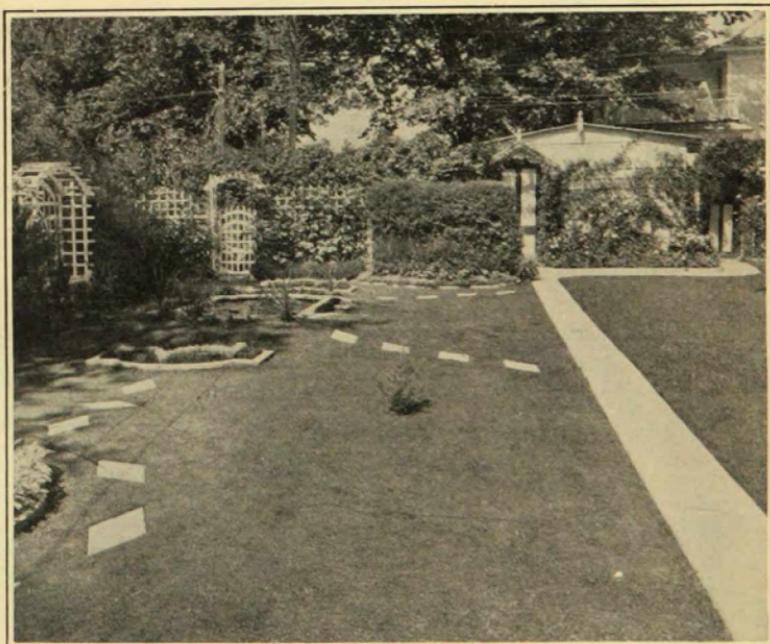


LAWNS



COLORADO AGRICULTURAL COLLEGE

EXTENSION SERVICE

F. A. ANDERSON, DIRECTOR

FORT COLLINS

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LAWNS

Planting and Maintenance in Colorado

By GEORGE BEACH, Horticulturist

"It's not a home until it's planted" and likewise the planting is incomplete without the lawn.

It goes without saying that considerable time and labor is necessary to keep a yard clean and weed free if no lawn is planted. So little extra work is required to sow and care for the lawn that the effort is amply rewarded by the increased satisfaction of its neat and tidy appearance.

The question is often asked whether there is not some other lawn grass for Colorado than the commonly grown Kentucky Blue, that would require less sprinkling and mowing. Our native prairie grass lives with only nature's care; but even under favorable conditions it is not a lawn grass. It must be clear at the outset that green-tinted concrete is the only laborless substitute for lawn.

Grading

There are many places where a perfectly level lawn is the only



A well-graded surface is most desirable for starting the new lawn. Note the depth of excavation for filling in with good top soil.

practical grade; but where conditions permit, a rolling but well-drained surface is the most pleasing and natural. Large expanses of perfectly level lawn give a stiff, strained effect which is never found in nature.

If there are soft spots after putting the ground to grade, rolling is necessary to detect low places. Depressions readily seen then may be filled by raking. Re-rolling and re-raking will insure good surface drainage.

Time for Sowing

Sowing may be done more or less satisfactorily at any time of year. We often hear of grass seed sown on snow. This is a rather hit or miss practice but will succeed if the seedbed under the snow



Gradual drainage away from the house is preferable to the flat lawn.
Note fineness of pulverization in seedbed.

is in the best condition; however, nothing is gained by waiting for snow when the ground is prepared beforehand.

If plenty of water for sprinkling is available, the very best time of year to sow lawn grass is from August 15 to September 15. Getting "the jump" on weeds is the important point in late-summer or fall planting, for the sod developed before winter is able to compete

with next spring's weeds much more favorably than the spring-sown seed.

If fall sowing is impossible the next best time is early spring. March is preferable to April if ground can be properly prepared.

Soil Requirements

If planting the lawn is anticipated before building, the removal of the surface 4 or 5 inches of soil before excavating, to be subsequently spread over the poorer soil, is an effort well worth while. Lawn may be grown on the subsoil piled over a yard from an excavation, but starting and maintenance are more difficult than when the surface soil can be restored after excavating.

If the damage of covering good surface soil with subsoil is already done, working a heavy application of well-rotted manure into the upper 4 or 5 inches of soil is a good practice. If the lawn is to be planted on a light, sandy soil, a dressing of about 2 inches of clayey soil as well as the manure can be used very profitably, as the clay will increase the water retention of the soil. If clay is not worked into a very sandy soil, almost *continuous sprinkling* will be required to keep the soil surface in proper condition for germination during warm months.

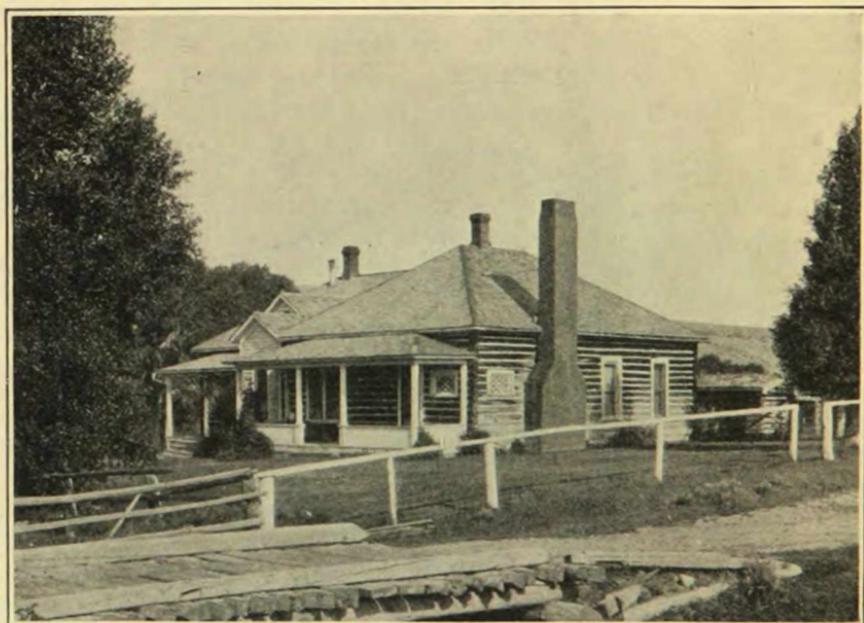
Soil Improvement

Few soils are so good as not to be benefited by some system of soil improvement. In general there are three such systems: The sowing and subsequent plowing under of a soil-improvement crop, such as oats; the working into the soil or addition after sowing of well-rotted manure, peat, or other materials of high humus content; and the use of commercial fertilizers.

The first method, plowing under a cover crop is often called green manuring. If soil lacks humus and is of poor texture generally, it will be considerably improved by the planting of a cover crop in spring which is plowed under a month or 6 weeks before sowing the lawn.

In the large majority of cases, a liberal application of well-rotted manure (100 pounds per 100 sq. ft.) worked well into the soil will furnish all the plant nutrients necessary and increase the soil's capacity for water retention besides, because of the amount of humus it furnishes.

Commercial fertilizers should be used in the "complete" forms unless there is known to be a deficiency of certain elements. Two and one-half pounds per 100 square feet is a moderate application of complete commercial fertilizer under average conditions. These fertilizers are easily applied, readily obtainable, carry no weed seed and



This mountain home is even more attractive by virtue of the pleasant lawn. Compare with the next illustration.

supply pure plant foods but must not be depended upon to improve the physical condition of soils.

Lime is not necessary on western soils, as acidity is not a soil problem here.

Varieties of Lawn Grass

The foundation of most successful Colorado lawns is Kentucky blue grass (*Poa pratensis*). This grass has a rich green color; its crowns are close to the ground and after it is established it spreads rapidly by underground shoots.

White clover (*Trifolium alba*) is used in most lawn mixtures. It starts rapidly—usually ahead of blue grass—and furnishes ground shade as well as giving an effect in the lawn that is pleasing to most people.

English rye grass (*Lolium perenne*) is an annual grass, coarse in leaf and stem which starts rapidly and produces early effect as well as covering ground quickly that would otherwise support weeds. The use of this grass coarsens the lawn the first year and is only useful where quick effect is more desirable than fine appearance.

Red top (*Agrostis alba*) grows better under adverse soil and moisture conditions than most varieties. It is a finer grass than rye

and occasionally used by itself for lawn. When mixed with clover and Kentucky blue it helps to give a good effect the first season, tho it is not as quick as the English rye in this respect.

Rhode Island creeping bent (*Agrostis canina*) is the type of grass commonly used for putting greens. The many varieties in trade necessitate careful selection when buying. The creeping stems or stolons of this grass take root at the joints or nodes and make a very dense mat of sod. Its habit of growth is more discouraging to dandelions than blue grass and, other things being equal, it requires less water than the blue grass lawn. Seed of this species is much more expensive than good blue grass and should only be used by those who are willing to give the lawn the care and study that a putting green merits. Chopped up plants or stolons may also be had for planting in rows or broadcasting. This material is costlier than seed but makes sod more quickly. Here again, careful study and judicious buying are essential to success.

Sowing

A good mixture of lawn grass for average conditions on home grounds consists of 8 parts Kentucky blue grass and 1 part white clover. If soil is richer than the average, less clover is necessary; if poorer than average soil, use more clover. The seed should be thoroly mixed and then divided into 2 parts, one to be sown by walking back and forth in one direction, the other part sown at right angles to the first direction. At sowing time, there should be no soil lumps on the surface larger than a grain of wheat. Seed should be covered by raking lightly or sprinkling a thin coat of well-pulverized rotted manure, peat or compost over the surface. Average conditions require a pound of seed per 100 square feet.

Maintenance

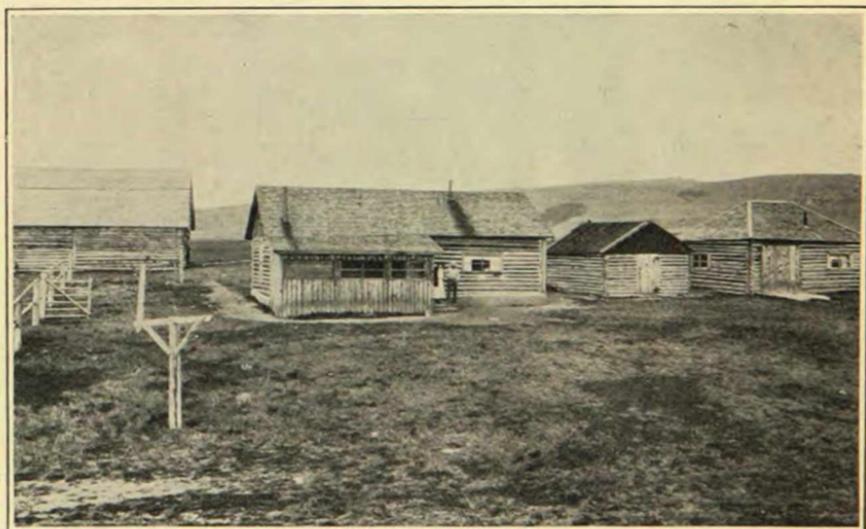
When starting a lawn during hot months, nearly constant sprinkling is necessary to keep the surface from drying and cracking. Surface moisture retention is materially increased by a thin coat of some finely pulverized vegetable matter put on after seeding. When the sod is established, a thoro soaking every few days, as weather demands, is much better than the usual perfunctory, twice daily sprinkling. Watering in full sunshine is not harmful if it is a "soaker." Subsoil should be wet as well as surface. Blue grass roots penetrate $1\frac{1}{2}$ to $2\frac{1}{2}$ feet and often as much as 5 feet.

Set the mower medium high. Short grass stands less abuse than long. By mowing often enough that clippings are not unsightly, the necessity of using a grass catcher is obviated and the cutting done in half to a third the time. These short clippings mulch the

soil so as to check drying to a certain extent, but of course a raking occasionally is in order when accumulated clippings become unsightly.

Old Sod Renovation

If a sod is poor it is best to spade it up and start over. Worthy sods however, are remarkably improved by top dressing with a com-



How much more attractive and homelike this place would be with a reasonable planting of lawn and some landscaping. Compare with previous illustration.

post of 2 parts good soil and 1 part manure. If the soil in the old sod is sandy, use clayey soil in the compost, or vice versa if the sod soil is clayey.

If commercial fertilizer is applied during the growing season, particular care should be taken to spread it evenly, or dissolve and apply with sprinkling can.

Bare places in an old sod should be raked and then sown. The whole lawn should then have the top dressing and a rolling to firm the soil.

Whenever clippings are removed from a lawn they should be composted and later returned as a top dressing. In this way the soil is never impoverished by the removal of its own products.

Most of the weeds found in the young lawn are not at all serious and will not persist after mowing begins. Dandelions, plantain and undesirable grasses are the most serious persistent weeds in Colorado lawns. To date, there is no miraculous and speedy method

of eradicating these pests. After the initial "ounce of prevention," hand digging and the pulling off of dandelion blooms with a dandelion rake to prevent formation of more seed is still the most reliable "pound of cure," tho it often assumes more nearly the proportions of a ton.

The presence of obnoxious weeds in the lawn, however, is no cause for discouragment, for "the poor we have always with us." Close inspection of the lawns we have always considered fine will reveal a surprising number of weeds. Scrupulous care in maintenance is the secret of fine appearance and if given this care, your lawn will make a very creditable carpet for your outdoor living rooms in spite of the presence of a few weeds which you intend digging on that elusive someday when there's "nothing else to do."

