

# Lehmann lovegrass a naturalized citizen

By George Ruyle and Jerry Cox

First introduced into Arizona in 1932 from Southern Africa by the SCS, Lehmann lovegrass can now be considered a naturalized citizen.

A drought tolerant, warm season, perennial bunchgrass, Lehmann lovegrass is ideally suited to southeastern Arizona. Whether denounced as an invader weed or hailed as a miracle plant, the grass is here to stay and ranchers should manage the plant as a forage species.

Field-sized plantings of the grass began in Pima and Cochise counties in the mid-1930s. Since that time, Lehmann lovegrass has been seeded extensively along roadways and on rangelands for erosion control and forage production. Pre-adapted to southeastern Arizona's growing conditions, the grass has persisted and is increasing in abundance.

In southeastern Arizona, Lehmann lovegrass thrives best at elevations above 3,000 and below 5,000 feet, where annual precipitation is between 10 and 14 inches. The grass prefers sandy or sandy loam soils.

Within these environmental limits, Lehmann lovegrass has spread vigorously on Arizona rangelands, often replacing the native perennial grasses. A prolific seeder, Lehmann lovegrass invasion usually begins on disturbed sites, but even protected enclosures have been taken over by this aggressive grass.

Today, Lehmann lovegrass occurs on thousands of acres of southeastern Arizona rangeland, often in nearly pure stands.

Lehmann lovegrass seeds are quite small, over six million seeds per pound, and recommended seeding rates are ½ to one pound of seed per acre. Between 1978 and 1984, 20,000 to 32,000 pounds of certified seed were produced annually in Arizona and nearly 100 tons of Lehmann lovegrass seed have been sold in the past 10 years.

The grass establishes easily by broadcasting on freshly prepared seedbeds. Mid-to-late June is the recommended planting time.

Over 4,000 acres have been seeded to Lehmann lovegrass along major highways (freeways and secondary highways) and over 60,000 acres of rangeland

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have been seeded to the grass in southeastern Arizona. In southern Cochise County, more than 40,000 acres have been seeded and an additional 30,000 acres invaded by Lehmann lovegrass.

Research from the Santa Rita Experimental Range indicates that lovegrass has continued to invade native grass stands since the initial plantings 50 years ago. Over 200,000 acres in Cochise, Pima, Pinal and Santa Cruz counties are now covered by Lehmann lovegrass.

The rather recent appearance of Lehmann lovegrass has presented ranchers with both opportunities and problems. On degraded sites, lovegrass may be the most successful grass to seed. In good years, established stands of Lehmann lovegrass can out-produce the native grasses, yielding 2,000 or more pounds of forage per acre.

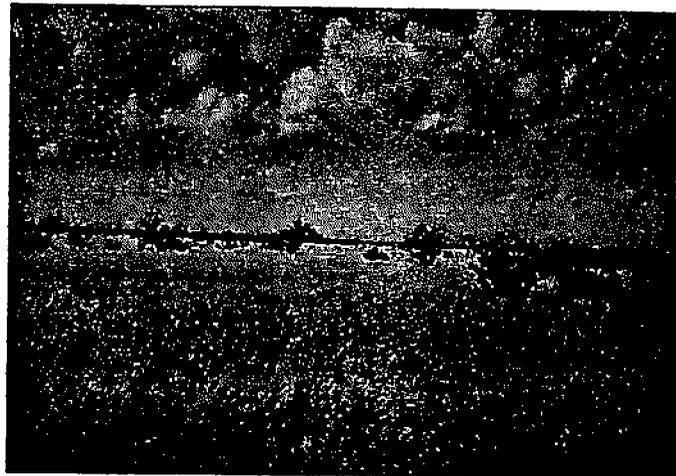
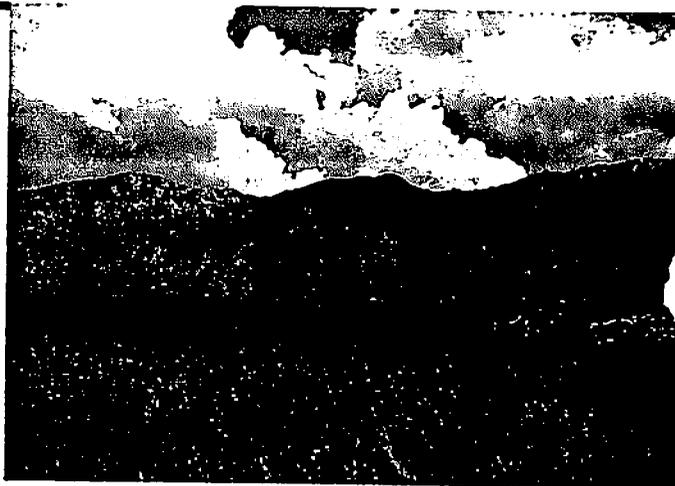
But Lehmann lovegrass is less palatable than the native grasses to livestock, especially during the summer growing season. The green forage is coarse and may be composed of fewer than 10% green leaves, even during periods of active growth. In fact, studies show that at no time did leaves make up more than 25% of total green standing crop of Lehmann lovegrass in 1984.

Although cattle prefer the native perennial grasses during the summer growing season, Lehmann lovegrass stems remain green during late winter and early spring, often becoming the major dietary component for livestock at that time.

Fecal analysis, a technique used to determine the forage species consumed by range animals, has shown that Lehmann lovegrass can constitute over 50% of cattle diets in the spring. Because the lovegrass contains more crude protein than the native grasses during the early spring, it provides an important forage source for lactating cows during the time when native grasses are dormant.

Another characteristic distinguishing the maligned lovegrass is that its herbage carries over from one year to the next in better physical condition than that of the native grasses. Thus, Lehmann lovegrass can be relied upon as emergency forage during dry periods.

Before planting Lehmann lovegrass, a careful evaluation of its strengths and weaknesses is necessary. If planted, the grass will likely spread into adjacent native range and may establish in nearly pure stands.



As these pictures show, Lehmann lovegrass covers rangeland at the Santa Rita Experimental Range, 30 miles south of Tucson.

## Yavapai Cattle Growers support Public Land Council

Yavapai Cattle Growers Association board of directors have voted to donate \$2,000 to the Public Lands Council, and are challenging all Arizona affiliated regional cattle associations to do the same.

The board of directors voted this action at their March 3 meeting. It will be in addition to the monies given directly to the PLC by individual ranchers. The

\$2,000 check will be presented to Herb Metzger, PLC president, at the Arizona Cattle Growers Association annual convention in July.

The funds will be used in an effort to help the Public Lands Council tell the story of grazing fees, and help it fight the battle in Congress to keep federal grazing fees at a reasonable level.