<table>
<thead>
<tr>
<th>State</th>
<th>Public Land Acres</th>
<th>Federal Acres</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arizona</td>
<td>77,688,000</td>
<td>31,141,386</td>
<td>41</td>
</tr>
<tr>
<td>California</td>
<td>180,706,720</td>
<td>45,777,760</td>
<td>26</td>
</tr>
<tr>
<td>Colorado</td>
<td>61,485,760</td>
<td>23,983,199</td>
<td>46</td>
</tr>
<tr>
<td>Idaho</td>
<td>52,933,120</td>
<td>33,741,468</td>
<td>64</td>
</tr>
<tr>
<td>Montana</td>
<td>93,271,040</td>
<td>27,665,588</td>
<td>30</td>
</tr>
<tr>
<td>Nevada</td>
<td>70,764,370</td>
<td>60,829,753</td>
<td>87</td>
</tr>
<tr>
<td>New Mexico</td>
<td>77,766,400</td>
<td>76,103,089</td>
<td>34</td>
</tr>
<tr>
<td>Oregon</td>
<td>61,598,720</td>
<td>34,856,196</td>
<td>66</td>
</tr>
<tr>
<td>Utah</td>
<td>57,696,960</td>
<td>30,559,563</td>
<td>53</td>
</tr>
<tr>
<td>Wyoming</td>
<td>67,343,040</td>
<td>29,699,563</td>
<td>48</td>
</tr>
<tr>
<td>Washington</td>
<td>47,693,760</td>
<td>17,588,442</td>
<td>36</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>752,947,840</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>State</th>
<th>Public Land Acres</th>
<th>Federal Acres</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Dakota</td>
<td>44,457,480</td>
<td>2,320,902</td>
<td>5</td>
</tr>
<tr>
<td>South Dakota</td>
<td>48,881,920</td>
<td>3,766,012</td>
<td>7</td>
</tr>
<tr>
<td>Nebraska</td>
<td>49,031,680</td>
<td>694,716</td>
<td>1.4</td>
</tr>
<tr>
<td>Kansas</td>
<td>51,510,720</td>
<td>717,518</td>
<td>1.4</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>59,599,400</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Texas</td>
<td>168,212,600</td>
<td>3,195,599</td>
<td>1.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>396,693,760</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Grand total: 1,149,641,660

778,000,000 acres range land is 63.3% of the land area of the 17 most western states.

778 million acres = approx 85% of the wild land area in the 17 states.
## Disposition of Public Domain

**Western Rangelands (17 states)**

<table>
<thead>
<tr>
<th>Ownership or Control</th>
<th>Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private (Homestead Law)</td>
<td>Acres</td>
</tr>
</tbody>
</table>

### Railroads & Roads

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Federal</strong></td>
<td>19,298,178</td>
</tr>
<tr>
<td><strong>States</strong></td>
<td>7,218,127</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>26,516,305</td>
</tr>
</tbody>
</table>

### Public Land

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Federal</strong></td>
<td></td>
</tr>
<tr>
<td><strong>State &amp; County</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Indian</strong></td>
<td></td>
</tr>
</tbody>
</table>
of our land-disposal policy reached its peak in the sixties when the
grants to the Union Pacific, Central Pacific, Northern Pacific, Santa
Fe, and Southern Pacific were consummated. The magnitude of
these subsidies soon raised so much opposition that the practice was
stopped with the exception of relatively minor grants for the pur-
pose of financing a few branch lines, connecting links, and to aid in
consolidations. Altogether, as shown in table 43, more than 101
million acres were granted to States and corporations to advance
railroad building in the range country. Figure 69 presents graphi-
cally their extent and location.

<table>
<thead>
<tr>
<th>State</th>
<th>Original grants</th>
<th>Present holding railroads</th>
<th>Additional grants to States for railroad and wagon roads</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arizona</td>
<td>8,415,506</td>
<td>5,770,900</td>
<td>4,946,816</td>
</tr>
<tr>
<td>California</td>
<td>11,481,459</td>
<td>9,996,411</td>
<td>2,474,912</td>
</tr>
<tr>
<td>Colorado</td>
<td>3,836,881</td>
<td>34,240</td>
<td>673,792</td>
</tr>
<tr>
<td>Idaho</td>
<td>7,849,583</td>
<td>4,733</td>
<td>1,934,257</td>
</tr>
<tr>
<td>Idaho Territory</td>
<td>16,365,500</td>
<td>3,515,441</td>
<td>1,307,225</td>
</tr>
<tr>
<td>Montana</td>
<td>7,687,747</td>
<td>15,611</td>
<td>4,440,078</td>
</tr>
<tr>
<td>Nevada</td>
<td>4,986,075</td>
<td>15,611</td>
<td>10,501,913</td>
</tr>
<tr>
<td>New Mexico</td>
<td>10,904,469</td>
<td>14,457,531</td>
<td>3,597</td>
</tr>
<tr>
<td>North Dakota</td>
<td>3,488,459</td>
<td>162,269</td>
<td>2,584,380</td>
</tr>
<tr>
<td>Oregon</td>
<td>2,200,541</td>
<td>138,194</td>
<td>1,326,590</td>
</tr>
<tr>
<td>South Dakota</td>
<td>2,277,839</td>
<td>403,531</td>
<td>1,592,390</td>
</tr>
<tr>
<td>Texas</td>
<td>9,930,542</td>
<td>1,326,590</td>
<td>1,592,390</td>
</tr>
<tr>
<td>Washington</td>
<td>5,104,706</td>
<td>403,531</td>
<td>1,592,390</td>
</tr>
<tr>
<td>Total</td>
<td>94,149,866</td>
<td>15,208,178</td>
<td>7,218,127</td>
</tr>
</tbody>
</table>

1 Bureau of Railway Economics, unpublished data as of June 30, 1933.
2 From unpublished data of Interstate Commerce Commission, 1934.
3 Excludes rights-of-way and urban property.
4 These lands were transferred to construction companies or railroads.
5 Includes 3,755,581 acres transferred to holding company for Red River, Topeka & Santa Fe Railroad Co.
6 Includes 1,431,941 acres transferred to holding company for Chicago, Topeka & Santa Fe Railroad Co.
7 Small acreage included with North Dakota.
8 Railroad in Texas were direct grants by the State—total grants to railroads, 12,153,878 acres (146).

While the stipulations differed in the various grants, the usual pro-
cedure was to include all of the alternate sections for a distance vary-
ing as between grants from 10 to 40 miles on each side of the right-of-
way. Provision was made for the selection of "frield lands" generally
within 10 miles beyond this limit, in lieu of lands which had already
been settled, were mineral in character, or for any other reason were
not available to the railroad company. That the railroad grants
accomplished their major purpose cannot be questioned. Transcon-
tinental lines were financed and pushed through much sooner than
they otherwise would have been.

In the final analysis, these grants were intended to encourage the
passage of title to private owners in small tracts similar to the homestead
law. Stipulations were usually included which controlled the
price at which the land could be offered for sale and which required
that it be offered by a certain specified time after construction.
Table 48 shows that it is in the range States more than 19 million acres
still remain in railroad ownership.
It is significant that in the administration of the railroad-grant laws the Federal land policy of passing of title to private ownership is clearly shown. Vigorous protests by the Forest Service against further patenting of land to the Northern Pacific Co. resulted in the passage of Public Resolution 24, Sixty-eighth Congress, on June 5, 1924. Among other provisions this resolution created a joint committee of both Houses of Congress to make a complete investigation of the Northern Pacific land grants. Hearings were held and the complete record was submitted to the Attorney General for analysis and advice. His findings (147) are summarized:

A consideration of the foregoing suggestions indicates that not only does no deficiency exist in the grants but that the company has already received approximately 6 million acres of public land which it has not earned and is not entitled to.

Final disposition of this case is still in the courts.

Naturally the land-disposal policy of the railroads has had two purposes: (1) The conversion of land into money and (2) the settlement at the most rapid rate of the territory served. High-pressure salesmanship was resorted to in furtherance of these aims. Certain roads even went so far as to open land offices in the capitals of Europe. Here was developed the land agents' viewpoint on a wholesale basis. Colonization schemes destined to failure were undertaken on a grand scale. The ease of irrigation, and the profits to be had from dry-land farming were presented in glowing terms. Thus many more millions of acres of typical range land, unsuited to crop agriculture, were put to the plow.

Fortunately the sales policy of most of those roads which still have lands to sell has reversed. It is now realized that, in the long run, the railroads can benefit only as the individual purchaser is successful. Misuse of the land is discouraged. Purchasers destined to failure because of inexperience are not solicited, and prices are set at the figure at which the purchaser has a chance to retain title. In most instances the railroads are in the vanguard of the movement to bring about some orderly plan of action which will insure stable and profitable use of the land. However, the checkerboard pattern of the railroad holdings makes difficult any sort of blocking up of range-land tenure in tracts of sufficient size to permit of economical livestock operations. In the establishment of one large grazing district in Montana, however, the Northern Pacific Co. took a leading part. Their own holdings, which were a large percentage of the total, were turned in to the grazing association at a very low rental price.

A part of the railroad lands are given relatively good management. Those sections which fall within the national forests usually can be used only in connection with adjoining lands. Thus they are usually leased by a national-forest permittee who turns them in to the Forest Service for a permit to graze the number of stock equivalent to the determined grazing capacity of the land.

Not much can be said in favor of the range practice required on most of the railroad lands. It consists simply in leasing the lands without restrictions as to number of stock to be grazed or the season during which the land may be so used. Presumably it is assumed that the lessor will protect the resource. As a usual practice the lands are first offered to the logical local user or users. If the lease is not thus taken up, the lands are then offered to the highest bidder, who more often than not secures the land for less than the annual taxes assessed against it. Much of the land is never leased at all, because it is so badly intermingled with other holdings that it cannot be protected from trespass.
The treaty of annexation of Texas, signed in 1845, provided, as already stated, that the new State would retain title to the lands within its borders. Thus we have an example of land disposal on a large scale by the individual State. That the land-ownership pattern of Texas is extremely complicated can be more readily understood if it is realized that previous to its annexation by the United States it had been, first, a Spanish Province, then in 1829 a part of the "State of Coahuila and Texas" under the Government of Mexico, and lastly, a sovereign independent nation.

The first title to land in Texas probably dates back to 1731 under a grant from Spain (87). From that date until 1819 various large and small grants were made by the Spanish Kings. In most instances the motive back of the grant was the extension of the Catholic religion and the colonization of the province. Although permanent settlements through Spanish efforts seem to have been a failure, it is estimated that private title to about 10 million acres of land went back to this source.

The Mexican influence on land ownership in Texas is very pronounced. It too was designed to encourage settlement and perpetuate the ruling religion, but it did set up a land-disposal scheme which had some merit. Under it, with certain restrictions as to residence and citizenship, an individual was entitled to 177 acres of tillable land to 4,251 acres of grazing land could be secured by one individual. In addition, anyone who would organize a colony of 100 or more families received a liberal reward in land. Though many minor changes and modifications were made, the system thus started remained in effect until 1845 as the land policy of the Republic of Texas. Under the system more than 16 million acres passed to private ownership.

Texas, as a State, as shown in the following tabulation (742), has used almost every known device except the lottery system in its public-land disposal.

<table>
<thead>
<tr>
<th>Grants by Spain and Mexico</th>
<th>23,265,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>State university</td>
<td>2,221,400</td>
</tr>
<tr>
<td>Khamesha Road</td>
<td>27,000</td>
</tr>
<tr>
<td>To build State capitol</td>
<td>3,800,000</td>
</tr>
<tr>
<td>County courthouses</td>
<td>640</td>
</tr>
<tr>
<td>San Jacinto Veterans</td>
<td>1,169,302</td>
</tr>
<tr>
<td>Disabled Confederates</td>
<td>1,979,822</td>
</tr>
<tr>
<td>Homestead donations (preemption)</td>
<td>4,947,198</td>
</tr>
<tr>
<td>Internal improvements</td>
<td>4,651,000</td>
</tr>
<tr>
<td>Counties for schools</td>
<td>4,229,188</td>
</tr>
<tr>
<td>Headright and bounty house</td>
<td>36,579,492</td>
</tr>
<tr>
<td>Colonies</td>
<td>1,436,106</td>
</tr>
<tr>
<td>Railroads</td>
<td>32,823,878</td>
</tr>
<tr>
<td>Asylums</td>
<td>400,000</td>
</tr>
<tr>
<td>Public free schools</td>
<td>42,400,536</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>194,191,308</strong></td>
</tr>
</tbody>
</table>

*Some estimates are as high as 20 million acres (87).*

Free homesteading has been encouraged, soldiers have been reimbursed in land and in land script, construction companies were paid in land for the construction of public buildings, large quantities were donated for internal improvements, it has been sold outright as a means of raising revenue, and an enormous area has been used to endow the public schools and institutions of higher education. Thus the land history of Texas is similar to that of the Nation except that more consideration was given to the relationship of size to intended use. That private range lands in Texas have been depleted to substantially the same degree as those in adjoining States is evidence that size is not the only answer to the proper use of such a resource. Current profits, inadequate finances, and failure to consider the forage as a renewable resource seem to have controlled here as elsewhere.

Those lands which remain in the various forms of State or institutional ownership are managed primarily for the greatest current revenue. No adequate provision has been made in leases and use agreements to perpetuate watershed values of the range forage resource at a permanent high level. Cents per acre rather carrying capacity has controlled in large measure.

In all of the range States except Texas, State ownership of land largely goes back to Federal grants for educational purposes or for public or semipublic improvements.

**STATE GRANTS**

That the use of public lands for educational purposes and for essential public improvements was a laudable purpose has been demonstrated. Our common-school system, our land-grant colleges, and our other favored institutions have benefited greatly. That they might have benefited more in the long run under a plan of land management which would have protected the range resource for both present and future generations seems equally clear.

Proposals that a portion of the public lands or of the receipts from the sale of public lands be distributed to the States probably originated in 1824 when a proposal was made that money from the sale of lands be invested, and the interest therefrom be distributed among the States. The following year a congressional committee was appointed to investigate the possibilities of such a plan with special reference to the possibility of using the money to finance a public-school system. The effect of such a plan on the colonization and development of the United States (74). The committee report was favorable, but the question was destined to occupy the middle of the political stage many years before the principle was finally accepted.

It is not the purpose of this report to present the detailed history of Federal grants to the States of lands or money from the sale of lands. The system was followed and has done much to foster the cause of education, public improvements, and public improvements. Table 44 shows the extent of such grants and present ownership in the western range States.
### Table 44.—State land status for 17 entire Western States

<table>
<thead>
<tr>
<th>State</th>
<th>Original grants</th>
<th>Total present ownership</th>
<th>Range land owned</th>
<th>Range land leased</th>
<th>Administrative agency of State lands</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Acres</td>
<td>Acres</td>
<td>Acres</td>
<td>Acres</td>
<td></td>
</tr>
<tr>
<td>Arizona</td>
<td>10,542,113</td>
<td>8,358,427</td>
<td>8,242,407</td>
<td>7,300,000</td>
<td>State land commissioner.</td>
</tr>
<tr>
<td>California</td>
<td>5,427,051</td>
<td>1,540,524</td>
<td>944,000</td>
<td>20,000</td>
<td>Division of State lands, department of finance.</td>
</tr>
<tr>
<td>Colorado</td>
<td>4,435,538</td>
<td>3,182,102</td>
<td>2,925,737</td>
<td>2,435,165</td>
<td>State board of land commissioners.</td>
</tr>
<tr>
<td>Idaho</td>
<td>3,639,157</td>
<td>2,881,285</td>
<td>1,291,331</td>
<td>1,798,564</td>
<td>State board of land commissioner's department.</td>
</tr>
<tr>
<td>Kansas</td>
<td>3,990,018</td>
<td>71,302</td>
<td>71,302</td>
<td>None</td>
<td>State auditor's office.</td>
</tr>
<tr>
<td>Montana</td>
<td>5,908,108</td>
<td>4,564,998</td>
<td>4,319,968</td>
<td>2,926,985</td>
<td>Department of State and land investments.</td>
</tr>
<tr>
<td>Nebraska</td>
<td>4,308,711</td>
<td>1,724,143</td>
<td>1,574,143</td>
<td>1,001,549</td>
<td>Commissioner of public lands and buildings.</td>
</tr>
<tr>
<td>Nevada</td>
<td>2,728,467</td>
<td>126,587</td>
<td>117,587</td>
<td>None</td>
<td>Surveyor general and State land register.</td>
</tr>
<tr>
<td>New Mexico</td>
<td>12,723,694</td>
<td>12,097,651</td>
<td>12,186,651</td>
<td>10,700,000</td>
<td>Commissioner of public lands.</td>
</tr>
<tr>
<td>North Dakota</td>
<td>3,163,551</td>
<td>1,555,053</td>
<td>1,556,901</td>
<td>1,173,422</td>
<td>Commissioner of university and school lands.</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>3,050,760</td>
<td>998,880</td>
<td>698,880</td>
<td>137,641</td>
<td>Commissioner of State land office.</td>
</tr>
<tr>
<td>Oregon</td>
<td>4,373,498</td>
<td>611,027</td>
<td>540,767</td>
<td>29,024</td>
<td>State land board and rural credit department.</td>
</tr>
<tr>
<td>Texas</td>
<td>7,464,270</td>
<td>2,900,006</td>
<td>2,225,239</td>
<td>2,709,256</td>
<td>General Land Office of Texas.</td>
</tr>
<tr>
<td>Utah</td>
<td>3,474,471</td>
<td>2,292,796</td>
<td>1,996,676</td>
<td>468,522</td>
<td>State land board.</td>
</tr>
</tbody>
</table>

Total: 94,142,924 | 73,354,022 | 63,882,461 | 56,950,912 |

1 Probably includes agricultural lands.
2 No State lands leased; all are sold outright or on long-time payment plan.
3 Includes small percentage of agricultural lands.

As a result of apparent fraud in disposing of land in the earlier grants, most of the grants, or the State constitutions, placed limitations on freedom of action in disposing of the land. Obviously the main reason back of the restrictions was a fear that State governments would be dominated by political influence and as a result the lands would be disposed of as political favors. Consequently, a fraction of their true value. Thus, in most grants, stipulations as to minimum selling prices and restrictions on sales are to be found. In several States the minimum price was so high in relation to resource values that it prevented disposal of any but the best land. Apparently the price set was based on the belief that all land would ultimately command a substantial price and on a desire to obtain all that the traffic would bear in State land disposal.

Regardless of the justification from other standpoints, range management on State lands has been seriously hampered by the scattered geographic distribution of the land over the States. The usual custom is to designate sections 16 and 36 of each township as common-school land. In Arizona, New Mexico, and Utah sections 2 and 32 were also so designated. Only in Nevada was this problem avoided; here, in lieu of a grant of named sections, the State ultimately was given the right to select from any unreserved and unappropriated public lands 2 million acres for common-school purposes (71).

This distribution in small units, rather than in tracts of sufficient application of sound range management principles even if those responsible for the handling of such lands so desired.

The State of Nevada based the location of its school-land selections on salability, especially as influenced by the control of water, which was especially vital to the use of the range. Thus in this instance the location of State land furnished the key to the use of an immense area of surrounding public domain, and this explains in part why such a large part of Nevada's common-school land has passed to private ownership.

Attempts at consolidation of State land in the public-land States of the West in blocks large enough for management have been made with more or less success. The greatest aid to this endeavor has been the various lieu selection acts. Title to land granted the States did not pass until the lands were surveyed and the survey accepted. Meanwhile the State grant might be defeated as to a given area either by settlement prior to survey or by inclusion in some reservation in which case title did not pass so long as the land was reserved.

To meet such situations equitably the States were given the right to select an equal area of unimproved, unreserved and unoccupied, surveyed public land anywhere within the same State, regardless of value. This provision proved of great value, especially where national forest reservations embodied great areas of unreserved, rough mountain land. The theoretical school sections were promptly surrendered, and the best of the remaining unreserved public domain was selected instead.

In 1907, in order to facilitate and encourage consolidation and management of State lands, the Forest Service agreed to eliminate certain agreed-upon areas from the national forests for selection by the various States on an "equal area—equal value" exchange basis. In some States part or most of the selected land was primarily valuable for grazing. This was true in part in Montana, Idaho, Washington, Wyoming, New Mexico, and other States.

Likewise, in a few States exchanges of patented State lands within the national forests for other unreserved lands of equal area and value have aided materially in consolidation. That other States have not followed a similar course results in part from a lack of permissive legislation.

It should be added that in most grants, other than those for the support of the common schools, the States were permitted to select the specified area from any unreserved and unappropriated public domain. This was true with the large grants for the various State colleges and universities and for many internal improvements. In many instances these selections were made in blocks of large size.

In many of the States it has been the practice to invest the receipts from the sale or lease of State land in real-estate mortgages. A large part of these investments were made during the dry-farm boom and were for amounts which we now know were in excess of the actual worth of the land. Although foreclosures have been avoided when possible, some States have by this means acquired a substantial addition of acreage of denuded lands and are destined to acquire much more. Here again the land distribution is in small units and serves to add to the confusing pattern of State land ownership.
The handling of State range land has been based almost wholly on a desire to secure the maximum current revenue. Sale of the maximum acreage has been encouraged without regard for the fitness of the land for private ownership. Leasing has usually been with a view to securing the greatest possible price. No provision has been made for the protection of the range and watershed resources through wise management. A search through the last annual land report of all the range States fails to reveal any mention of the condition of the lands. Without exception they are mere financial statements made up largely of figures of acreages and dollars. The measure of success seems to be based entirely on the ability of those responsible for the lands to obtain the maximum revenue from lease or sale regardless of the effect on the resource.

In every case responsibility for administering State lands rests with those whose major function is revenue collection. In no instance has the land been turned over to an agricultural agency. Surprising as it may seem, even where a qualified State agricultural department is provided it has been permitted to have no part in State land management other than that which could be exerted indirectly through influence. Clearly, in the interest of good land management, the administration of State grazing land should be closely tied in with the interrelated agricultural interests. Sound land-use management requires this action.

To sum up: The distribution pattern of State lands is of such character as to complicate any attempts at improved range management. No provision at all to control numbers of stock or season of use is exercised in leases. Supervision of the use of the land is not provided. The responsible agency is primarily interested in securing the greatest current revenue through sales or leases. The services of existing qualified agencies such as the State agricultural departments, the agricultural experiment stations, and the Extension Service are little used.

**INDIAN LANDS**

The land ownership problem within the western Indian reservations, especially those of the Northwest, is little if any less complicated than with the land in other forms of ownership or control. Until very recently the objective in Indian administration seems to have been to lead or force the Indian to accept the same mode of living and standards of civilization that have proved to be satisfactory to the white man. This has included the principle of individual, private ownership of land as the ultimate solution. As a result, five distinct classes of land titles are intermingled on most of the reservations. This situation is fully discussed in another section (pp. 278-285) and therefore will not be repeated here. It should be said, however, that the resultant land-ownership pattern has been one of the major obstacles to the practice of proper range management on Indian lands. Progress in recent years has been encouraging and should be more rapid under the broad authority vested in the Interior Department by the Wheeler-Howard Act of 1934.

**UNSUITABLE LAND POLICY**

Beginning late in the nineteenth century, a few farsighted individuals began to realize that for certain lands private ownership was neither feasible nor desirable. As a result, partly owing to the public pressure but more largely to the political astuteness of certain conservation leaders, a large area of the remaining public domain has been withdrawn from all forms of entry and reserved for public management. Chief among these reservations were those creating the national forests, national parks and monuments, and power-site withdrawals. Also a great area has been reserved for such special purposes as Indian reservations, reclamation sites, stock driveways, and mineral reservations. Although there is a material amount of overlapping as between various reserves, their general extent, as recorded in the 1914 report of the Secretary of the Interior, is shown in the following partial tabulation:

<table>
<thead>
<tr>
<th>Acres</th>
<th>188,120,479</th>
</tr>
</thead>
<tbody>
<tr>
<td>National parks and monuments</td>
<td>56,673,283</td>
</tr>
<tr>
<td>Indian reservations (estimated net)</td>
<td>1,000,000</td>
</tr>
<tr>
<td>Military, naval, and similar reservations (approximately)</td>
<td>512,582</td>
</tr>
<tr>
<td>Bird and game refuges</td>
<td>9,771,579</td>
</tr>
<tr>
<td>Stock driveways</td>
<td>20,292,658</td>
</tr>
<tr>
<td>Reclamation withdrawals</td>
<td>5,147,060</td>
</tr>
</tbody>
</table>

As a residue from the combined effects of the land-disposal policy on the one hand and the reservation policy on the other, we shall find, on July 1, 1934, 163,695,479 acres of unappropriated and unreserved public domain, of which 162,183,181 acres were in the range country. For the purposes of this section grazing districts as shown in table 45 are considered to be public domain.

**Table 45.** Public domain areas in the range States, included and not included in “grazing districts”

<table>
<thead>
<tr>
<th>State</th>
<th>Included in grazing districts</th>
<th>Not included in grazing districts</th>
<th>Total public domain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arizona</td>
<td>1,000 acres</td>
<td>1,000 acres</td>
<td>1,000 acres</td>
</tr>
<tr>
<td>California</td>
<td>1,550 acres</td>
<td>2,000 acres</td>
<td>3,550 acres</td>
</tr>
<tr>
<td>Colorado</td>
<td>1,672 acres</td>
<td>1,500 acres</td>
<td>3,172 acres</td>
</tr>
<tr>
<td>Idaho</td>
<td>5,000 acres</td>
<td>5,000 acres</td>
<td>10,000 acres</td>
</tr>
<tr>
<td>Montana</td>
<td>4,120 acres</td>
<td>1,000 acres</td>
<td>5,120 acres</td>
</tr>
<tr>
<td>Nevada</td>
<td>3,400 acres</td>
<td>8,000 acres</td>
<td>11,400 acres</td>
</tr>
<tr>
<td>New Mexico</td>
<td>7,000 acres</td>
<td>5,000 acres</td>
<td>12,000 acres</td>
</tr>
<tr>
<td>Oregon</td>
<td>7,000 acres</td>
<td>2,000 acres</td>
<td>9,000 acres</td>
</tr>
<tr>
<td>Utah</td>
<td>6,000 acres</td>
<td>1,000 acres</td>
<td>7,000 acres</td>
</tr>
<tr>
<td>Washington</td>
<td>20,000 acres</td>
<td>5,000 acres</td>
<td>25,000 acres</td>
</tr>
<tr>
<td>Wyoming</td>
<td>1,346 acres</td>
<td>12,000 acres</td>
<td>13,346 acres</td>
</tr>
<tr>
<td>Kansas, Nebraska, North Dakota, Oklahoma, South Dakota, Texas</td>
<td>12,000 acres</td>
<td>12,000 acres</td>
<td>24,000 acres</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>56,522 acres</td>
<td>96,665 acres</td>
<td>153,187 acres</td>
</tr>
</tbody>
</table>

On June 28, 1934, the Taylor Grazing Act, which provides for some degree of public control of grazing on 60 million acres of the public domain, became a law. Although the restriction in acreage...
still leaves more than 85 million acres of Federal public land without provision for control, it seems inevitable that some sort of management will be provided very shortly. This can be provided through amendment to the Grazing Act to include the entire area, through a division of the area between this and other agencies in the interest of consolidation and conservation, or through a combination of these measures. Consideration of the good and bad features of the Grazing Act will be found elsewhere. It is necessary here to present the effects on the land pattern which this immense acreage of predominating range land exerts and to describe in some detail its condition and the reasons therefor.

The public domain of the West is made up of remnants left after careful culling by many agencies. The homestead, desert homestead, and grazing homestead laws eliminated much of the best of the natural range area. State, railroad, and other grants, with their provision for lieu selection of indemnity land, still further reduced the average quality. The national forests, Indian reservations, reclamation withdrawals, and so forth, each have absorbed grazing land better than that which remained. Clearly the residue of 165,695,479 acres consists of the least desirable of the original 1,442,220,320 acres. Certainly, it includes the poorest 10 percent of the lands west of the Mississippi River.

Not only is the land poor in quality but its geographic distribution often makes administration difficult. Except those semidesert, or extremely low-value areas where there was little demand for the land, it is scattered in units too small to administer separately and badly intermingled with other ownerships. As has already been emphasized, absolute lack of proprietorship on the public domain resulted in the worst kind of abuse through overgrazing and use during improper seasons. Wherever there is any public domain used as open range, it is in virtually every instance in a more advanced state of depletion than similar land under any other form of ownership.

Along with forage depletion has gone, more often than not, the top soil, and along with it the soil fertility. The forage and soil resource is generally so badly deteriorated that the land has lost not only its grazing values but also its ability to regulate run-off and prevent erosion.

Reasons for Delay in Adopting a Constructive Range-Land Policy

Failure to correct the evils of our Federal range-land policy is hard to understand. As early as 1878, Lieutenant Powell, then Chief of the Geological Survey, after a rather thorough field examination, prepared a report on the necessity for revising our land laws to fit conditions in the semiarid West. His report (107), with remarkably clear foresight, pointed the way for future action. He recognized the desirability of combining range and irrigable land, of the protection of water holes for widest possible use, and of preventing nonirrigable lands from going into crop agriculture. No action was taken.

In 1898 the American National Livestock Association, well knowing that the range resource was being destroyed, passed resolutions asking that the public domain be given protection from overgrazing. No action was taken.

In 1903 President Theodore Roosevelt, fresh from his experiences in Dakota and Montana, realizing keenly the impaired condition of the range resource, appointed a Public Land Commission to investigate and report. This Commission after much testimony and travel reported not only what would happen but what had already happened. It recommended, as suggested by many progressive stockmen, that the remaining public domain be withdrawn from entry and placed under Federal administration with provision for homesteading after careful land classification. No constructive action was taken. In due time additional laws were passed designed to facilitate rather than prevent further damage.

In 1930 President Hoover appointed the Committee on the Conservation and Administration of the Public Domain. Another study was made and another recommendation for placing the public domain under administration. In this instance primary emphasis was placed on transfer of the land to the States where they so desired and where proof of ability and intention to protect the resource could be given. Mineral rights were to be reserved to the Federal Government. In those States not caring to assume the heavy responsibility of rehabilitating these run-down lands, administration by the Federal Government was recommended. Also the remaining forest lands, high-value watershed lands, and units desired to block out administrative divisions, were to be added to the existing national forests. It is probably fortunate that several of the recommendations of this report were never translated into law.

Finally in 1935 after a half century of delay and failure to act realistically on the public-domain range problem, and after untold damage to the range and to the livestock industry had resulted, less than half of the remaining public domain was placed in the way of administration. The remainder, together with nearly 25 million acres of unperfected homestead claims, remains a “no man’s land.”

Why the delays? The reasons are obscure and may be conflicting. First of all has been the ever-present fear of oppressive bureaucracy. The idea of placing in the hands of some governmental agency the final say as to the use of lands which heretofore have been used without hindrance, was distasteful to many of the pioneer American stockmen. Perhaps in no business has the spirit of rugged individualism been more strongly displayed. From the days of the Texas trail herds on down to the present depression, the business has been highly individualistic. The motto has been, “Let the best man win.” As a result, the stockmen were unable to unite on a solution and which they could mass their full strength.

The State rights argument has likewise been used to prevent action. Even though the management of State lands more often than not has been on a political basis with no apparent regard for the permanence of the resource, there has been a strong following for transfer of the public domain to the States. That, in their present depleted condition, management and rehabilitation of these lands would constitute a liability rather than an asset, seems not to have been realized. The fact that some receipts were being obtained from lands already in State ownership easily led to the
assumption that the ownership of the public-domain lands would increase this revenue. Partisan politics, especially within some of the States concerned, has made good use of the State rights principle at the expense of the perpetuation of the range and watershed resource.

Another feature in the delay has been a possible advantage which the stockmen have seen in keeping the situation such as to afford an opportunity to play one form of Federal control against another. That this is true is evidenced by the situation today when the division of Federal responsibility between two departments is being so used. Always, of course, the question of the fee to be charged for use of the range has played a part far beyond its true importance. The cost to the stockman of equitable fees, as against insecurity in the use of range, losses from overstocking of ranges, and damage which results from erosion and unregulated stream flow from such areas, should be quickly accepted as the only reasonable alternative.

Transcending all of these, however, has been the lack of inspired, aggressive leadership. Reports have been made, laws have been drafted and recommended; action to correct abuses of existing laws has awaited definite and inescapable mandate from Congress; but the “punch” required to convert reports and recommendations into established policy has not materialized. Always the solution has been diluted by the tradition for land disposal and passage of title to private ownership. Had there been inspired leadership, such as Gifford Pinchot displayed in putting into effect a constructive conservation program for forest lands, the unreasonable delays could not have continued. Partisan politics, adherence to outmoded precedents, suspicions of bureaucracy, pure inertia, unwillingnesses to face facts, and lack of appreciation of the worth of the forage resource—none of these nor all together would have been able to obstruct, as they have done, so obvious a course of action on behalf of the public welfare, if such leadership had developed.

The Effects of Past Land Policy

Effect on Present Range-Land Ownership

The ownership pattern of range lands within the region where the raising of range livestock must be the major industry has gradually become exceedingly complex and confusing. In general, our land-disposal laws were so drawn as to keep ownership units to a small size and, except in the case of the national forests, to make no provision for continuing use of sufficient additional range to support a home unit. That one purpose back of this type of legislation was the prevention of monopoly in land ownership and control in no way alleviates the situation which we now face.

The only laws which were so framed as to facilitate the control of range land in units of manageable size were those providing for certain Federal reservations and those which authorized the exchange of private or State lands within these reservations for lands in the unreserved public domain. The national forests, and more recently the grazing districts, have for one purpose the consolid...
Outside the boundaries of the Federal reservations we find a confusing ownership picture. It has been well described by R. R. Renne, of the Montana Agricultural Experiment Station in a recently written unpublished manuscript. The description is typical of much of the eastern two-thirds of that State.

Thousands of tracts owned by individuals residing all over the United States; thousands of small farm units interspersed among grazing areas and other ownerships; a large portion of the remaining public domain occurring in isolated, disconnected tracts; state holdings scattered, usually including the sixteenth and thirty-sixth sections of each township; thousands of acres of county land, taken through continued tax delinquency, and occurring haphazardly in small units; railroad lands making a checkerboard effect in some areas, being much more scattered in others; insurance company lands scattered thinly here and there; investment and mortgage company holdings strung out in a disorderly fashion, representing parcels out of larger blocks not yet sold; lands foreclosed by land banks and commercial banks occurring at random here and there — such is the pattern of ownership established under a policy of "laissez faire," free individualism, and planless settlement. With such a pattern economic instability, overgrazing, and general misuse of the land occurs.

The above description by one who has spent several years in an intensive study of the land-ownership problem in our western range country is not overdrawn. Figures 63 and 64 present graphically the ownership pattern of typical areas in Montana and Colorado. Actually, the ownership in these areas is immeasurably more complicated than here shown, as is evident in the necessary grouping on these maps of several ownerships in certain of the classes. For example, Federal ownership may include land under the jurisdiction of several departments or bureaus; corporate ownership includes not only railroad land but that of all banks, investment houses, insurance companies, and all other incorporated entities; and private ownership is widely distributed among both residents and nonresidents. Need more be said concerning the seriousness of multiplicity of ownership in its effect on range management in a predominantly range country where it takes from 3 to 15 acres to support one cow for a month?

Our land policy has had equally serious effects on the resultant land use. Generally the land-disposal laws have not provided for adequate land classification before settlement was permitted or title was passed. It is true that certain laws, specifically the stock-raising homestead law, did so provide, but in practice the classification was in no sense adequate and did not protect the settlers from an uneconomic land selection. Land-hungry applicants, encouraged by publicity departments of railroads, real-estate locators, and local chambers of commerce—with or without previous farm or ranch experience—were permitted to select at random their quota of land. Title was allowed to pass with little regard to the suitability of the land for the purpose intended.

To say that the application of the 160-acre homestead law to the nonirrigable lands of the semiarid West was disastrous is no overstatement. The dry-farm wheat belt of the short-grass plains was settled under this law. The effect of the World War with its resultant peak prices for wheat and other farm commodities, coming during the period of settlement, has been described in an earlier section.

At this time, too, the dry-farm region was favored with more than normal precipitation for a period of several years. As a result of this coincidence literally millions of acres of the best natural range was turned under with the plow. Then the war ended. Wheat surpluses built up. The dry years came on. A large part of these wheatlands that once were range were abandoned.

While no reliable statistics as to the extent of abandonment are available, it has been estimated that more than 20 million acres is not too high a figure. In Montana, according to unpublished estimates, nearly 5 million acres, and in Washington more than 1 million acres of such land present a major problem. Homesteads patented under the various laws, State lands leased for agricultural use, railroad lands, and homesteads not yet proved up on, all suffered in varying degree.

The dry-farm wheat lands of many parts of the West today present a discouraging picture. Immense areas which once supported a fine stand of grama and buffalo grass now grow little except worthless weeds. Literally thousands of homes, cheaply constructed to be sure, stand dilapidated and abandoned. Other hundreds of homes still occupied plainly show a degree of poverty seldom equaled in our city slums. Schoolhouses are abandoned, or if still used, show the results of an attempt to continue public education at a cost per pupil greatly exceeding that in the more prosperous communities. Local governments are deeply involved in financial difficulties, if not in fact actually bankrupt. It is thus that we pay the price of a land settlement that ignores sound planning in the use of land.

The extent of tax delinquency in the range area is not now known. Comparable figures for the entire area have not been collected. Sample range counties in several States are, however, available to indicate the extent to which ownership has reverted to the public. According to R. R. Renne, the county governments of Montana in 1934 owned 2,526,549 acres (excluding lands within the boundaries of incorporated municipalities, highways, rights-of-way, etc.) Several times as much was delinquent 3 or more years and subject to tax deed, but because of recent tax moratorium legislation title had not been perfected.

Table 46 indicates for Montana, for which tax data are available, the building up of delinquency during recent years. Although it is impossible to segregate natural range from cropland, it is well known that delinquency is worst on dry-farm wheatland which has been abandoned for cropping. The counties in which delinquency is most prevalent are those in which range livestock and dry farming have predominated. In the final analysis, tax delinquency of abandoned dry-farm land is a range problem. It is only through rehabilitation for range use that these lands can again be made to produce satisfactorily. It is significant that even during the prosperous years delinquency was serious. In 1928, as shown in table 47, more than 15 percent of the range and cropland was so listed and by 1933 this had increased to more than 40 percent.
That the above situation is not peculiar to any one range State is shown in the Colorado yearbook for 1933-34 on page 277. In 1933 nearly 61 percent of the privately owned farm and ranch land (approximately 21,760,000 acres) was delinquent for general property taxes. In 1928 the percentage of delinquency was only 30.4 percent and the acreage involved was 10,679,054 acres. That delinquency in this instance was worst on grazing land and dry-farm lands is shown by table 47, which is based on information for one typical range county. It is significant that 49.4 percent of the delinquency is on range land, and 54.8 percent is on dry-farm land which should have remained in grass, while only 15.5 percent is on irrigated crop land. Thus 54.2 percent of the tax delinquency in this county is on land which grazing would seem to be the highest use.

The tax delinquency situation is likewise serious in the range livestock counties of eastern Oregon. As of March 1, 1934, 12 eastern Oregon counties in which the range industry is predominant or co-dominant with lumbering, owned 674,450 acres of land. Abandonment of land to the counties for unpaid taxes was far less in arable agricultural counties than in the grazing counties. In three range counties the acreage of land which taxes were delinquent 3 or more years, but which had not gone to county ownership, increased from 187,385 acres in 1928 to 1,092,731 acres in 1933. Although an exact division between range and submarginal farm land is not possible, the delinquency situation is known to be very serious for both types of land. While additional data from sample surveys...
of Montana University Forest School. Table 48, which is taken from his report, shows that during the first 5 years after abandonment 85.7 percent of the cover consisted of worthless and unpalatable species. Only 7 percent was grass. Even 16 or more years after abandonment it was found that more than 20 percent of the cover was made up of unpalatable species, with only 45.4 percent in the grass group. It should be noticed, further, that only 3.9 percent of this grass cover was blue grass, whereas on adjacent unbroken grasslands 36 percent of the vegetative cover is accounted for by this most excellent species.

Table 48.—Occurrence of native species on various types of land in Wheatland County, Mont.

<table>
<thead>
<tr>
<th>Species</th>
<th>Scientific name</th>
<th>Native grassland</th>
<th>Abandoned plowed land</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1-5 years (Percent)</td>
<td>6-10 years (Percent)</td>
</tr>
<tr>
<td>Blue grama</td>
<td>Bouteloua gracilis</td>
<td>26.0</td>
<td>0</td>
</tr>
<tr>
<td>Bluebunch</td>
<td>Agropyron smithii</td>
<td>7.8</td>
<td>6.0</td>
</tr>
<tr>
<td>Needle and thread</td>
<td>Silpia conspersa</td>
<td>12.5</td>
<td>1.0</td>
</tr>
<tr>
<td>Dome grass</td>
<td>Koeleria cristata</td>
<td>4.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Native bluegrass</td>
<td></td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>Other bluegrass</td>
<td></td>
<td>3.0</td>
<td>4.0</td>
</tr>
<tr>
<td>Dryland sedges</td>
<td>Carex spp.</td>
<td>13.0</td>
<td>( )</td>
</tr>
</tbody>
</table>

PERENNIAL AND BIENNIAL WEEDS

| Palatable                     | 0                 | 1.6               | 3.1               | 4.4               | 2.2               |
| Unpalatable                   | 4.6               | 11.8              | 13.1              | 8.9               | 16.2              |

ANNUAL WEEDS

| Russian thistle | Salsola kali    | 2.0              | 70.0              | 26.0              | 12.0              |
| Russian thistle |                | 3.2              | 70.0              | 26.0              | 12.0              |

BROWSE

| Silver sage | Artemisia frigida | 8.0              | 5.7               | 12.8              | 18.2              | 17.2 |
| Snake weed  | Gutierrezia sarothraea | 2.3             | 1.6               | 6.1               | 6.0               | 5.0  |
| Phlox      | Phlox moehleri | 2.6              | 0                 | 1.2               | ( )               | 3.7  |
| Cactus     | Opuntia polyacantha | 1.0             | 0                 | 0                 | 0                 | 1.0  |
| Total      |                   | 100.0            | 100.0             | 100.0             | 100.0             |

1 Less than 0.5 percent.
2 Considered half shrubs.

Nelson's conclusions as to rate of natural rehabilitation of plowed and abandoned dry farms are substantiated by those reached by Shantz (135) from a study in Colorado in 1911. In the Escalante Valley in southwestern Utah, George Stewart found that the rate of recovery of lands last plowed in 1913 was very much slower than that determined by Nelson in Montana.

It is seriously questioned whether private owners can profitably hold a class of land which shows so little improvement even after many years of abandonment from cropping. Its rehabilitation within a reasonable period seems generally to be dependent on artificial reseeding. Just how private owners and underfinanced coun-

ties can undertake a wholesale program of artificial reseeding in a region where the climate makes the undertaking extremely hazardous and until the costs of such treatment can be reduced to much less than the value of the land so treated has yet to be answered.

The problem for the rehabilitation of badly depleted range land and the restoration of abandoned dry farm land seems to be one for a strong unit of the Government to undertake.

EFFECT ON THE RANGE RESOURCE

The complex ownership pattern of range land which has been built up and the deterioration and destruction of the range resource which has accompanied this process presents a major problem to the livestock industry, dependent communities, the States, and the Nation. As is shown in discussing integrated agriculture, crop farming and range use are inseparable parts of the agriculture of the Western States. The extent to which either use is successful depends in large part on the degree to which the other can be made to contribute toward it. Clearly close coordination is essential to the permanent and continuous prosperity of the integrated agriculture.

Coordination in use is equally essential to the conservation of the high public values which much of this land carries. High-value watersheds, critical erosion areas, tracts badly needed for recreational use, and key areas for game use have been passed to private ownership or abusively used without regard for their need for these special services.

One of the essential features of sustained-yield management is security in the right to use the forage resource which may properly be harvested from the land. That such security is impossible under an ownership pattern such as has been previously described seems clear. One small area sufficient for even 150 head of cattle or a small band of sheep may be divided in ownership between so many individuals, corporations, and agencies that planning for future use is impossible. The logical user of the range is never sure that some less dependent competitor will not legally invade his range through purchase or lease of part of the area. Also, the situation which now exists lends encouragement to the "coyote sheep herder," who, by the lease of small, widely separated areas, combined with his equal right to use such public domain as may remain, feeds his flocks in trespass on areas which have been held for special seasonal use, or which purposely have been lightly grazed as a range rehabilitation measure. Thus the usual result is to consider only the present and get the last blade of grass every year. Under such treatment range depletion has been serious and will continue.

The effect of dry farming on the range resource has already been discussed. The native range forage has been destroyed and has been replaced by plant species of little or no forage value. Natural rehabilitation will be extremely slow. Unfortunately, these dry farm lands are often intermingled with unbroken range lands, thus reducing the average carrying capacity of entire units to an extremely low level. Ownership is widely distributed, and tax delinquency is most serious. Thus, in regions where unsuccessful dry farming has
difficult and is made more complicated by the land-ownership situation which exists.

One of the most unfortunate results of the land policy which has been followed in the West is the extent to which it has encouraged overinvestment in land, and in turn abuse of the range. As homestead entries were allowed and patents were issued the stockman who had previously used the range borrowed from the banks to buy out the so-called settlers and gave a mortgage on his enlarged holdings as security. The increase in owned range did not increase the area or productiveness of the range unit which he had previously used free of charge as public lands. To meet taxes and interest payments on the enlarged ownership, the stockman usually found it necessary to increase the size of his flock or herd. The result, almost inevitably, has been overgrazing and range depletion.

Under the conditions which have been described it is to be expected that ranges generally have been depleted. The extent to which depletion has gone under the various forms of ownership and control should be one guide to future action. It is significant that in every major forage type the national-forest ranges are now in better condition than those under any other form of control. At the other extreme, as might be expected, is the public domain, where no administration has been given to range use.

THE PROBLEMS WHICH ARISE FROM LAND OWNERSHIP

The tangled and illogical ownership problem which has arisen from the lack of constructive land policy as previously shown, has had and still has a serious influence on the perpetuation of the range resource. Four problems stand out as the major features which require solution.

SIMPLIFICATION OF OWNERSHIP PATTERN

Clearly, such intermingling of ownerships as is illustrated by figures 63 and 64 is too great a handicap on the development of good range management. The situation is made immeasurably more acute by the fact that a very high percentage of the lands is held by absentee owners who have no personal interest in the community welfare other than that of obtaining a return on their investment. Another large segment of potential range land widely diffused in ownership has been effectively lifted out of production by an unsuccessful attempt to grow dry-farm wheat. The economic rehabilitation of such land for productive use depends in large part on assurance for future good management of the property. Simplification of the pattern will be one incentive to better treatment.

State legislation to facilitate consolidation in some form of public ownership, the formation of cooperative grazing districts for administration of certain units, and active participation by the Reclamation Administration of the Federal Government should all be considered as possible aids to the solution of this problem. A more logical ownership pattern is fundamental to permanent range rehabilitation and maintenance.

UNSUITABLE LAND POLICY

DIVISION INTO ECONOMIC UNITS

The distribution of the grazing resource in such a way as to avoid monopolistic tendencies, without dividing it up in such small units as to destroy its social value, is another major problem. Ideally and ultimately the range resource will probably contribute most if made to support the maximum number of satisfactory home units. This does not necessarily mean individual ownership of sufficient range and range property to support the number of stock required to meet this objective. The system of distribution of grazing privileges in effect on the national forests offers one solution. Under this system dependency of the outfit on the use of range forage, the commensurability of owned land on which supplemental feeds are raised or which is used as winter range, and the number of stock owned each are considered.

The livestock requirements for an economic unit will vary greatly. In regions where range livestock is the sole means of support, the ideal family unit may call for about 150 to 200 head of cattle or a small band of sheep. Where diversified farming is practiced, provision to graze only a few head of stock may be essential to supplement the other farm income. In certain regions where successful management is contingent on running a large outfit it may be entirely proper to recognize such ownership. Always the effect size of outfit on the cost of producing meat, wool, and hides must be given fair consideration. The controlling principle in each case should be the support of the maximum number of people at an acceptable standard of living. If this objective can be approached, the cost of rebuilding the depleted ranges can be justified.

TAXATION

One of the problems of range-land ownership is that of taxation. The extent of tax delinquency in the range country establishes the fact that, in their present run-down condition, much range land cannot carry the load. It is significant that, generally, on those properties where good range management has been practiced the taxes have been paid. Certainly a part of the solution of the range-land tax problem rests on rehabilitation for maximum production, but the ranges are not yet rehabilitated and taxes are payable each year.

Range lands must, as a matter of course, pay their full share of the cost of good government. Their failure to do so in recent years is so greatly influenced by the effects of the lack of good management and by the delinquency of intermingled lands improperly used for crop agriculture that thoroughly reliable conclusions are impossible. It seems probable that the taxes on these lands are disproportionally high in terms of real income value. This much is clear. A comprehensive analysis of the tax problem on the range area should be undertaken, and in the meantime serious consideration should be given to the possibilities of revamping the local government organization to fit the population pattern which exists. Certainly some means must be found to prevent range lands from being given the abusive treatment commonly accorded.