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# HOW TO REFORM GRAZING POLICY:

CREATING FORAGE RIGHTS ON  
FEDERAL RANGELANDS

Robert H. Nelson

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### **EXECUTIVE SUMMARY**

Property rights have been recognized since ancient times as an essential element of a well ordered society. When clear rights to property exist, the owner will take care to exercise careful stewardship. When rights are undefined, however, there is conflict among multiple claims. In the past, the solution to the confusion of multiple claims on the rangelands in the American West has been government ownership. Ranchers have been allowed to graze livestock on the public federal rangelands for over a century. Having applied labor to this land, it stands to reason they are entitled to its benefit. Yet, applying the same thinking, many others also have entitlements in the land as well, including conservationists, outdoor enthusiasts, and others.

Many ranchers have pressed for decades for a more formal establishment of their tenure status on the federal rangelands. What is new today is that some prominent members of the environmental movement are beginning to reach a similar conclusion — that a delineation of formal rights to use would create an institutional setting that would also promote a more responsible environmental management and use of the federal rangeland resource. The blurred lines of responsibility resulting from the lack of any clear rights on the federal rangelands have been as harmful to the environment as they have been to the conduct of the livestock business.

If “forage access” rights were defined and made legally transferable to any new owner, environmental organizations could purchase the forage rights to federal lands which are now available only to ranchers. Environmental groups seeking to reduce livestock grazing on federal lands would have a realistic way to accomplish their goals. A clear delineation of rights would also encourage existing ranchers to invest in long-run improvement of the land and its productivity. Equally important, the debate over western land-use would no longer be resolved by government planners, but by the competitive workings of the marketplace. Changes in rangeland use would be made through voluntary transactions between existing rights holders -- ranchers -- and those who wish to see changes on western lands.

Establishing forage rights on federal lands begins by acknowledging that the existing rancher holding a grazing permit to an area would continue to hold the permit as a formal matter of right. In the process, the actions allowed under the permit, the provisions for transferring it to other parties, the types of parties eligible to hold the permit, and the character of the permit itself would be changed in the following manner:

- Eliminate the use-it-or-lose-it requirement for forage rights so that rights may be used for purposes other than livestock grazing;
- Eliminate the base property requirement that a rancher must own nearby property or water rights in order to own forage rights;
- Eliminate the requirement that the holder of a grazing permit must be a livestock operator;
- Eliminate the restrictions on rangeland subleasing, and;
- Shift from a permit system to a leasing system for forage rights.

As proposed here, the forage rights leased would be part of the bundle of rights at any given portion of federal lands. The core right would, of course, be the control over the use of the forage resource in the allotment. However, this use would be constrained to a certain degree, reflecting the fact that there currently exist other de facto rights in the overall surface bundle of rights.

In the future it also may be possible to move beyond government ownership of the Western range. In place of the federal rangelands, there could be a new system of private property rights in which the private rights newly defined would include a complex blend of individual and collective rights. An appropriate institutional model here might be a condominium in which the rights to the entire property are separated into the individual rights of the unit owners and the rights to control the use of the common elements that are exercised collectively through the home owners' association or other collective decision making instrument. In a rangeland condominium, the individually held rights would be the forage rights, giving them control over the use of the grazing forage resource in a particular allotment.

In order to implement a full condominium privatization, many more details beyond the brief sketch offered here would have to be provided. Until a privatization of the public rangelands can occur through establishing a condominium arrangement, or perhaps in some other way, the individual rights to grazing forage would be defined in the context of continuing government ownership of the rangelands. However, a clearer resolution and formal codification of rancher rights on the federal lands, as proposed in this paper, could be a first step toward such broader institutional changes.

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## INTRODUCTION

Property rights have been recognized since ancient times as an essential element of a well ordered society. Rejecting Plato's communal designs, Aristotle wrote that "how immeasurably greater is the pleasure, when a man feels a thing to be his own." When clear rights to property exist, the owner will take care to exercise careful stewardship. When rights are undefined, however, as Aristotle commented, "we see that there is much more quarreling among those who have all things in common."<sup>1</sup>

As in many matters, Thomas Aquinas followed Aristotle in his assessment of the importance of property. There were three reasons why property rights were essential. First, they provide important incentives in that "each one would shirk the labour and leave to another that which concerns the community, as happens where there is a great number of servants." Second, Aquinas wrote, the clear assignment of responsibility for property means that "human affairs are conducted in more orderly fashion if each man is charged with taking care of some particular things himself." And third, like Aristotle, Aquinas observed that "quarrels arise more frequently where there is no division of the things possessed."<sup>2</sup>

John Locke would affirm these principles and add that property rights come into existence when labor is applied to a resource to create something of value. The deer is not owned in the wild but becomes the possession of the hunter at the moment it is killed.<sup>3</sup> In the nineteenth century a similar concept would be applied in the United States under the Homestead Act. A settler obtained a right to the land by successfully farming it for five years.

On the federal rangelands of the West, ranchers have grazed public lands for a century or more.<sup>4</sup> They have applied their labor to the land and, by the standard of Locke, should be entitled to the fruits of their efforts. Yet, applying the same thinking, many others also have entitlements in the land.<sup>5</sup> The traditional hunting

of deer, antelope, elk and other animals on public rangelands may have a value equal or greater than the livestock forage obtained. If interpreted broadly, even those who visit the land to enjoy an evening sunset could be said to have applied their labor to the land to create something of beauty and value.

In the twentieth century, government ownership of the lands throughout much of the West has been the solution to the confusion of the multiple claims.<sup>6</sup> This solution was more readily adopted because — under the banner of European socialist, American progressive and other collectivist ideologies — the tides of history shifted once again in this century to communal property arrangements. Utopian ways of thinking as old as Plato had their day again, if with predictably dismal results around the world.

Now, however, at the end of the twentieth century nations everywhere are trying to sort out the messes of a century of collectivist illusion. Many governments are privatizing former state owned enterprises.<sup>7</sup> On the federal rangelands, to be sure, the task is complicated by the past. As noted above, there is already present a diversity of groups and interests with legitimate claims to rights in the land. Privatization in a typical fashion, consisting of the outright sale of the land by the government, would in effect dispossess these groups of their rights claims. If perhaps it would be economically efficient, it would be ethically reprehensible — in a moral category not really all that much different from socialist and other expropriations of private property in the past.

Moreover, the evolution of property rights, historically, is almost always gradual and contingent.<sup>8</sup> Except in times of revolutionary excess, it consists of the recognition of an ability of some party to exclude a particular use here, of the ability to sell access to a resource there, and of the incremental accumulation of other types of controls over the use and disposition of a resource. The evolution of such rights typically takes place first in an informal way, perhaps grounded in local custom. The formal legal acceptance of a right is generally the end rather than the beginning of the process.<sup>9</sup>

The rights to graze livestock on federal lands come in this category. They have long existed in a *de facto* way, and are informally recognized by many of the involved parties — if still officially denied by some. Many ranchers have pressed for decades for a more formal establishment of their tenure status on the federal rangelands. What is new today is that some prominent members of the environmental movement are beginning to reach a similar conclusion — that a delineation of formal rights to use would create an institutional setting that would also promote a more responsible environmental management and use of the federal rangeland resource. The blurred lines of responsibility resulting from the lack of any clear rights on the federal rangelands have been as harmful to the environment as they have been to the conduct of the livestock business.



If rangeland rights were defined and made legally transferable to any new owner, environmental organizations could purchase the forage rights to federal lands which are now available only to people engaged in ranching. As owners, such organizations would be able to ensure that riparian habitat is protected, that forage is available for wildlife, and that other key environmental objectives on federal rangelands are met. Moreover, a clear delineation of rights would encourage existing ranchers to invest in the long run improvement of the land and its productivity. The establishment of forage rights offers the best means available for resolving the severe gridlock and polarization that have beset Western rangelands for the past quarter century or more.

## **AN ENVIRONMENTAL PLAN FOR FORAGE RIGHTS**

Andy Kerr is, no one can doubt, a fierce partisan of environmental causes. As the chief strategist for the Oregon Natural Resources Council, he sought the sharp curtailment, if not elimination, of timber harvesting in the federal old growth forests of the Pacific Northwest. Now, Kerr has turned his attention in a new direction; he argues that "if we want — and society does want — to restore streams, bring back salmon, unendanger species, restore soil productivity and reduce government spending, then livestock must go from our public lands."<sup>10</sup>

Kerr and other environmental activists fought to cut back timber harvests with the tried-and-true methods of the contemporary environmental movement: Persuade the federal government to wield a command-and-control stick to compel compliance with environmental objectives — in the case of the forests of the Pacific Northwest, Kerr and his allies used the formidable powers of the Endangered Species Act to curtail logging. Yet, in seeking to reduce livestock grazing on the federal lands, Kerr now professes to favor a much different approach. Instead of government coercion, he says he wants to give ranchers the right to sell their access to federal land forage. Environmental or other organizations then could buy ranchers out in voluntary transactions among willing sellers and willing buyers. In his words, "a permittee should be able to sell the grazing privilege to anyone: another rancher or to an environmental group who could elect to retire the permit in favor of salmon and elk or plenty and poetry."<sup>11</sup>

Kerr says that a buy-out approach would be both "easier" and "more just" than traditional command-and-control strategies.<sup>12</sup> It would be more workable because livestock ranchers have proven themselves a powerful political foe. Persuading the government to exercise its powers to curtail livestock grazing significantly in areas of special environmental sensitivity would be a long and difficult political process with uncertain prospects at best. Among other things, ranchers can appeal to powerful images in the mind of the average American of the lone cowboy riding the Western range — in a way that no timber harvester, for example, ever could.

At the same time, one of the characteristics of the federal rangelands is their low economic value in grazing use. It takes 15 acres of typical Bureau of Land Management land to support the grazing of one cow (and often a calf) for one month. As shown by market trades that have long occurred among ranchers, it would require an average of only about \$3 to \$6 per acre to pay the going price to buy out a grazing permit. At these prices, many environmental groups have sufficient resources that they could afford to buy out rancher permits covering significant acreages of federal grazing lands, including the lands of most environmental interest to them.

In total, livestock grazing is today taking place on approximately 260 million acres of federal lands. It is not necessary for any environmental purpose to buy out all of this grazing. Indeed, livestock grazing in many areas may be a necessary element in improving rangeland conditions. Nevertheless, as a way of showing the magnitude of the resource values at stake, and assuming that environmentalists did want to buy out all grazing and that ranchers were willing to sell, it would require in the neighborhood of \$1 billion to accomplish this purchase.

Besides purchases by environmental groups, the government itself would also enter the market to buy out grazing rights in selected areas. Environmental activists oppose grazing in wilderness areas and have sought to have the government remove livestock from these areas. A negotiated purchase from willing rancher sellers would be a fairer, less confrontational and more politically feasible way to accomplish this.

The costs of administering grazing on BLM lands are estimated to be \$200 million per year. The economic inefficiency of the current federal grazing system is shown by the fact that it would require in the range of only three to five years of BLM administrative costs to pay the full capital value for all current livestock grazing on BLM lands. As long as administrative costs are so high, from the standpoint of economic rationality in the management of a resource, it would pay to abolish the existing grazing regime—to buy out all the grazing rights. Kerr makes this economic argument as a possible grounds for a widespread buyout of grazing: “since the government spends \$10 for every \$1 it takes in on grazing, in a few years the [administrative] savings can pay for the compensation [paid to buy out ranchers]. Then the money could go to debt payments or starving kids or heart bypasses.”<sup>13</sup> Although it is impossible to defend the status quo, other strategies for change might be adopted, including drastic reductions in government administrative costs of grazing.

Kerr also argues—departing from the long-standing environmental conventional wisdom—that it is fairer and more equitable to pay the rancher. Many ranchers and their predecessors have grazed the same federal lands for a century or more, building expectations of continued federal land access into their private ranching investments and other calculations. When the ranch has been sold, the

permit to graze on federal land — which by long practice automatically accompanies the transfer of ownership of the ranch — often represents a major portion of the ranch value. Thus, many purchasers of ranches have in effect paid for their grazing access to federal lands. As Kerr comments, “the market recognizes the value of the permits when ranches are transferred. Grazing reductions reduce the value of the [private] property to which the permits are attached.”<sup>14</sup> So it is only fair that the government should compensate the rancher, Kerr concludes, for this loss of value. All in all, it is “a solution to an environmental problem that requires less government regulation and lets the free market work. Call it supply-side ecology,” says Kerr.<sup>15</sup>

## **RETHINKING THE FEDERAL RANGELANDS**

One need not agree with Kerr’s assessment of the environmental impacts of livestock grazing, or believe that grazing needs to be curtailed on western lands, to recognize that, if it were to be adopted, such a proposal to allow the marketing of grazing forage rights to nonranchers would be a milestone in the history of federal land policy.

In the past, the government has sought to resolve issues such as the role of livestock grazing on government lands through “scientific” debate about the ecological, economic and other impacts of grazing. The potential values of competing uses must also be factored in and weighed against the grazing value. Then, levels and seasons of livestock grazing, the existing federal land system has said, should be resolved by land use planning grounded in scientific determinations. It has all been part of the scientific management philosophy that has provided the intellectual foundation for federal land management since the progressive era early in this century.

Now, however, Kerr and others would in effect bypass all that. The question of whether federal land forage would be used for grazing would no longer be resolved by government planners but by the competitive workings of the marketplace, as already occurs on private lands in the West. It would be a question of whether environmentalists, recreationists, or other groups are willing to meet the rancher’s selling price. The precise motives or scientific calculations of either party would be irrelevant to this process. Such an approach would involve less conflict than the existing regulatory regime because changes in rangeland use would be reached through voluntary transactions. It would also require much less in the way of a government administrative apparatus, offering the potential of major savings in government expenditures.

Kerr is not the only prominent environmentalist these days who talks about creating forage markets on federal lands. Johanna Wald has for years been the leading environmental spokesperson on matters relating to livestock grazing on federal lands. In 1974, as an attorney for the Natural Resources Defense Council

(where she is still located), Wald was instrumental in winning *NRDC v. Morton* in federal court.<sup>16</sup> As a result of this decision, the Bureau of Land Management was required to prepare almost 150 new land use plans to reexamine the role of livestock grazing on 175 million acres of federal land, an effort that absorbed large amounts of agency attention and money over 13 years. Partly out of disillusionment with the ultimate outcome of that long planning process (the BLM ended up spending a great deal but making few changes in grazing practices), Wald has recently suggested that a turn toward the market may be needed.

Writing in the *High Country News* (with Karl Hess) in the fall of 1995, Wald called for a whole new approach to federal land grazing based on "incentives and markets." For this purpose, environmentalists and others "should be free to acquire permits to federal grass and to use the lands to enhance wildlife, stabilize soils, protect endangered species, improve riparian areas or, if they prefer, raise red meat." If the law were changed to allow this, environmentalists would "have less cause to push for a political end to grazing on ecologically fragile public lands. For the first time, they will have market options, like buying all or a portion of a rancher's permit or simply leasing federal forage."<sup>17</sup>

One might think that Dave Foreman, the founder of the radical environmental group Earth First, would be among the persons least likely to favor linking free markets with environmental objectives. In the 1980s, Foreman was willing at times to break the law, and even destroy the property of others, to gain his objectives.<sup>18</sup> Solutions grounded in the recognition of private rights were far from his thinking. Yet, Foreman recently claimed to have had a change of heart. Instead of their forced removal, he now proposes an effort to "buy out grazing permittees in Wilderness Areas, National Parks, Wildlife Refuges, and other reserves." Foreman says that he has "become convinced that butting-head battles with ranchers over grazing in Wilderness is bad news for all involved. The most practical way (and, I gotta admit, fair) to end grazing in Wilderness is to buy 'em out."<sup>19</sup>

Some environmental groups are starting to put their money behind this sort of approach. In 1995 an environmental organization, Forest Guardians, bid to lease grazing lands owned by the state of New Mexico. Unlike federal lands, most states regularly put the use of their grazing lands up for auction. State Lands Commissioner Ray Powell at first refused to accept bids for nongrazing uses. Facing growing environmental protests and threats of legal action for failure to exercise a proper trust responsibility (state trust lands are to be managed to raise revenues for schools and other state purposes), Powell has since reversed his stance. In October 1996, Forest Guardians entered a bid for a New Mexico grazing lease involving an environmentally sensitive riparian area along the Rio Puerco River and the bid was accepted by the state. It was the first such successful purchase of grazing rights by an environmental group in a state competitive lease sale.<sup>20</sup>

Local governments in the Las Vegas area have paid more than \$1 million to purchase five grazing allotments, water rights, range improvements, and the base property from existing ranchers, involving more than 900,000 acres. These purchases were made for the purpose of eliminating grazing over the allotments, a key part of a broader agreement of the local governments with the Fish and Wildlife Service to implement a habitat conservation plan for the desert tortoise, listed under the Endangered Species Act. Rather than a forced removal of the ranchers, which arguably might have been possible under existing law, the Las Vegas plan paid compensation through a voluntary buyout of the affected parties — an approach that should be extended much more broadly in the resolution of other endangered species conflicts. The plan also provides for the spending of up to an additional \$1 million in order to further “purchase grazing privileges from willing sellers.”<sup>21</sup>

In September 1996, the Nature Conservancy of Utah announced that it had obtained an option to purchase the Dugout ranch at the entrance to the Needles District of Canyonlands National Park for \$4.6 million. The purchase involved 5,167 acres of private property and associated control over the grazing use of 250,000 acres of BLM and Forest Service allotments. The Nature Conservancy plans to continue the livestock business, while taking steps to ensure that the presence of cattle is compatible with the high biodiversity, scenic and other environmental assets of the allotments being used. The purchase of the ranch was also designed in part to prevent the sale of the private lands for second home and other development.

Dave Livermore, the Utah State Director for Nature Conservancy, commented that the organization was increasingly seeking to “move beyond the rangeland conflict” and enter into “collaborative efforts with livestock operators.” For one thing, “cows are better than condos. Increasingly in the West, this is the only choice we face.” Moreover, “for biodiversity to be preserved, local people must prosper.... We have to offer models which, by embracing progressive grazing practices, also make economic sense.”<sup>22</sup> In the case of the Dugout ranch, the Nature Conservancy concluded that a direct purchase was the best route, but in other cases options such as subleasing, purchase of easements, and other transactions less than a full purchase might be appropriate.

This shift in strategy by some environmentalists is long overdue. In *Sand County Almanac*, Aldo Leopold argued that fundamental improvements in the environment would come about only when people changed their ways of thinking. Government could do useful things but at some point it would become a “mastodon” that was “handicapped by its own dimensions.” If government asked a property owner to “perform some unprofitable act for the good of the community,” it would only be “fair and proper” to pay for this. Indeed, at one point Leopold even suggests specifically that, if livestock must be excluded from certain areas to protect the grizzly

bears there, then "buying out scattered livestock ranches is the only way to create such areas."<sup>23</sup>

In the long run, "the answer, if there is any, seems to be in a land ethic, or some other force which assigns more obligation to the private land owner."<sup>24</sup> In short, if the land owner, or the grazer on the public rangelands, is to behave according to a land ethic, it will not be as a result of government compulsion but because that person is free to experiment and manage the land in accordance with his or her own vision of what is ethically right. That will require the personal independence and ability to control use that only a regime of private ownership of property rights can offer.

## THE EXISTING GRAZING SYSTEM

If a new rights regime were established on federal forests and rangelands, it would help to resolve what has been the most controversial and bitterly fought issue in the history of the federal lands. Fierce disputes over livestock grazing date back to the second half of the nineteenth century. Until then, the settlement of the western territories of the United States had taken place on Midwest and other lands where there was enough rain for crop farming. But when settlement moved beyond the 100th meridian (going westward, approximately one-half of the way through the Dakotas, Nebraska and Kansas), there was no longer sufficient moisture for traditional farming. Absent irrigation, the only feasible agricultural use of the land was for the grazing of cattle and sheep.

The principal law for the disposal of federal land to settlers was the Homestead Act of 1862, enabling a settler who farmed 160 acres for five years to acquire ownership free of charge. This law worked well enough in the Midwest but was ill suited to the conditions of the arid grazing lands further west. On these lands, the productivity of the land was so low that a small family ranch of 100 cattle generally required more than 1,000 acres. In the most arid lands such as were found over much of New Mexico and Arizona, it might require more than 5,000 acres for a ranch even of this small size.

Yet for many years Congress refused to modify the Homestead Act (and other public land laws with similar acreage limits).<sup>25</sup> By eastern standards the ownership of more than 1,000 acres seemed a virtual landed estate. Others persisted in the hope, against all evidence, that a landscape of small family farms growing crops on the model of the midwest would somehow eventually be extended over all the West.

The Homestead Act itself was a formal codification of practices that had developed over a long history of squatting on the public lands. From the earliest days of settlement, when the government did not make land available under terms acceptable to settlers, the settlers simply moved onto the land in defiance of the law.

At some point, what started out as an unlawful occupancy would typically be recognized retroactively by the Congress in a grant of full ownership rights.

In the later part of the nineteenth century, when the Homestead Act proved unsuited to their circumstances, ranchers also attempted to follow this route. They installed barbed wire fences over portions of the public rangelands to stake out "their" area of rangeland. This time, however, the federal government refused to accept the actions of the grazing squatters. Among other things, the government was simply not prepared to convey such large acreages for such a low value use of the land as livestock grazing.

Ranchers therefore were forced to turn to other ways of asserting control over the public range.<sup>26</sup> An uncontrolled commons, they recognized full well, would be disastrous for range conditions. Using the Homestead Act and other existing legislation, ranchers acquired private ownership of key properties that controlled access to the nearby public range. Such a property might be a parcel of land that controlled access to public grazing lands through a canyon or that contained a spring that was the only available water in the area. A rancher might obtain the land along a river or stream that could be used to irrigate lands to grow hay for winter feed supplies, a necessity for ranching in many northern climates. Ranchers also organized among themselves informally to allocate individual access to the use of federal rangeland at particular times and places.

All this had the effect of creating a *de facto* division of the range among competing livestock users. However, the periodic eruption of range wars involving cattlemen, sheep herders and homesteaders testified to the unstable and less than fully satisfactory nature of these informal rancher efforts to deal with a classic commons situation.

Following the enactment of the Forest Reserve Act of 1891, the existing *de facto* allocations of federal land grazing were given a more secure legal status first in the national forest system, where exclusive permits were issued to ranchers to graze in certain areas. Then, grazing on the remaining public domain lands was brought under government control by the Taylor Grazing Act of 1934. Under the Act, ranchers were eligible to graze on federal lands if they could meet two conditions: (1) ownership of nearby private "base" ranch property that was complementary with grazing on federal lands, and (2) the ability to demonstrate a recent history of grazing on federal rangelands. The practical effect was in many ways to give the force of law to the grazing arrangements that had already existed less formally.<sup>27</sup> The one major exception — indeed, an important reason many cattlemen favored the law — was that it served to exclude the migratory sheep herders who had never been part of the local range allocation system.

The Taylor Grazing Act was thus a kind of homestead act for federal rangelands. A new agency, the Grazing Service, was created to administer the new system of rangeland allocations. In 1946, the Grazing Service was merged with the old General Land Office (which with the end of the disposal era had little left to do), thereby creating the current Bureau of Land Management.<sup>28</sup> The BLM was originally formed with a main purpose to police the grazing arrangements established by the Taylor Grazing Act. Livestock grazing to this day occupies a major portion of the time and effort of BLM personnel. The BLM currently has a total budget of about \$600 million per year for the management of all types of lands and resources, an estimated 30 percent of which is attributable in one way or another to the existence of the grazing program.<sup>29</sup>

Under the provisions of the Taylor Grazing Act for BLM lands, and similar arrangements on national forest lands, each eligible rancher is permitted to graze cattle (or sheep) on a designated portion of federal land, called an "allotment." Most ranchers are the sole grazing users of this land area, although some graze their livestock together with other ranchers in common allotments. The rancher has up to a ten year permit from the BLM to use the allotment. In practice, although not explicitly required by law, the BLM (and Forest Service) virtually always renew the permit for the existing rancher. When the "base" ranch to which the permit is attached is sold, the BLM again is not legally required but in practice almost always transfers the permit to the new owner.

As a result, the assurance of future access to federal lands, connected to a particular private ranch property, has taken on the character of a property right. This right has a value — the "permit value" — that can often represent half or more of the total value of the private ranch. Federal courts have ruled that the rancher does not have an actual property right but at the same time federal tax collectors have insisted that permit value be included in federal capital gains, estate and other tax calculations. Banks collateralize loans to ranchers on the basis of ranch values in significant part attributable to permit value.

The rancher's permit specifies how many livestock will be allowed to graze the allotment and the precise times when the livestock can be present. For example, a rancher in a northern state such as Idaho or Montana might have a permit to graze say 200 head of cattle on a particular allotment of BLM land between April 1 and June 15. After that, the cattle might move for several months to an allotment at a higher elevation on Forest Service lands, perhaps then returning to the BLM lands for a portion of the fall. In winter, the rancher would then typically feed the cattle from his private lands, including hay grown during the summer and stored for that purpose. In the warmer southwest, however, it is common for a rancher to keep livestock on BLM and/or Forest Service land for the entire year ("yearlong grazing").



A person is required to be a livestock operator to hold a permit to the use of the forage in a federal land allotment. This is partly because the permit holder must own base private ranch property. More fundamentally, the federal lands grazing system, similar to western water law, follows a use-it-or-lose-it philosophy. If a rancher does not use the allotment for livestock grazing, the government considers the rancher in violation of the provisions of the Taylor Grazing Act and will reallocate the permit to another livestock operator. It is this feature of the system that up to now has largely prevented hunting, fishing, environmental and other nonranching groups from bidding to purchase grazing permits from ranchers, then dedicating the forage to some other type of nongrazing use.

One of the major sources of grazing conflict has been the grazing fee. The Forest Service began charging a fee in 1906, and the Taylor Act in 1934 authorized a fee as well on BLM lands.<sup>30</sup> The fee is charged on the basis of the number of months that each cow (sometimes with a calf) or other domestic animal spends grazing on public rangelands — “animal unit months” (AUMs). In 1993, there were 9.8 million AUMs of livestock grazing on BLM lands and 8.1 million AUMs on Forest Service lands. The 1993 grazing fee was \$1.86 per AUM. Thus, total government grazing revenues for BLM and Forest Service lands were less than \$35 million. This small amount of money was the main government source of revenue from surface lands extending over more than 10 percent of the land area of the United States, a reflection in part of the very low economic value of grazing on these lands.

Since the 1970s, environmental groups have sought greater recognition of wildlife, watershed, and other nonranching uses of the public rangelands.<sup>31</sup> In order to accommodate these uses, they have pressured federal land agencies to make reductions as needed in livestock grazing. As noted above, the Natural Resources Defense Council in the mid 1970s won a major court case requiring that the BLM undertake a brand new round of land use planning over all its lands.<sup>32</sup> The Federal Land Policy and Management Act of 1976 gave a Congressional blessing to this effort, mandating that land use plans should form the basis for future management actions by the BLM. Yet, land use planning has in practice more often yielded gridlock and polarization than decisive and effective management actions. As a top official of the BLM commented at a 1994 public land conference, “we recognize that our planning systems have been a pretty bad failure.”<sup>33</sup>

A more powerful set of pressures for change in livestock grazing may yet come from a different type of plan, the budget plan. The main outputs of the BLM lands are livestock grazing; recreation and wildlife; timber harvests; energy minerals; and “hardrock” minerals. If all BLM costs are assigned to one or another type of output (thus factoring in the full overhead costs as well), as noted above, the management costs for livestock grazing are estimated to be about \$200 million.<sup>34</sup> Yet, revenues

earned from livestock grazing on BLM lands in 1994 yielded less than \$20 million for the government.<sup>35</sup>

To be sure, the federal grazing fee may not reflect the true market value of the grazing activity. However, even valuing grazing at government estimates of its full market value, the total economic value of livestock grazing on BLM land is still below \$75 million, about one third of the administrative cost. In short, by any accepted economic and budgetary criteria, there are strong grounds to search for alternatives to the current livestock grazing system.<sup>36</sup>

Any significant changes would affect the lives of many individual ranchers. The federal grazing system presently serves about 19,000 livestock operators on BLM lands and 9,000 on Forest Service lands. The size of allotments ranges from less than 50 acres to more than 1,000,000 acres. The forage obtained from federal lands supplies about 7 percent of the total rangeland forage consumed in the United States and 2 percent of the total feed consumed by cattle. Although federal forage thus is not much of a contributor to the national feed supply for livestock, it does play a significant role in the operation of the ranching industry in the West. In Idaho 88 percent of cattle spend at least part of their time during the year grazing on federal rangelands; in Wyoming the figure is 64 percent; and in Arizona 63 percent.<sup>37</sup>

## **A BRIEF HISTORY OF THE FORAGE RIGHT IDEA**

Although environmentalists such as Andy Kerr have recently proposed buying out the grazing permits of ranchers who are willing to sell, this idea has been around for many years. The original proponents were mostly economists concerned about the economic problems of the method of allocating access to grazing on government-owned lands. Although ranchers face little risk of being displaced altogether from allotments, the terms of their status on the rangelands are subject to the winds of political change and thus they lack secure tenure in many respects. Economists have long recognized that, where the ability to capture the gains is uncertain, there will be less incentive for making long run investments and the pursuit of high quality management. As early as 1952, a leading western land economist observed, "as long as the public land manager insists on absolute liberty to alter the use to which grazing land is committed or to change the user to which it is rationed, the private firm user . . . will distort his inputs toward short-run returns, including deterioration of the resource."<sup>38</sup>

Existing arrangements also misallocate access to the federal rangelands among different types of users.<sup>39</sup> The requirement for ownership of base property means that many ranchers who do not own such property, yet might place a higher value on the federal land forage, are denied the opportunity to obtain access to this forage. The federal land agencies have also acted to place tight limitations on subleasing of federal land forage, thus further ensuring that some ranchers who

might value the forage less will be required to use it in place of other ranchers who might value it more. Finally, those who might value the use of the livestock forage more highly for nongrazing purposes such as hunting, watershed protection, or simple aesthetics have been shut out of the opportunity to purchase it directly.

One of the early economists to criticize these features was Delworth Gardner, long a leading U.S. agricultural economist and now professor emeritus at Brigham Young University. In a 1962 article in the *Journal of Farm Economics*, Gardner concluded that "the inability of the [forage] resources to move to their highest economic use impedes economic development by diminishing the product that might have been taken from the resource."<sup>40</sup> In a 1963 follow-up article, Gardner examined how this problem might be resolved.

Gardner first observed that it would be desirable to have greater security of tenure, a goal that could be achieved if the grazing "permit were a 'right' to graze a given number of AUMs in perpetuity." Gardner specifically proposed that the government should "create permits covering redesignated allotments . . . and issue them to ranchers who presently hold permits in exchange for those now in use. These permits would be similar to any other piece of property that can be bought and sold in a free market. These permittees would be completely free to retain or to dispose of the new permits to whomever they wished, for whatever price they could agree on." If the government were to decide to reduce grazing, it would still have this prerogative, but it "would be required to compensate the permittee for his loss."<sup>41</sup>

Gardner conceded that "if many small operators should decide to discontinue ranching because they choose to sell their public grazing, then local, rural communities may suffer somewhat through these 'neighborhood' effects." However, he considered that the improvement in the operation of the grazing market "would almost certainly more than offset" any such negative impacts.<sup>42</sup> In any case, new economic forces would eventually win out, whether ranchers approved or not. It would be better to have a fair and orderly process, one that compensated ranchers as they made way for potentially new and more valuable uses — as would happen if the changes occurred through voluntary transactions in the market. Absent this outlet, recreational and other groups would have no choice but seek to attain their goals in a zero-sum-game effort in the political process, using command-and-control devices.

Gardner's proposal to formally establish forage rights circulated for many years in the academic world, but otherwise generated little interest.<sup>43</sup> By the early 1990s, however, it was receiving new attention as a possible practical way of addressing public rangeland problems that for years had proven intractable. Writing in the *Journal of Range and Water Conservation*, professor Jerry Holechek of New Mexico State University observed that "the effect of livestock grazing on riparian habitats is a major [environmental] concern." Including other areas where

grazing was problematic, he estimated that grazing might need to be eliminated over perhaps 10 percent of federal rangelands. To accomplish this, Holechek suggested, "the most practical and equitable solution when major conflicts develop between recreation and livestock grazing may be for the government to purchase the grazing permit from the rancher at fair market value on a willing seller/willing buyer basis."<sup>44</sup> Holechek estimated that the purchase price would be about \$70 to \$90 per animal unit month (AUM), requiring total spending of up to \$80 million to acquire the permits on the federal rangelands with highest environmental priority. Given the deep public concern to maintain the quality of the rangeland environment, and the large magnitude of government expenditures devoted to the resolution of rangeland environmental controversies, spending of \$80 million for such a purpose would be a very cheap price to pay indeed.<sup>45</sup>

Robert K. Davis served from 1976 to 1984 as director of the economics staff in the Office of Policy Analysis in the Interior Department, the chief economist serving the Secretary of the Interior. By the 1990s, having left Interior for the University of Colorado, Davis was publicly advocating an approach similar to Holechek's proposal. At a grazing conference he proposed a new regime of "free-choice environmentalism." The existing restrictions on the ability to hold a grazing permit would be eliminated, thus making it possible for environmental, hunting and other groups to purchase the permits. If they chose to retain their permits, ranchers would obtain greater security of tenure. Such a system, Davis argued, would mean that "the need for a command and control bureaucracy armed with a heavy regulatory fist would disappear along with the clamor for increasingly byzantine procedural entanglement and unproductive public participation."<sup>46</sup> Forces in the marketplace, rather than a failing BLM planning system, would determine the future uses of federal rangeland forage.

Professor David Lambert of the University of Nevada, addressing the 1994 annual meeting of the Western Economic Association, expressed similar views. Although he was skeptical about the idea of complete privatization through "transferring title of western U.S. public rangelands," he concluded that "the property rights' literature does suggest that delimitation of property rights is a precursor for efficient exchange."<sup>47</sup> Lambert commented that:

What appears to be missing in the public rangeland debate is the establishment of clear rules of the game. Without well-defined property rights, transactions costs are high. Efficient exchange would seem to require that all users clearly understand their rights in current and future public land grazing decisions regardless of the outcomes of the current legislative debates over grazing policy.<sup>48</sup>

*The Different Drummer*, a leading voice of market-based environmental policies, picked up on the theme as well. In a 1994 issue devoted to "reforming the

western range," Karl Hess, Jr. and Randal O'Toole, proposed to create "forage rights" that could be "openly bought and sold by environmental groups, ranchers, state wildlife agencies, and other public land users."<sup>49</sup>

In short, by the mid 1990s there was a considerable body of writings, reflecting varying political outlooks, favoring the creation of a new rights regime on the federal rangelands. As environmental groups have now become interested as well, the discussion has begun to move into the political arena and into the details of possible real world implementation.

## **HOW TO ESTABLISH FORAGE RIGHTS ON LANDS**

In order to implement a regime of rights to the forage on federal rangelands, a number of key changes from the current rangeland system would be necessary. The beginning point would be a recognition that the existing rancher holding a grazing permit on federal lands would continue to hold this permit. Existing grazing permits would in essence be grandfathered and newly recognized as a formal matter of right. In the process, the actions allowed under the permit, the provisions for transferring it to other parties, the types of parties eligible to hold the permit, and the character of the permit itself would be changed, as discussed below.

### ***Eliminate the Use-It-Or-Lose-It Requirement***

The BLM has traditionally interpreted the Taylor Grazing Act as a law governing access to federal rangelands for the purpose of the grazing of domestic livestock. The law does not, so the BLM has long stated, convey any rights, formal or informal, to control the type of use of the forage, or to decide not to use the forage at all in order to serve some nongrazing purpose. Rather, the rancher receives a temporary permit to use the federal lands for the specific purpose intended by the government, grazing livestock, to take place in those areas where the government has decided that grazing is an appropriate use. Such a decision, the BLM (and Forest Service) have insisted, should be based on land-use planning grounded in scientific calculations of rancher livestock needs, grazing capacity, levels of public demand for alternative uses, degrees of conflict among uses, and various other considerations.

To be sure, ranchers have been able to "take non-use," meaning that they do not actually graze as much as their government permit allows. They might choose to cut back on grazing voluntarily because of drought or other temporary climatic conditions; because they regard BLM's permitted level of grazing as greater than the actual grazing capacity of the land; because they do not need the forage in a particular year under their grazing plan for that year; or for a host of other possible reasons. Indeed, many ranches never graze to the full level permitted. In 1993, the

actual use of BLM grazing lands was approximately 25 percent less than the amount formally authorized by the government.<sup>50</sup>

However, a rancher can not end grazing altogether, or abandon the grazing use of a major part of an allotment, where there is in fact forage available for livestock consumption. If a rancher were to propose to do so, the BLM would consider itself as under a legal obligation to transfer the grazing permit to another rancher willing to use the allotment land for what the law regards as the land's intended purpose, the grazing of livestock.

In 1994, as part of his overall rangeland reform package (strongly opposed by most ranchers), Interior Secretary Bruce Babbitt proposed (among other things) to revise the traditional BLM policy, allowing "conservation use" of the allotment. Under the new rule, incorporated in final regulations in 1995, a rancher could remove the livestock altogether for an extended period of time, conceivably the full duration of the permit. However, this action was of uncertain legality under traditional interpretations of the Taylor Grazing Act. Indeed, in the summer of 1996, a Wyoming federal judge ruled that several key provisions of the Babbitt regulations, including the new allowance of conservation use, did in fact violate the law. Even without such a ruling, conservation use would probably still be an option limited to holders of the grazing permit in the livestock business.

In order to resolve this matter definitively, Congress would have to change the law to eliminate the use-it-or-lose-it requirement. That would put all parties, ranching and nonranching alike, on an equal footing in seeking access to control the use of the forage resources of the federal lands.

### ***Eliminate the Base Property Requirement***

Under the Taylor Grazing Act, ranchers have been required to own nearby private property (which sometimes consists of water rights alone) that is complementary with the grazing use of federal lands. As noted above, this "base property" requirement was designed in part to ensure that, when the public rangelands were initially carved up into allotments to be assigned to particular ranchers, only local ranchers would be eligible.

The base property requirement does not in itself prevent an environmental or other nonranching group from purchasing the grazing permit for an allotment. However, it means that, like a rancher, the group would have to buy private base property as well. The effect, to be sure, would be to significantly increase the cost of buying a permit. Moreover, the nonranching buyer would be required to maintain the base property in the ranching business in order to retain the grazing permit. That might not be feasible in some cases and in others would be a significant complication.

In many instances, a nonranching group may be interested in only a portion of the grazing permit. It may want, for example, to buy the forage rights in a riparian area, in order to exclude livestock from the area and to improve the fishing. Or the group may want to buy the forage rights to an upland meadow in order to provide feed for big horn sheep or some other key species. At present, the environmental group would be required to own base property in order to make such a partial acquisition. However, there may not be any local ranchers interested in selling off adequate base property. Thus, transfers of forage rights beneficial to all the involved parties could easily be blocked by the base property requirement.

The complications posed by the use-it-or-lose-it and base property requirements of the current system were illustrated the purchase by local governments in the Las Vegas area of five grazing allotments noted above. They sought to eliminate the grazing as part of the habitat conservation plan for the desert tortoise. As the Clark County Desert Conservation Plan commented, the grazing privileges "may not simply be retired. . . . If not utilized by the owner, another grazing operator may apply for and utilize the land for grazing purposes, unless the BLM has agreed in advance that the owner may hold them in 'nonuse.' In order to hold the privileges in nonuse, the holder must operate a grazing business."<sup>51</sup>

To solve this problem, and since the counties that had actually purchased the grazing rights were not in the grazing business, an arrangement was devised by which the grazing permits would be assigned to the Nature Conservancy to be held in trust. Since the Nature Conservancy owned grazing operations within Nevada, the BLM agreed to accept this special arrangement as meeting the base property requirement, even though this meant stretching the letter of the law. Still, the Nature Conservancy could only obtain a commitment from the BLM to accept nonuse status for the first two years, with new applications for nonuse required annually thereafter, each time left to the discretion of the BLM to approve or disapprove. Because of such significant uncertainties associated with the nonuse status, the tortoise conservation plan felt it necessary to provide additional funding "to protect and defend those privileges in nonuse until such time, if ever, that grazing is prohibited by the Stateline RMP."<sup>52</sup>

Eliminating the base property requirement would also allow livestock operators without base property — and thus now precluded from holding a grazing permit — to purchase such permits. This would have the benefit for ranchers of increasing demands for permits and potential selling prices. It would promote the efficiency of the overall livestock industry by helping to ensure that access to grazing on federal lands is obtained by the parties that actually place the highest value on this grazing.

### ***Eliminate the Requirement that the Holder of a Grazing Permit Must Be a Livestock Operator***

Another restrictive element of the existing system is the requirement that the holder of a grazing permit must be a qualified livestock operator. This requirement, like the active use and base property requirements, reflects the implicit assumption of the Taylor Act that the only legitimate use of the forage resource is for direct productive or consumptive purposes. It is an outgrowth of the general utilitarian philosophy of the conservation movement early in this century. Gifford Pinchot, the founder of the Forest Service, said on a number of occasions that the primary purpose of the national forests was to supply wood, water and other outputs to meet the productive needs of the nation. Pinchot opposed the creation of national parks as leading to a waste of valuable timber and other resources. Similar attitudes would later be shown by other leaders in the development of the federal land system with respect to the forage resources of these lands.

### ***Eliminate Restrictions on Subleasing***

Historically, the Forest Service has prohibited subleasing of the grazing rights to an allotment. The BLM has allowed subleasing but with significant limitations, including a requirement that the rancher turn over to the BLM any subleasing revenues collected that exceed the federal grazing fee. These restrictions on subleasing reflect in part the difficulty of reconciling the scientific management philosophy with the workings of a market process. Scientific management says that the full details of the use of the allotment should be carefully planned by the government, a process likely to be disrupted by frequent changes in the identity and grazing plan of the operator.

Opposition of federal officials to subleasing has also been significantly increased by the fact that ranchers often charge higher prices per AUM than the grazing fee collected by the government. A typical sublease rate is in the range of \$5 to \$7 per AUM (and sometimes much higher), while the federal government in recent years has collected less than \$2 per AUM from its own grazing fee. Critics charge that ranchers who sublease are profiting unfairly from the resale of public resources.

However, the existence of subleasing does not in any way diminish the government return; it merely shows up in a very visible way the fact that the government is getting less than the going private rate. It would seem that fairness to the government is not the real issue. Rather, it is the desire to avoid public embarrassment that is the real objection of federal officials to subleasing. To be sure, the actual market value of the sublease may be difficult to determine, because ranchers who sublease public land forage often provide services to sublessees and



make improvements on the land that the government does not provide in its own management of grazing lands.

Despite the historic agency attitudes, subleasing should be an integral part of a market regime for public land forage. It offers a flexibility to devise innovative arrangements among ranchers and other groups that otherwise would be precluded. For example, during drought conditions a hunting club may want to sublease an area to maintain all the forage there for wildlife on a temporary basis. This may also work to the advantage of the rancher as long as the sublease payment is enough to purchase livestock feed supplies from alternative sources — and perhaps leaving something left over for profit.

Long term subleasing would allow an environmental group to obtain control over the grazing activity — possibly removing it altogether — in a particular area at less than the cost of a full purchase. Ranchers and environmental groups might try out a joint working relationship, or experiment with a resource management concept, without the permanency of outright sale and purchase. Where rights are clearly defined, such cooperative arrangements are more common.<sup>53</sup> In some cases, a lease may be an initial step that leads to purchase, after the effectiveness of the new arrangements has been demonstrated.

In the future environmental organizations that have purchased public land forage rights might find that they in fact want to sublease to a livestock operator. By purchasing the grazing permit outright, the environmental group would obtain the full control over the use of the forage that accompanies ownership. It would be able to set the precise terms and conditions of any livestock grazing that occurred. With this assurance, grazing could be a useful element in the overall resource management plan to improve rangeland conditions. In addition, the revenues received by the environmental group from subleasing might be an important contributor to the financial viability of the overall acquisition, effectively reducing the net cost.

Subleasing is one example of a broader category of potential financial arrangements short of outright purchase. Environmental organizations could purchase easements or stipulations from ranchers concerning the operation of the livestock business. For example, a group might negotiate an agreement to compensate a rancher for taking cattle off a pasture earlier in the year, because this would benefit elk habitat, even while raising the costs of ranching. The environmental organization might compensate a rancher for changing the grazing system to remove cattle permanently from a particular section of an allotment. They might reach an agreement to pay all or part of the costs for the installation of fencing to keep cattle out of riparian areas, or for the construction of a water facility that would also benefit wildlife.

### *Shift From a Permit System to a Leasing System for Forage Rights*

As discussed above, ranchers operating on federal rangelands at present hold a permit issued by the government to graze a certain number of livestock during certain periods of the year on a particular area of public land. If the rancher sells the permit to an environmental organization, the new owner likely will not be primarily interested in grazing livestock. Indeed, the objective may be to remove the grazing activity altogether. In this new circumstance, the form of the legal agreement between the government and the forage user should be revised. Instead of a permit to graze, the agreement should instead take the form of a lease to the forage resource.

A shift to a leasing approach would also recognize that it will no longer be possible for the government to charge for the use of the land on the basis of the amount of livestock grazing. The current grazing fee is assessed per month of grazing per animal. Hence, if an environmental organization were to purchase the permit and retire the grazing, it would not pay any fee under the current arrangements. In a real sense, however, the environmental group would still be making use of the forage. In addition, an efficient process of market competition — one that ensured that the highest value user would win out in this process — would require that each party face the same future payment obligations. Otherwise, the rancher, for example, might be unfairly disadvantaged in that he would be required to pay for use of the same forage that another party might receive for free.

Hence, as part of a new regime of forage rights, the government should no longer charge on the basis of the amount of livestock grazed. The lease rate might instead be set as a flat dollar payment per acre. Perhaps preferably, the lease charge might vary with the forage productivity of the land. One simple procedure for setting the lease rate would be to take the current grazing permit, calculate the amount of forage available under this permit, apply a reasonable grazing fee (say \$2 to \$4 per AUM), and then fix the annual lease payment at this dollar amount from this point onward. For example, if the current grazing permit allowed 500 AUMs per year, the annual lease payment would then be set at \$1,000 to \$2,000 per year, independent of whether or not there was any grazing activity on the allotment. Such a payment should also be adjusted over time for inflation.

The current duration of a grazing permit is 10 years. However, given the very slow response of vegetation in arid western climates, and the need for long term tenure to create strong positive incentives to improve and maintain the land, this is too short a period. The term of forage leases might well be in the range of 25 to 50 years. Indeed, there is a strong case for issuing them for an indefinite period.

If leases are not of indefinite duration, lease renewals should be renegotiated well before the end of the lease term (five or 10 years before), in order to avoid any negative incentives that might arise near the end of the term due to uncertainty over renewal. The existing lease holder should hold a priority for renewal, but there might be some opportunity at this point to reconsider the specific environmental and other terms of the lease. Similarly, under existing federal mineral leases, the terms are renegotiated at the end of the 10 to 20 year term, and certain changes can be made, although the operator retains the basic right to continue the mineral operation.

## **DEFINING A FORAGE RIGHT**

As proposed here, the forage rights leased would be part of the bundle of rights at any given portion of federal lands. Just as land rights are sometimes divided into surface and mineral components, it is also possible to divide the surface rights. Leases to the forage portion of the surface rights could be issued to ranchers or other parties, in much the same way that the government now issues leases to the subsurface oil and gas or coal rights. At the point of initial lease issuance, it would be important to specify as clearly as possible the full dimension of the forage right.

The core right would, of course, be the control over the use of the forage resource in the allotment. However, this use would be constrained to a certain degree, reflecting the fact that there currently exist other de facto rights in the overall surface bundle of rights. These existing rights holders, based also on long historic presence on the land, can include hunters and fishermen, hikers, birdwatchers, miners, offroad vehicle users, and others. The flexibility of the forage lessee would be limited by the requirement that the existing de facto rights of such other parties must not be infringed upon. It is the same kind of standard as is applied in nuisance law — the forage rights holder is free to take an action as long as this does not do significant damage to another party. The long history of common law adjudication of nuisance law issues could be applied to the resolution of the appropriate boundaries among individual forage and other rights on federal rangelands.

In order to protect nonranching rights, it is likely that a certain amount of forage would have to be made available for wildlife every year, reflecting the historic levels of availability of such forage. Since wildlife can have different requirements, the specific forage amounts might have to be specified by type of plant as well. The lessee would have to use the forage resource in a way that avoided significant adverse impacts on fishing and on downstream water quality. As a practical matter, this might be determined by applying the provisions of the Clean Water Act to the operation of whatever type of use is being made of the forage.

Holders of forage rights would be expected to provide protections for the streambank and water quality of riparian areas. If cattle are damaging these areas, their removal or the adoption of tighter rancher controls over animal movements

would be mandated. The exercise of the forage right would be subject to the same kinds of limitations that the Endangered Species Act would impose on an ordinary private land owner. Thus, if adverse grazing impacts of cattle on the desert tortoise—including competing for forage, damage to burrows, and direct destruction—are determined to endanger this species, mitigating actions would be required to avoid such impacts.

To be sure, it should be said, if these actions create excessive burdens on forage rights holders, the requirements of the Endangered Species Act could prove counter-productive.<sup>54</sup> An effective system of species protection will create positive incentives for land and other rights holders to assist in maintaining the species. All too often, under current law, a property owner will instead be penalized for actions that provide greater habitat or otherwise assist the preservation of a species.

In practice, it would typically require considerable negotiation to define the full terms for the future exercise of a forage right. Much as grazing levels and the boundaries of allotments were set by local rancher groups following the enactment in 1934 of the Taylor Grazing Act, such a negotiation might now occur locally but with the membership expanded to reflect the full diversity of current users and de facto rights holders. One possibility would be to assign the task to the Resource Advisory Councils that have been established in the past year or two. It would also be important to ensure subsequent monitoring to check that the lease provisions were being observed. The Resource Advisory Councils might play an important role in this matter as well.

The monitoring effort could also be contracted out in part to private parties. Third-party certification is being more widely employed in timber management and other natural resource fields. Outside private firms that specialize in this field now often certify to the manufacturers of furniture or other wood products that the timber used has been harvested in an environmentally satisfactory way. A similar process might certify that the holders of federal land forage rights are in fact exercising their rights in a way that meets the conditions of the lease and does not infringe on other local users.

## **A FULLER PRIVATE PROPERTY RIGHTS REGIME**

Yet another approach would be to put the entire matter in the private sector. As noted above, the full range of de facto rights includes matters such as the open access to the land for hiking, bird watching, and viewing other wildlife populations, hunting and fishing access and other forms of dispersed recreation, access for mining exploration, and more. It would be possible to go beyond the establishment of new forage rights to also recognize the traditional access of these groups and their historic uses as matters of formal rights. If that were done, government ownership would become superfluous; one would no longer speak of leasing forage rights. In

place of the federal rangelands, there would be a new system of private property rights in which the private rights newly defined would include a complex blend of individual and collective rights.

One of the difficulties of such an approach is that, unlike the initial assignment of a forage right to a rancher, there is no one well defined party to whom the recreational and other nonranching rights are appropriately assigned. Who speaks for hunters on the public lands in a certain broad area, or for the fishermen?

In the future, if recreational and other nonranching rights are to be transferred more directly to the beneficiaries, it may be necessary to devise new institutional mechanisms. An appropriate model here might be a condominium.<sup>55</sup> In a traditional condominium, the rights to the entire property are separated into the individual rights of the unit owners and the rights to control the use of the common elements that are exercised collectively through the home owners' association or other collective decision making instrument. In a rangeland condominium, the individually held rights would be the forage rights, giving them control over the use of the grazing forage resource in a particular allotment. The common elements would consist of the collective rights to oversee nonranching uses over the total area of all the allotments located within the umbrella area of the condominium agreement. This might consist, for example, of a large block of land containing say 625 square miles (25 miles by 25 miles), within which there might also be found say 30 allotments, each with its own individual forage rights.

The decision making mechanism for such a condominium would have to be more complex than a standard urban condominium. There would not be any great problem to include holders of forage rights to individual grazing allotments, as they could be given representation readily enough on the condominium board of directors. However, representation for other groups such as hunters and fishermen would be a greater challenge. Perhaps say two positions for hunters, and two positions for fishermen, would be set aside on the rangeland condominium board of directors. There might similarly be two representatives for hikers, and two for all other forms of dispersed recreation. The problem is to determine an appropriate method of selecting such representation.

One possibility would be to specify, for example, that each hunter wishing to use the lands within the total area encompassed by the condominium boundaries might be required to pay say a \$5 annual fee. All hunters who paid the fee would then be eligible to vote on the hunter representation on the condominium board of directors. A similar approach could be applied for fishermen, and possibly as well for people who have a potential interest in mineral exploration.

There might also be representation on the condominium for the set of people — some of whom may reside far away — that are simply interested in the general

environmental quality of the lands within the condominium boundaries. Again, members of this group might be charged say a \$2 annual fee (smaller than hunters, since there would be no direct benefit expected), and elect its appointed representatives by vote of all those who have paid this amount. Members might be able to assign their vote by proxy, as shareholders in a corporation at present often do. In some areas of special environmental interest, many of the proxy votes might be assigned to environmental groups such as the Sierra Club or Wilderness Society.

Under such a structure of condominium ownership, decisions with respect to the use of grazing forage in particular allotments would be made exclusively by the holders of the forage rights there. Collective decisions involving issues of management of the common rangeland area for recreation, wildlife protection or other joint purposes would be made through the collective decision making mechanisms of the condominium. The collective responsibilities would include matters such as the arrangements for gaining access to the lands for hunting, fishing, and other activities, as well as any charges imposed by the condominium for public entry for these purposes.

In order to implement a full condominium privatization, many more details beyond the brief sketch offered here would have to be provided. Until a privatization of the public rangelands can occur through establishing a condominium arrangement, or perhaps in some other way, the individual rights to grazing forage would be defined in the context of continuing government ownership of the rangelands.

The best form of government ownership, to be sure, may be state (or local), rather than federal. The ownership of the federal lands involves the federal government in a wide range of issues of essentially state and local significance. Applying traditional American concepts of federalism, the responsibility for these matters should lie at the state and local levels of government. To be sure, there are many political obstacles to a transfer of federal lands to the states. One of the more important is the uncertainty many ranchers would feel about their future tenure status under new state ownership of the lands, and related matters such as permitted livestock numbers and grazing fees. A clearer resolution and formal codification of rancher rights on the federal lands, as proposed in this paper, thus could be a necessary first step, before any transfer of lands to the states could become politically viable.<sup>56</sup>

## CONCLUSION

There are a number of precedents for the creation of a market in federal forage rights, as proposed here. Consider, for example, the communications spectrum consisting of a variety of frequencies suitable for radio, television, and telephone. The communications spectrum might be described as yet another form of public domain. Indeed, some estimates of the economic value of the total communications

spectrum are in the ballpark of estimates for the total value of the federal lands and minerals as a whole.

Rights to use spectrum suitable to radio and television have long been issued to applicants who agree to meet certain public service obligations. Over time, as on the public lands, it became a recognized practice that a sale of the station would mean the automatic transfer of the spectrum rights to the new owner. The spectrum rights were typically much more valuable than the capital value of the building and other physical facilities of the station. Also, when they have come up for renewal, the Federal Communications Commission has almost always reissued these rights to the same station that held them. Yet, like forage rights to public grazing lands, the FCC has never officially recognized the control over the spectrum as separable from the existence of an actual operating station and freely transferable as a matter of right.

In recent years, advances in communications technology meant that parts of the spectrum not previously in use have become newly valuable. In such cases where no prior use exists, the FCC has now begun to auction spectrum rights directly, yielding revenues in the many billion of dollars for the federal government. In effect, the FCC has now recognized a spectrum right as existing independent of any particular use or physical facility — equivalent to abandoning the base property requirement on public grazing lands and issuing a lease of indefinite duration.

There exist a certain number of "vacant" allotments on public grazing lands. If the forage rights there were put up for competitive sale to any bidder, it would correspond to the recent sales of unused spectrum rights.

A similar process of definition of rights is being discussed for fisheries, involving creation of "individual transferable quotas" (ITQs), in hopes of resolving the commons situation that has resulted in severe depletion of the Grand Banks and a number of other major American fisheries.<sup>57</sup> Where a scarce physical resource is currently controlled by government regulation, it will typically be possible to shift instead to the establishment of a system of property rights as a preferred means of allocating the use of the resource.<sup>58</sup>

In economic terms, federal land forage is not an especially valuable resource, in comparison with many other natural resources. However, the treatment of livestock grazing on western rangelands has great symbolic significance to the nation. Americans define their basic beliefs about themselves and their values in significant part by the policies they adopt for forests, rangelands and other natural resources. The arrival of the progressive era early in this century was marked in part by a shift to a paradigm of scientific management in the administration of the federal forests and rangelands of the United States. Today, the nation is searching for new institutions and values to replace a failing progressive design.

In moving past scientific management, the policies adopted for federal rangelands will be an important arena for exploring new visions.<sup>59</sup> If scientific management in the past offered the prospect of the one best scientific answer, in the future there is likely to be a pluralism of visions for the federal lands.<sup>60</sup> Each answer will mix technical and value considerations. Without greater agreement in American society, to impose one solution would mean the coercive imposition of one set of values on others. A better way is to leave such decisions to local people who resolve their problems in a cooperative and voluntary manner—in many cases through private transactions among willing buyers and sellers. A system of property rights provides the institutional setting to minimize the frictions and transactions costs of such a process.

As the economist and environmental philosopher Kenneth Boulding emphasized in his writings, the market is a voluntary “exchange system” that is a “positive-sum-game in which all parties can be better off,” while politics is in its basic workings a “threat system” focused on redistribution.<sup>61</sup> Relying on the use of coercive powers, politics is all too likely to yield the gridlock and polarization that have been found on the public rangelands for many years. Attempts by the government to impose solutions on people who do not regard them as legitimate are sure to generate bitterness and resentment. A market exchange system, by contrast, substitutes a set of arrangements that are reached by mutual consent among the affected parties. Under such a decentralized process of market decision making, freed from the tight constraints of bureaucratic management, a whole host of innovative methods and approaches is likely to emerge on the rangelands and forests of the West.

Although he was not a libertarian himself, Boulding thus looked with favor on an “economic libertarianism [that] quite rightly emphasizes the benevolent and developmental qualities of exchange.”<sup>62</sup> As this paper has argued, this outlook today is moving past the stage of philosophical discussions to be making some significant inroads among key groups in the federal land policy debate, offering the intriguing prospect of a confluence in at least certain areas of libertarian and environmental theorizing and activism.



### ABOUT THE AUTHOR

Robert H. Nelson is a professor at the School of Public Affairs of the University of Maryland and Senior Fellow in Environmental Studies of the Competitive Enterprise Institute. He served as a senior economist in the Office of Policy Analysis of the Department of the Interior, the principal policy office serving the Secretary of the Interior, from 1975 to 1993. During that time he served as the senior research manager for the President's Commission on Privatization (1988) and chief economist for the Commission on Fair Market Value Policy for Federal Coal Leasing (1984). Dr. Nelson also is currently a Senior Fellow at the Center for the New West in Denver and an adjunct scholar at PERC in Bozeman, Montana. He has previously served as a visiting scholar at the Brookings Institution and the Woods Hole Oceanographic Institute. He is author of several books, including *Zoning and Property Rights* (MIT Press, 1977), *Reaching for Heaven on Earth: The Theological Meaning of Economics* (Rowman and Littlefield, 1991), and *Public Lands and Private Rights: The Failure of Scientific Management* (Rowman and Littlefield, 1995). He received a Ph.D. in economics from Princeton University in 1971.

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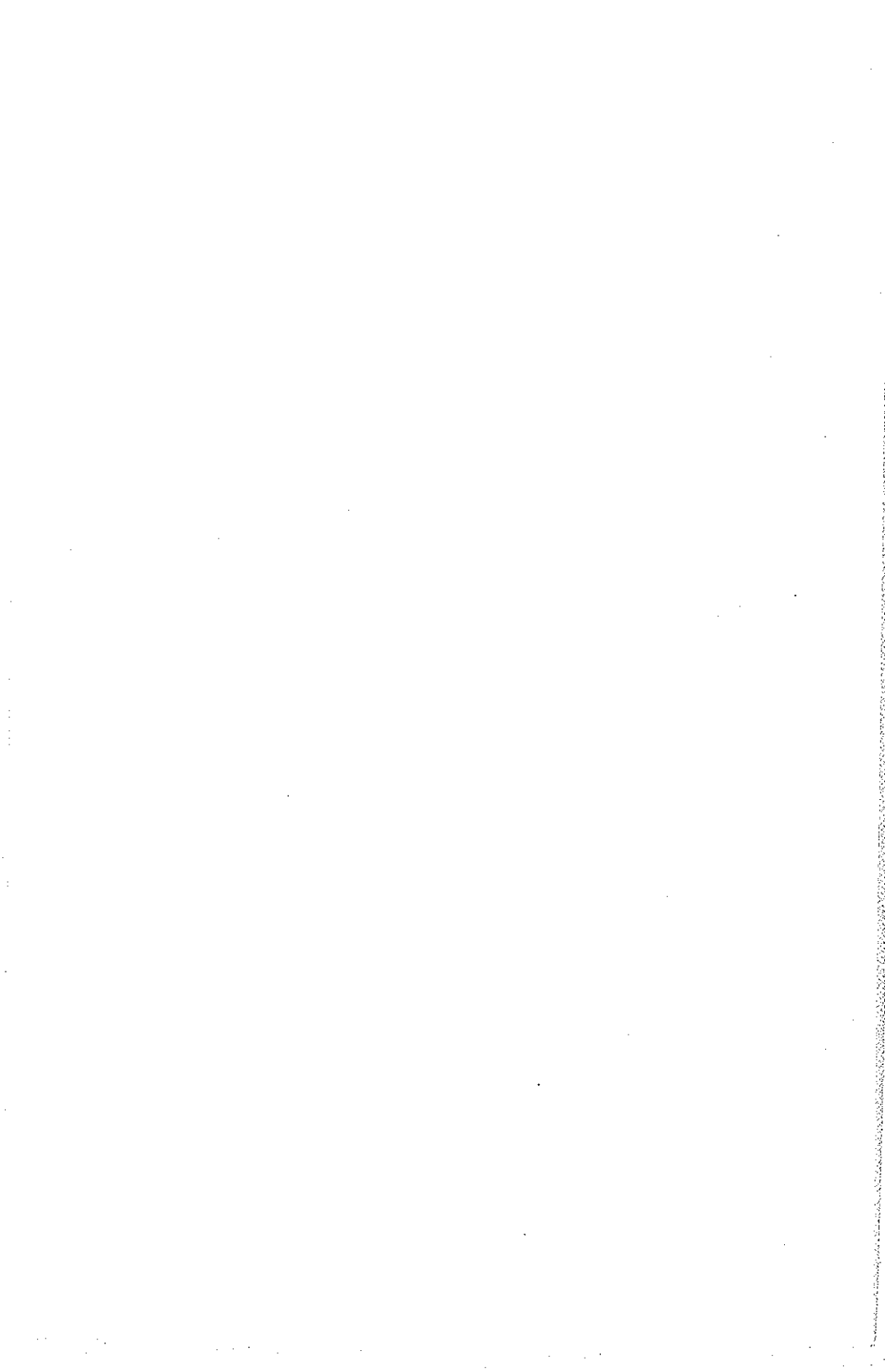
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*For more information, contact:*

**Competitive Enterprise Institute**

1001 Connecticut Avenue, N.W.

Suite 1250

Washington, DC 20036

phone: (202) 331-1010

fax: (202) 331-0640

E-mail: [info@cei.org](mailto:info@cei.org)

Web site: <http://www.cei.org>