauses should be included in the main lease body. When an AMP is used in conjunction with a lease, the AMP should include its own communication ground rules relevant to the AMP, and consistent with the lease clause on communication.

Good communication during the lease drafting process will help the parties start off in alignment. Good communication during the course of a lease—ideally at regular, predetermined intervals—will help the parties remain true to intent, and adapt as needed.

A good communication clause is important when lessee and landholder have limited interaction, but equally so to avoid false assumptions when parties have frequent, casual conversations.

A good communication process acknowledges the power dynamics that may be at play between the parties, for example due to gender, race, cultural and language dynamics, wealth gaps, historical events, etc. See this guidebook's <u>Resources</u> for a few references on racial equity and non-violent communication.



Both human relationships and the management of land are complex, and there is a good chance that the landholder and lessee will disagree at some point. Unexpected circumstances, divergent values, and any alleged breach of terms can disrupt the lessee-landholder relationship, even rendering the lease invalid. Parties drafting a lease should always include a respectful process for **dispute resolution** and, should it be necessary, **termination** (see below).

To avoid potentially costly attorney and court fees, parties may choose to specify that any dispute first be brought to mediation. If a dispute cannot be resolved through mediation, the lease can outline the process for pursuing binding arbitration or establish a process for payment of attorney's fees. It is important that the duration of professional mediation be defined and that the source and method of arbitration and number of arbitrators be established, if binding arbitration is specified. Landholders and lessees can utilize the mediation services of the California Agricultural Mediation Program (CALAMP)* for dispute resolution with confidence and without cost. These mediation services are free to explore for lease disputes, family farm transitions, credit and debt issues, and a variety of other topics.

Whether parties commit to mediation, arbitration, and/or a more traditional dispute resolution method involving the court system, it is important for all parties to consult with their attorney to determine the best path for their relationship and agreement.

*CALAMP is certified by the United States Department of Agriculture (USDA) and California Department of Food and Agriculture (CDFA).

TERMINATION/BINDING ON HEIRS

Sufficient opportunity for notification of default, cure of default, and notice of termination is recommended for agricultural leases. Termination terms must outline appropriate time allowances for moving animals off property following a notice of termination. A clause specifying that the agreement is binding on heirs secures tenure in the event of ownership transfer.

IMPORTANT NOTE: The lease term is only as secure as the process for termination and cure of default: A ten-year lease with a termination that allows for 14 days' notice of termination clause without cause is effectively a 14-day lease.

IN SUMMARY

A well-written lease is clear, concise and easy to follow. It legally binds both parties (landholder and lessee) to uphold the lease intent and their responsibilities to each other, and protects each party from avoidable harm. It sets clear boundaries for allowable and prohibited uses and practices, and explores some of the imaginable 'what-if's.'

Leases should be rigorous and clear enough to attract innovative and effective graziers who are aligned with the landholder's goals, yet not so onerous as to prevent them from adapting to changes beyond their control, or as to dissuade them from accepting the lease's terms.

For a grazing lease to promote regenerative land stewardship, it must strike a balance between rigor and adaptability. Its intent must align with the core principles of regenerative agriculture. It should set clear, actionable goals, ideally with the living guidance of an adaptive, agricultural management plan (AMP). A good monitoring and evaluation process are essential to keep the lease parties pointed at their guiding star.

Finally, a good regenerative grazing lease is underpinned by a healthy relationship and thoughtful communication process between the landholder and lessee. Landholders wishing to leave a legacy of healthy working lands and viable agricultural businesses should plan early for a viable transition to the next generation.

When designed with careful foresight, firm expectations, and room for adaptive change by all stakeholders, a regenerative grazing lease can promote optimal agricultural productivity, ecological resilience, and community well-being.

Guide to Regenerative Grazing Leases: Opportunities for Resilience



Photo: William Milliot, TomKat Ranch

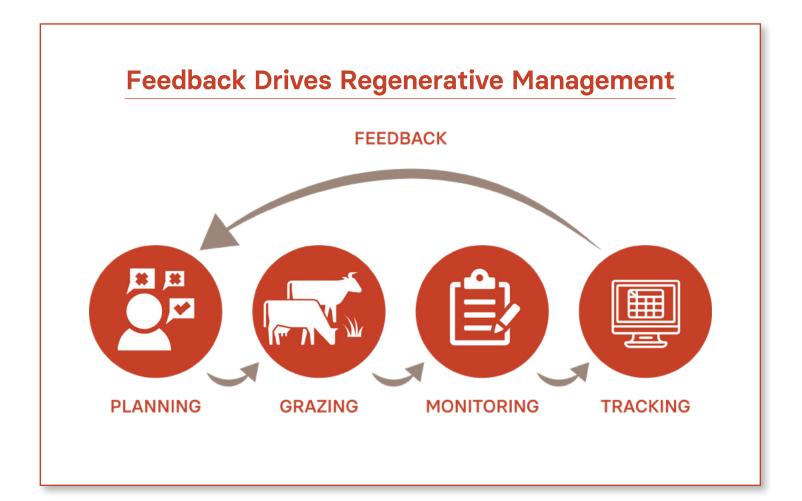
CHAPTER 3. Agricultural Management Plans

And Their Role in Regenerative Grazing Leases

CHAPTER 3. Agricultural Management Plans

The purpose of Chapter 3 is to show how an Agricultural Management Plan (AMP), when linked to a lease, can promote regenerative outcomes and achieve shared goals of the landholder and lessee—as well as other stakeholders such as livestock, ecosystems, easement-holders, and the public.

Ecosystems are highly dynamic and stewardship decisions often have to be made despite variability and uncertainty in practice impact. Adaptive management—which is the process of taking action, measuring results, and then refining new actions based on the outcome of previous actions—is one of the most effective ways to practice regenerative management in the face of ecological uncertainty. Planning, goal setting, and monitoring are key aspects of the adaptive management process, and are therefore critical parts of any regenerative Agricultural Management Plan.



CHAPTER 3. Agricultural Management Plans (Continued)

Given the important role of planning and adaptive management in achieving ecological goals, an AMP can and should accompany any medium- or long-term grazing lease. (Because AMP's require a significant investment of time, trust, and knowledge to create, they are usually not practical for short-term leases. Exception: a nonprofit or other model landholder may develop an AMP that is core to its mission or stipulated in a conservation easement. Such a landholder may choose to begin with a shorter-term trial lease subject to that AMP, before committing to a longer-term lease.) In the AMP, desired outcomes and prescribed key practices are articulated and framed by the clear understanding that an effective management plan must be responsive to environmental, economic, and other changes over time if it is to uphold the Intent of the parties agreeing.

If appropriate—depending on the context and goals of the operation—the following planning frameworks may be used as a foundation for, or supplement to, an Agricultural Management Plan:

- <u>Natural Resource Conservation Service Conservation Plan</u>, which may or may not include a <u>Soil Health Management Plan</u> component
- Carbon Farm Plan
- Holistic Management Plan
- Grazing Plan
- Landscape Conservation Plan
- Cultural Ecology Plan (see Cultural Resources and Indigenous Solidarity in Chapter 4)

See Resources for more detail on these frameworks and plan types.

CREATING AN AGRICULTURAL MANAGEMENT PLAN (AMP)

The process of writing the AMP together can give the landholder an idea of the lessee's process and approach to managing land, and give the lessee the opportunity to share the art and complexities of regenerative grazing with the landholder.

The AMP articulates desired outcomes and sets goals, outlines management practices or strategies for implementing the goals, describes a consistent and effective methodology for how success is measured, and establishes a process and timeline for re-evaluation—at least yearly. It should be appropriately cross-referenced with any applicable lease and/or easement.

CHAPTER 3. Agricultural Management Plans (Continued)

Goal-setting. Property-level goals, accompanied by objectives with enough specificity to inform daily operations, provide the framework upon which work and measurements will be directed, in order to track success over time. (In this guidebook, property-level goals and practical objectives will be referred to collectively as 'goals.') All goals should be Specific, Measurable, Achievable, Realistic, and Time-bound (SMART), and can be refined as monitoring data is collected and lessons are learned through the adaptive management process.

Attribute	Description
Specific	The goal is concrete, detailed and well defined
Measurable	The goal focuses on an aspect of the system that can be monitored
Achievable	The goal is achievable given the resources and context of the operation
Realistic	The goal is ecologically and operationally realistic
Time-bound	The goal is linked to a relevant time frame

Regenerative operations often set goals that consider the system as a whole, including goals for improving forage or livestock production and ecological outcomes like fostering biodiversity, rebuilding soil health, and improving water capture and retention, as just a few examples.

Because most outcomes are inherently complex and difficult to measure in their entirety, ecological indicators are often used to monitor success. SMART goals should be developed in relation to such indicators to ensure they are measurable, and that implementation and monitoring can be achieved with a reasonable investment of time and money. In some cases, indicator species (whose presence or absence provides information on the ecological condition and function of a given landscape) can be monitored as a cost-effective way to track progress toward a SMART goal.

Examples of SMART goals and indicators that might be included in a regenerative grazing lease:

Desired Ecological Outcome	Example Indicators	Example SMART Goal
Increase biodiversity	Bird abundance and richness (number of species); Abundance of predators, both large (mountain lions) and small (spiders); Plant richness	By a specific date, increase the 3-year average grassland breeding bird abundance to 4.25 birds per 10 acres.
Improve soil health	Soil organic carbon concentrations; soil compaction; bare ground	By a specific date, increase soil organic carbon at 0-10 cm by an average 0.5%.
Increase water capture and retention	Water infiltration rates; water holding capacity	Ranch-wide water infiltration rates exceed regional targets by specific date.
Control invasive plant species	Plant counts using line-point intercept method	By a specific date, decrease counts of invasive plant species by 30%.

PRACTICE IMPLEMENTATION

During the planning process, it is necessary to identify specific strategies or management actions that can be implemented to help achieve each SMART goal at the appropriate scale. In some cases, it may be desirable for the chosen strategies or actions to be supported by considerable anecdotal and scientific evidence, but some practices are intended to be more experimental, lending themselves to testing at small scales using the adaptive management framework. Chosen strategies or management actions can even be guided by principles. For example, stewardship of soil health can be guided by soil health principles, which include maximizing plant diversity, minimizing soil disturbance, extending the period of active plant growth if possible, and maintaining soil cover.

There are many approaches and actions that can help achieve particular goals and SMART goals; it is beyond the scope of this guidebook to describe them all.

Extending the above example of indicators and SMART goals for four ecological outcomes.

Here are four illustrations of management strategies or actions that might be used to help achieve success:

The first example SMART goal is to increase grassland breeding bird abundance to an average 4.25 birds per 10 acres by a specific date.

This type of numeric goal is best suited for longer-term (5-10+ year) leases, and should consider factors outside of the control of the grazier (for example, by comparing with overall bird population trends in the area). To achieve the bird number increase in this example, actionable strategies may include minimizing or eliminating grazing of high density grassland bird areas during the peak breeding season, or managing the grassland bird areas for short, perennial grass and few trees by carefully planned grazing of cattle and goats. For newer or shorter-term leases, it may be more appropriate to avoid species number targets, and focus on creation of the type and abundance of habitat that can be directly managed by the grazier.

CHAPTER 3. Agricultural Management Plans (Continued)



The second example SMART goal is to increase soil organic carbon from 0-10 cm by an average 0.5%, by a specific date.

Again, careful: the achievability of this goal may depend on external factors outside of the lessee's control. To achieve a soil carbon increase, begin with a resource inventory of current carbon management. Identify any current on-farm practices that release carbon, and establish practices to eliminate or minimize these. Focus on the water cycle by increasing infiltration; and the energy cycle: lengthen the growing season by encouraging perennial plants. Graze in a manner that supports the restoration and health of riparian areas, and if appropriate, that recruits and establishes desired tree species. (Management of existing trees may be paramount, as under-managed savanna and forestlands can quickly become overpopulated, having an adverse carbon impact in the long run).



The third example SMART goal is to ensure that ranchwide water infiltration rates exceed regional targets by a specific date.

Take baseline soil tests to understand water infiltration, microbial life status, and mineral makeup of soils from the outset. Some actionable water infiltration strategies may include minimizing road area; improving road conditions and grading to slow and spread runoff; and minimizing soil compaction from repeated use of heavy machinery or poorly timed hoof traffic from livestock. Leaving behind plant residues and other practices can help maintain cover on the soil surface year-round, and has been shown to increase water infiltration as well.



The fourth example SMART goal is to decrease the number of detected invasive plant species at a given monitoring point by a specific date.

TomKat Ranch manager, Mark Biaggi, cautions us to understand recent land management history, and to test the soil for

imbalances that invasive plants may indicate, *before* treating the symptom. If decreasing the prevalence of certain identified species is shown to line up with the lease's guiding principles, the lessee may use high-density livestock grazing to knock them back when they are palatable to livestock or highly sensitive to impact. Another approach may be to instead focus on grazing strategies that promote and encourage plant species that can out compete the invasive species.

CHAPTER 3. Agricultural Management Plans (Continued)

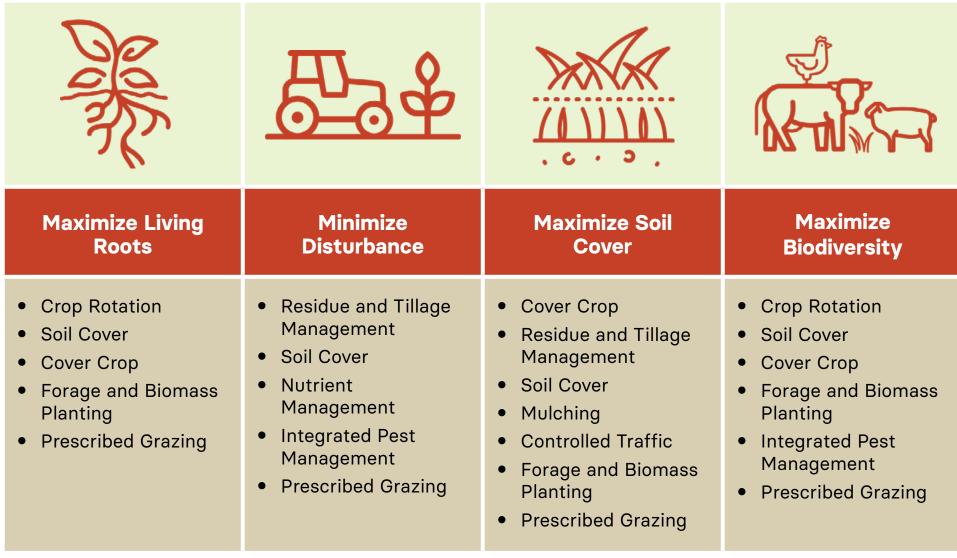
BIODIVERSITY AND THREATENED OR ENDANGERED SPECIES

While maximizing biodiversity is a central principle of regenerative agriculture, landholders may be legitimately concerned about the unintended consequences of creating good habitat for sensitive species—which can trigger lengthy and costly compliance measures. Landholders may even be reluctant to enter into leases with regenerative graziers for fear of a future 'take' associated with newly-created habitat.

When possible, landholders are urged to take a baseline biodiversity resource inventory, and to be aware of any existing habitat for threatened or endangered species. If concerns are found that a lessee's grazing practices, by increasing biodiversity, may trigger costly regulatory consequences, the landholder may consider a voluntary <u>Safe Harbor</u> agreement designed to mitigate for the risk and responsibility of maintaining that habitat while <u>complying with the Endangered Species Act</u>.



Soil Health Principles and Potential Practices







CHAPTER 3. Agricultural Management Plans (Continued)

MONITORING

The type and intensity of monitoring to be agreed upon should depend on the goals of the operation and the resources available. Even before working with a given lessee, it is important for landholders to collect baseline data and begin monitoring ecological outcomes that are important to them. This not only helps with goal setting and planning, but also provides crucial baselines that can be used to accurately measure the impact of a lessee's management. For long-term monitoring, landholders and lessees should make sure their sampling and measurement methods are consistent (process, location, time of year, laboratories used, etc.), and that the time and costs required to use these methods are realistic.

Monitoring can be as simple as visually assessing progress towards a SMART goal, keeping good records in a field journal, and collecting photo documentation. For example, it is possible to qualitatively determine whether a ranch's management is providing habitat for wildlife by setting up game cameras in the field or by keeping a bird list. Visual assessments of the soil can also be made, including ones for smell, color, rooting patterns, and signs of life.

In some cases, it may be desirable to conduct more rigorous or quantitative assessments. These can include affordable, low-tech options like bare ground estimates using a quadrat or transect, soil compaction tests using a penetrometer, in-field assessments of soil aggregate stability, or water infiltration estimates using a homemade infiltrometer. They may also include methods or measurements that require some sort of technical assistance, such as point counts for bird diversity, soil sampling for laboratory analysis of carbon and other parameters, or vegetation surveys using standardized methodologies.

Carrying on the examples from above, one way to track progress toward the first SMART goal would be by conducting bird point counts across multiple years (Please note: Goals that include migratory animals should also consider the overall populations in comparison. If there is a downward trend in overall populations due to off-property land management impacts these can have far greater consequences than what is accomplished on one ranch.) Progress towards the second SMART goal could be tracked by sampling soil every few years and analyzing it at a service laboratory for soil carbon using the dry combustion method. Progress toward the third SMART goal could be tracked by measuring water infiltration rates using the single ring infiltrometer method and comparing rates to those from neighboring properties or published values from the surrounding region. Finally, progress toward the fourth SMART goal could be tracked by conducting a yearly vegetation survey using the line-point intercept method and comparing counts of invasive species from before grazing started and after.

CHAPTER 3. Agricultural Management Plans (Continued)

The ability to achieve particular SMART goals and influence outcomes will almost certainly depend on your context. For example, if your property has been managed well for some time and is in a hot, dry location with sandy soils, it may be harder to improve soil carbon than if your property has been mismanaged and is in a cooler, wetter location with finer textured soils. In addition, it may be harder to increase grassland breeding bird habitat if your property is relatively small and surrounded by forested lands. These are just two examples of many where the ability of a producer to achieve SMART goals and particular regenerative outcomes may depend on external factors that are beyond the producer's control. To address this phenomenon, it may be advisable to have binding language focused on adherence to the adaptive management process, or achieving a proportion of goals, rather than binding lease performance to achieving each and every individual SMART goal.

There are many existing resources and efforts to leverage when deciding on monitoring approaches, protocols, and sampling design (if necessary). Below is a non-exhaustive list of resources and organizations that can inform and support ecological monitoring.

Monitoring Protocols, Handbooks, and Worksheets:

- NRCS Stream Visual Assessment Protocol
- BLM Interpreting Indicators of Rangeland Health Protocol
- Point Blue Rangeland Monitoring Network Handbook
- NRCS In-Field Soil Health Assessment Worksheet

If appropriate, these monitoring or certification programs can be used as a foundation for, or supplement to, broader ecological monitoring efforts:

- Point Blue's Rangeland Monitoring Network
- Savory Institute Ecological Outcome Verification
- CDFA Healthy Soils Program
- Soil Carbon Coalition Network
- Regenerative Organic Certification

IN SUMMARY

When the landholder and lessee can collaborate on planning, goal setting, and monitoring as described in this chapter, the entire system benefits. The resulting aligned goals, mutual trust, and transparency builds the landholder's confidence in the lessee, and predisposes them to support the lessee's decisions. Having input in the goals, in turn, predisposes the lessee to try to meet those goals, and to communicate clearly when obstacles arise or when adjustments are needed. The lease is adaptive, its parties resilient, and its outcomes regenerative.

Guide to Regenerative Grazing Leases: Opportunities for Resilience



Photo: Liya Schwartzman

CHAPTER 4. Into the Next Generation

Working with Lessees and Preparing for the Future

CHAPTER 4. Into the Next Generation

Regenerating today's rangelands requires active, thoughtful engagement by people: graziers, range managers, and landholders. "The stewardship of these ranchers, past and present, shapes the capacity of the land to produce livestock and ecosystem services," write Lynn Huntsinger and Nathan Sayre in a special issue of Rangeland Archives. People have the capacity to restore and mimic natural processes, says Christy Wyckoff, Deputy Director of the Santa Lucia Conservancy, and natural processes are our best hope for robust food systems, climate resilient ecosystems and healthy communities.

Lessees are the primary stewards of about a third of the nation's grazed lands—whether privately or publicly owned, or protected by a land trust. If you're a landholder using this guidebook, you're likely negotiating, drafting, or updating a lease with regenerative management objectives. Objectives, of course, that are only as good as the commitment of the people managing the land. This chapter offers ideas for acknowledging land and power, selecting lessees, supporting lessees, and facilitating land and business transfers to the next generation.

Who are the ranchers of the next generation? As in the rest of the agriculture sector, the number of people working as ranchers has been decreasing over the years, but the proportion of them who are new to the business is increasing. New grazing business owners include more women, young people, and farmers and ranchers of color than in previous generations—all groups who face significant barriers to success. The two greatest barriers consistently reported by next-generation agriculture producers are lack of access to credit and lack of secure land tenure. This chapter offers steps landholders can take to help pull down this second barrier in support of future generations of regenerative land stewards.



RANCHES IN TRANSITION

Average age:

 Average age of the American farmer/rancher is approximately 58 years, with a full third of agricultural operators over 65 years old. Ranchers/livestock operators appear to be slightly younger on average.

Rangeland in transition:

 The number of acres of grazing lands predicted to change hands in the next 25 years is estimated in the hundreds of millions. Most of this land will be passed down within families.

Proportion of grazing lands leased vs. owned by ranchers:

Nearly 30% of US grazing lands are leased.

Landholder & rancher diversity:

98% of the agricultural lands in the US are white-owned.* Approximately 73% of all US ranchers (employees as well as business owners) are white.† The proportion of female ranchers has also grown slightly over the past ten years to approximately 29% of all ranchers.

Photo: Liya Schwartzman

ACKNOWLEDGING LAND AND POWER

Know thy land. When embarking on your regenerative management journey, start with the land and the opportunity before you. How has the land been managed historically (who are its indigenous ancestors?) and through recent times? How has this impacted the landscape and ecosystem? How many acres are grazeable and what infrastructure—barns, corrals, sheds, fencing—are available? What is the quality of the grazing lands, and what is biotically unique in the landscape? How does water move across the landscape, and what is the water infrastructure like? Who are your regenerative or holistic range management advisors? Is the property listed under the Williamson Act or encumbered by any other conservation, agricultural, or right-of-way easement? A deep knowledge, and detailed description, of the land opportunity is the first step to finding the best fit in a lessee.

^{*}According to census data.

[†]Union of Concerned Scientists, HEAL Food Alliance. Leveling the Fields: Creating Farming Opportunities for Black People, Indigenous People, and Other People of Color.

As a landholder with the property rights ascribed to you by your deed, you have control over your land. Before beginning negotiations, consider that the landholder has the power in a lease. A good lease assigns secure rights to the lessee, but what are the initial differences between your power and control, and theirs? How might your wealth (earned and/or inherited), education, gender, or the color of your skin* convey unspoken power to you in contrast to your lessee? Perhaps the lessee holds some of these kinds of power, but chances are you, as a landholder, have a leg up. Much in the same way an over-grazed meadow can enter a spiral of declining soil carbon and biodiversity, so can systems of power and privilege reinforce themselves—to the detriment of those already disempowered.

This matters because healthy, diverse grazing lands depend upon healthy, diverse graziers.

*98% of agricultural landowners in the US are white, according to census data.

CULTURAL RESOURCES AND INDIGENOUS SOLIDARITY

There are many emerging resources on non-violent communication, social/gender/ racial privilege, and land justice that can help landholders be more aware of their own part in systemic injustice, and empower lessees to bring their best selves to the work of regenerative grazing.

And if you don't know who occupied the land prior to Europeans, now is a good time to find out! Native Land Map is a good resource to start developing "an awareness of the real lived history of Indigenous peoples and nations in a long era of colonialism." See also if there is a Tribal Historic Preservation Office or other local indigneous cultural organization that can help determine whether there are meaningful cultural sites or resources on the land-and how best to honor them. Landholders who believe in providing cultural access, or taking other reparative steps with an indigenous group, may wish to explore this Land Reparations & Indigenous Solidarity Toolkit. For additional cultural resources, see Resources.

Sierra Miwok) Monache Confederated Mammoth Monache Goldfield Villages of Lisjan Modesto Lakes Me-Wuk (Southern Ramaytush Sierra Miwok) Eastern Mono/ Merced Tamien Nation Monache Chukchansi Los Banos CALIFORNIA Yokuts Popeloutchom (Amah Mutsun) Fresno Monterey Bay Amargosa Tübatulaba National Marine Rumsen Chalon

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SELECTING AND SUPPORTING LESSEES

Cast a Wide Net

A well-defined land opportunity is only as good as the pool of candidates who see it. Where landholders fail to cast a good net, access tends to accrue to "the good ol' boys"—established ranchers who are known to neighboring landowners, or have a similar social advantage.

There are many good reasons to seek out diverse lessees, such as their ability to bring new ideas and practices that help alleviate or solve long-standing ecological, social, or economic problems in an area. New graziers may be more inclined than established ones to apply out-of-the-box tools to achieve lease objectives—for example, using sheep and goats instead of cattle to manage invasive plants. Instead of scouting with a clear picture of the ideal lessee, scout with clear values, objectives for the land, baseline requirements, and an open mind.

Some newer-entry graziers have the skills, ideas, and ambition but lack the capital to start their own herds. One creative approach is to lease grazing land to a neighbor with livestock, while bringing in a new-entry grazier as a hired manager. This model, called a "Lease with Care Provided" contract, offsets the cost of the hired manager by requiring a higher lease rate from the livestock owner. It can be a good way to support the neighbors, work with locally adapted livestock, create opportunities for first-generation graziers, and ensure that the ranch is managed thoughtfully. The considerations in this guidebook could apply to the lease and to the contract with that employee.

Where to Look

It can be hard to find lease candidates outside of established rancher networks. Landholders should engage with regenerative and climate-smart grazing networks to find innovative graziers. Training programs and apprenticeships can also be good places to find individuals with a willingness to innovate, and with a long career ahead of them.

California FarmLink, a nonprofit organization supporting farmers and ranchers through access to land and financing (and co-author of this guidebook), hosts a landholder-to-landseeker linking portal and provides one-on-one lease assistance to landholders and lessees alike. This lease assistance can make the difference between a good lead and a safe and secure lease between landholder and grazing lessee.

The increasing prevalence of absentee landholders is escalating the importance of intermediaries to help find good lease candidates. Landholders without strong relationships with Black, Indigenous or People/communities of Color (BIPOC) are encouraged to seek out local and regional organizations and business advisors that prioritize BIPOC land-seekers. Indeed, these types of focused intermediaries may be essential in order to begin repairing a legacy of unjust access to land. Below is a general list of resources for landholders seeking to find lessees outside of their own networks.

Resources for Finding Lessees in the West:

- California FarmLink
- Holistic Management International
- Local universities, community colleges or training programs teaching regenerative agriculture; e.g. <u>CSU Chico Center for</u> <u>Regenerative Agriculture and</u> <u>Resilient Systems</u>
- Match.graze
- <u>Tribal Historic Preservation</u>
 <u>Office</u> or local Indigenous tribal governments and councils
- California Rangeland Coalition
- Western Landowners Alliance and Women in Ranching

- Quivira Coalition, New Agrarian <u>Program</u>
- National Young Farmers Coalition
- Grassfed Exchange
- Understanding Ag
- Ranch Management Consultants
- Soil Health Academy
- American Grassfed Association
- Rodale Institute
- Regrarians
- American Grazing Lands Services
- Real Wealth Ranching
- Greenhorns

Request for Proposals

A Request for Proposals (RFP) can help public, nonprofit, and even private landholders cast that wide net and offers equal opportunity to prospective lessees. A RFP usually begins with eligibility criteria, then outlines the 'proposal' requested. A full proposal might require:

- Questionnaire or application form to establish that basic criteria or 'prequalifications' are met
- Resume
- Business plan outline or brief summary of regenerative grazing plans for the land
- References

Peninsula Open Space Trust (POST), for example, issues RFP's outlining goals and values for a lease opportunity, then asks prospective lessees to share their vision and goals for the property and how those align with POST's. This land trust also asks about a candidate's qualifications and how identity and life experience influence their vision for the property.

Landholders issuing RFP's for a particular lease opportunity should have a process for evaluating proposals, narrowing down the top contenders, making a selection, and negotiating the lease itself.

Selecting Lessees

Of course, landholders must consider the livestock and land management skills and experience of potential lessees. What skills and experiences are most needed to uphold the regenerative grazing values, i.e., What will the grazier do for the land? But landholders should also ask what the grazier will do for the community (human and biotic), and even what the land can do for the grazier. Depending on a landholder's goals, and the support available, each landholder will need to consider a grazier's reputability and experience, along with the opportunity to invite innovation and diversity in a new generation.

A clear set of eligibility criteria can help high-profile landholders screen for quality candidates and simultaneously extend equal opportunity to underrepresented individuals.

At the top of this chapter, we summarized a few of the known race, gender, and age inequities in land access, tenure, and business ownership. Each lease presents an opportunity to push the needle toward land justice and begin leveling the playing field for Black, Indigenous, Latinx, immigrant, refugee, and other ranchers of color as well as younger and women ranchers. The public sector is responsible for promoting diversity and equity in alignment with its ecological and economic sustainability goals for rangeland leases. Private landholders should consider their power to support land justice as well. This does not mean locking out excellent 'dominant-culture' graziers, but it could mean setting selection criteria that prioritize BIPOC (Black, Indigenous and People of Color) and other under-represented graziers who bring their own skills, experience, and vision to a lease opportunity. A predetermined, even transparent, scoring matrix of selection criteria can help any landholder—private, nonprofit, or public—overcome potential biases and begin changing business as usual.

Supporting Lessees

A truly regenerative grazing lease should promote regeneration of soils, ecosystems, and people.

The most successful leases are formed when the landholder is truly an ally to the lessee. It is critical, again, that both parties review their shared goals, communicate often, and commit to an adaptive decision-making process. It is also critical that the lessee be given ample room to work, make decisions, learn, and even make mistakes. This is what builds understanding, and ultimately will produce the most capable land managers. A good lease should include opportunities to re-evaluate regularly, a clear pathway for communicating when expectations are not being met, and opportunities for the lessee to remedy or 'cure' potential breaches of the lease.

Lack of land affordability is one of the greatest barriers to farmer and rancher success. For grazing lessees to succeed and achieve the mutual goals set forth in a lease, they must first have the means to do so. A landholder who accepts a fair or below-market lease rate, and/or provides on-site housing, can help a grazier invest more in good management choices, business viability, professional development, life balance, and longevity.

Some of the benefits of regenerative grazing can take years to realize and may not be directly compensated in traditional economic markets (e.g., increased soil organic matter, improved water cycling, greater biodiversity, etc.). Landholders can help incentivize and support these outcomes with rent credits and other financial incentives for outstanding achievement of stated goals or measurable ecosystem services. A longer lease term itself may, in fact, be a reward for excellent performance, and often creates meaningful value for a lessee. This 'carrot' approach to leasing can foster a sense of partnership and pride, and can make a substantial difference to a rancher's bottom line.

The most successful ranchers acknowledge they'd never succeed all alone. Today's generation, especially, will rely on their 'ecosystem of support' in order to overcome barriers, react nimbly to climate and economic roller coasters, and achieve the degree of resilience needed to stay—and thrive—in business. Landholders can further support their grazing tenants by encouraging them to use the services and incentive programs available to them. See Resources for some suggestions. Again, landholders can support lessees by doing their own work—know your land, define the opportunity, recognize social dynamics, and seek change where it's needed. Promoting the health of the next generation of working land stewards may be our greatest hope to regenerate the ecosystems of this planet.

PASSING DOWN THE RANCH

A healthy, regenerative system is built for the long haul. The current generation grazing your land may have another ten, twenty, or more years of grass-growing, soil-building, and ecological web-weaving ahead. But then what? Too often, ranchers and landholders fail to plan for the inevitable changes that life brings—and end

up in crisis with no one to take over. Even when there is a willing and chosen successor, transition challenges can be formidable.

Ranching, like all of agriculture, is facing an unprecedented succession crisis due to a number of factors: high costs of entry into the business of ranching, lack of secure and affordable land tenure, regulatory burdens, and marginal profitability for even 'successful' businesses.



"Traditionally, ranching has been a closed-door industry," <u>writes Madeline Jorden in Ranchlands Review</u>. "The high costs of entering agriculture are significant enough to prevent young people from choosing it as a career, while families who do pass down an agricultural operation are threatened by the opportunity for higher wages in urban areas that are drawing the next generation away from the land. All in all, ... [this] does much to stifle innovation."

An affordable, secure lease can be just the leg up needed for a promising next-generation grazier to make the leap into ranching as a livelihood.

<u>California FarmLink</u> has worked with farmers, ranchers, landholders, attorneys, and others to create a trove of resources designed to help families transition their farm or ranch land and businesses. These include lease templates, asset purchase agreements and tools, a grazing contract, a land tenure guidebook, a farm/ranch succession guidebook, a collection of case studies on how land trusts can improve land access for farmers, and more. In 2021, FarmLink launched a 12-month succession program for farming and ranching families, <u>The Regenerator: A Year of Farm Succession Planning</u>.

TRANSITIONS WITH PURPOSE

As a landholder you have an opportunity to think creatively about that next generation: Will it be your own family heir, or maybe the daughter or son of an existing lessee? Maybe a hired ranch manager with experience, skills, and confidence who wants to become an independent business owner? Or a non-family member from the regenerative grazing community to bring new perspectives to the business? Perhaps you have the opportunity to protect your land with a conservation easement, preserving its ecological values while putting equity on the table to help with intergenerational transition. This section shares a handful of creative approaches to land conservation, ownership transfer, and promoting the viability of the next-generation.

Land Trusts

California Rangeland Trust (CRT), for example, is a rancher-led land trust that focuses on protecting grazing lands. By purchasing conservation easements from grazing landholders, CRT has helped to keep many a family legacy intact for the next generation. In "Conservation and Affordability of Working Lands," a collection of case studies of land trusts working with next generation farmers, features the Gutierrez brothers who acquired the title to their family ranch with the help of a conservation easement purchased by the American River Conservancy and a low interest loan guaranteed by the USDA Farm Service Agency (FSA).

Land Justice and Rematriation

In an inspiring movement toward land justice and rematriation, some landholders are beginning to return ranchlands to the indigenous peoples who were uprooted from them. In a recent example of land rematriation, the Richardson family, who arrived on the Sonoma Coast in the late 1800's, made a charitably discounted sale of almost 700 acres of coastal land back to the Kashaya Pomo who had been part of that land for over 12,000 years prior to European settlement. Funds were raised by the county along with a number of foundations with a key role held by the Trust for Public Lands' Tribal and Native Lands Program. A younger-generation member of the Richardson family now practices regenerative grazing of sheep on adjacent family and neighbor land nearby.

Another way to transfer permanent land access rights to members of an indigenous group is a *cultural access or respect easement*, as in the case with <u>Soul Fire Farm</u>. In addition, people have successfully set up mechanisms for reparative, voluntary land payments or 'taxes' to help a tribe begin reclaiming connection to stolen land, such as the 'Shuumi' land tax of Sogorea Té Land Trust.

Innovative Conservation Financing

In a unique example of conservation financing to facilitate land transfer to a next-generation ranching family, The Nature Conservancy (TNC) issued an RFP to transition a large ranch in the Nebraska Sandhills to a conservation-oriented rancher. Knowing how hard it is for new-entry ranchers to get a foot in the door, TNC and the Sandhills Task Force developed a lease with option to purchase which would require the lessee to work with mentorship from the Task Force to ensure successful use of conservation practices stipulated in the lease (later becoming stipulations of a conservation easement retained by TNC). The 5-year option price would be kept at the price purchased by the Conservancy, allowing appreciation to accrue to the lessee—not the land trust. A young couple with children was selected to lease the

ranch and they were later able to buy it subject to a conservation easement, retaining the equity they had helped earn during their lease period. With the land in the hands of working ranchers, and with a community of mentors in support, TNC is confident that the Horse Creek Fen Ranch will be well-managed for years to come.

In other resources for creative financing, landholders of large timber and grazing properties may wish to look into the California Water Board's (CWB) Revolving Fund for non-point-source benefits under the Clean Water Act which could include water quality benefits provided by regenerative grazing practices. Qualifying ranchers and conservation groups may be able to take advantage of the CWB 20vear loans with rates limited to no more than half of the State of California Bond rate.* Next-generation ranchers hoping to buy land should study the requirements of the FSA Farm Ownership Loan Program; or California FarmLink's conservation and land purchase loan programs.



^{*} Comment provided by Cam Tredennick, Consultant, March 8, 2021.

Regenerating Land and Communities

How else are today's landholders using their land to regenerate human communities? Christine Pielenz and Bill Laven founded Potrero Nuevo Farm on 300 acres in Half Moon Bay with a goal of providing free and healthy produce to people in need while building healthy soil. With their nonprofit partner, Abundant Grace Coastside Worker, Potrero Nuevo Farm grows, harvests, and donates over 20,000 pounds of fresh, organic produce to low-income residents in the area. TomKat Ranch manages cattle on their Pescadero, CA property to uphold shared ecological values and model regenerative grazing practices. Peninsula Open Space Trust holds an agricultural conservation easement on the land, protecting it from development and ensuring a future of healthy soil and productive agriculture.

Community Land Trusts and Agrarian Commons

Some ranch owners facing the end of the line envision a future of affordable land access by regenerative, working farmers and ranchers, and cannot find a viable path to do so within the private real estate market. Whereas conservation land trusts generally hold easements in partnership with private landowners, community land trusts were formed as nonprofit landholders, in which long-term or lifetime tenure is conveyed to qualifying members of the community. The <u>Agrarian Commons</u>, organized under umbrella organization Agrarian Trust, holds clusters of agricultural properties in trust for their communities—supporting regenerative land stewardship, local food production, and equitable access for working producers.

IN SUMMARY

There is an urgent need for landholders to take the bull by the horns—to proactively begin transforming land tenure, access and stewardship practices. Landholders are in a unique and empowered position to align the management of their land with their values and directly impact the health of their communities, ecosystems, and even the planet as a whole. By working creatively with the next generation, landholders can see their land be honored and cared for, support the regeneration and transformation of the ranching industry, and build a diverse and equitable system of ecological, economic, and community resilience.

Worksheet

Common Regenerative Grazing Goals By Stakeholder

Who are the active stakeholders on your grazing land? Try doing this worksheet together.

How will you learn or envision the goals of the silent stakeholder groups?



These are some goals commonly held by regenerative practitioners. Add your own! Try comparing your top five with those of the other stakeholder groups.



Neighbors, Public

Wildlife and

	and Livestock	Landholder	Ecosystems	and Land Trusts
Increase forage production				
Improve forage quality and diversity				
Improve animal health				
Improve livestock/wildlife relationship				
Reduce cost of/ dependence on chemical inputs				
Reduce soil compaction				
Improve soil fertility				
Enhance soil microbiome health				
Increase water infiltration				
Increase soil water holding capacity				
Improve water quality				
Decrease flood risk				
Improve aquifer recharge				
Increase plant and animal diversity				
Support wild pollinators and beneficial insects				
Manage invasive plants				
Increase prevalence of native plants				
Decrease fire risk				
Minimize social conflict				
Support the local economy				
Improve beauty of the property/ surrounds				
Support the next generation				

Grazing Lessee

Resources

Resources By Topic

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Regenerative Grazing, Range Management, and Conservation Science

Organizations and Services

- Brown's Ranch: Regenerating Landscapes for a Sustainable Future
- CSU Chico Center for Regenerative Agriculture and Resilient Systems
- Natural Resources Conservation Service
- Point Blue Conservation Science
- TomKat Ranch
- Your Local Resource Conservation District

Online Primers, Guides, and Tools (by organization)

TomKat Ranch:

- Growing Abundant Rangelands: An Introduction to Regenerative Ranching
- Profiles in Land and Management
- Welcome to Regenerative Agriculture Online Curriculum

Natural Resources Conservation Service:

- GHG and Carbon Sequestration Ranking Tool
- Interpreting Indicators of Rangeland Health
- Sizing Up California's On-Farm Carbon Footprint

Point Blue Conservation Science:

- Keeping Grasslands Healthy
- Keeping Mountain Meadows Healthy
- Keeping Oak Woodlands Healthy
- Keeping Riparian Habitats Healthy
- <u>Life Belowground on the Range</u>
- Rangeland Monitoring Network Handbook
- Rangeland Watershed Initiative Handbook

Journal Articles and White Papers

 Soil Carbon Restoration: Can Biology Do the Job?, by Jack Kittredge, NOFA/ Mass

- Soil Health as a Transformational Change Agent for US Grazing Lands Management, by USDA Agricultural Research Service (ARS)
- <u>Sustaining Working Rangelands: Insights from Rancher Decision Making</u>, in Rangeland Ecology and Management
- What Is Regenerative Agriculture? A Review of Scholar and Practitioner
 Definitions Based on Processes and Outcomes, in Frontiers in Sustainable
 Food Systems

Books

- Comeback Farms: Rejuvenating Soils, Pastures and Profits with Livestock Grazing Management, Holistic Management resource by Greg Judy
- Dirt to Soil, by Gabe Brown
- Grazing Management, by John F. Vallentine
- Holistic Management Handbook, by Alan Savory
- No Risk Ranching: Custom Grazing On Leased Land, Holistic Management resource by Greg Judy
- Rangeland Ecology and Management, by Harold F. Heady and R. D. Child

Tools for Calculating Animal Unit Months (AUM)

- A Guide to Livestock Leases for Annual Rangelands, by Sheila Barry, Stephanie Larson, Lawrence Ford and Philip Brownsey, UC ANR. See p. 4, Table 1. Animal Unit Month (AUM) equivalents by kind and class of livestock
- <u>Estimating Initial Stocking Rates</u>, Technical Note by the Natural Resources Conservation Service (NRCS)

Agricultural and Land Management Planning

Methods, Questionnaires, and Workbooks

- ATTRA Grazing Planning Manual and Workbook, National Center for Appropriate Technology (NCAT)
- Carbon Farm Planning, Carbon Cycle Institute
- <u>Conservation Plan Purpose, Benefits and Process</u>, USDA Natural Resources Conservation Service
- <u>Landscape Conservation Planning</u>, California Department of Fish and Wildlife

- <u>Native Land Map</u>, Native Land Digital (for Cultural Resource acknowledgment and planning)
- <u>Soil Health Management Plan</u>, USDA Natural Resources Conservation Service (may be included as part of Conservation Plan above)
- <u>Tribal Historic Preservation Office (THPO)</u>, National Park Service (for Cultural Resource acknowledgment and planning)
- Whole Farm/Ranch Planning System Highlights, Holistic Management International

Monitoring, Certification, and Incentives

Protocols, Handbooks, and Worksheets

- BLM Interpreting Indicators of Rangeland Health Protocol
- NRCS In-Field Soil Health Assessment Worksheet
- NRCS Stream Visual Assessment Protocol
- Point Blue Rangeland Monitoring Network Handbook

Monitoring and Certification Programs

- Audubon Conservation Ranching Program
- Regenerative Organic Certification
- Point Blue Rangeland Monitoring Network
- Savory Institute Ecological Outcome Verification
- Soil Carbon Coalition Network

Incentives

CDFA Healthy Soils Program

Lease Drafting

Guides, Worksheets, and Templates

- Basic cash lease template, California FarmLink
- Elements of a Good Lease, California FarmLink (Printable Handout)

- Growing on Solid Ground: A Farmer's Guide to Land Tenure, California FarmLink
- <u>Guide to Livestock Leases for Annual Rangelands</u>, UC Agriculture and Natural Resources

Toolkits and Interactive Tools

- Build-A-Lease Tool, Land For Good
- <u>Conservation Lease Toolkit</u>, Land Stewardship Project
- Farmland and Ranchland Leasing, Farm Commons
- <u>Farm Lease Builder Tool</u>, Vermont Law School, Center for Agriculture and Food Systems
- Toolbox for Leasing Farmland, Land For Good

Land, Power, and Anti-Racism

History, Maps, and Toolkits

- Annotated Bibliography on Structural Racism Present in the US Food System, 8th Ed., Michigan State University Center for Regional Food Systems
- Farming While Black, by Leah Penniman, Soul Fire Farm
- Land Reparations and Indigenous Solidarity Toolkit, Resource Generation
- Northeast Farmers of Color Land Trust (NEFOC)
 - » Reparations and Rematriation Map
 - » Honoring Indigenous Sovereignty
- "Regenerative Agriculture Needs a Reckoning: Why avoiding uncomfortable conversations about equity, race, and access threatens to spoil a nascent movement's environmental promise." The Counter
- Territory Acknowledgment, Native Land Digital
- The Great Land Robbery, The Atlantic
- The White Ally Toolkit, The Dialogue Company, LLC

Finding and Supporting Lessees

Linking Services and Tools

- <u>California FarmLink</u> Land-linking, lease/tenure assistance and farm loan program.
- <u>Match.graze</u> Interactive, web-based tool hosted by University of California Cooperative Extension.

Rancher Networks, Next-Generation Rancher Support

- <u>California Rangeland Conservation Coalition</u>
- CSU Chico Center for Regenerative Agriculture and Resilient Systems
- Cuesta College
- Fibershed
- Holistic Management International
- Kitchen Table Advisors
- National Young Farmers Coalition
- Natural Resources Conservation Service (NRCS)
- Quivira Coalition, New Agrarian Program
- University of California Agriculture and Natural Resources (ANR) and Cooperative Extension (UCCE)
- Western Landowners Alliance and Women in Ranching
- Your Local Resource Conservation District

Communication and Dispute Resolution

Programs and Training

- <u>California Agricultural Mediation Program (CALAMP)</u>, Environmental Mediation Center: Official United States Department of Agriculture certified agricultural mediation program for California.
- The Center for Non-Violent Communication

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