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by Simplot



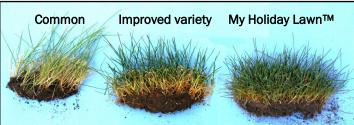
RESEARCH NEWSFLASH





Part 1 HOW IT WAS CREATED by Doug Brede, Ph.D.

This spring, Jacklin Seed is shipping the first bags of a revolutionary new lawngrass that requires as little as one mowing per MONTH, rather than once or twice a WEEK as with a normal lawn grass. This new series of grasses – dubbed $\underline{\mathbf{My Holiday Lawn^{TM}}}$ – lets you take a holiday from frequent lawn mowing.



Grass plugs extracted from 1-year old turf plots that had not been mowed for 1-month prior. Under these conditions, the common type variety grows vertically similar to a pasture grass. Even with the improved variety, you notice a lot of browning on the shoots below the mowing height with green foliage up above.

With the My Holiday Lawn variety even the sheaths are green and the foliage is kept mainly below the mowing height.

The concept of My Holiday Lawn dates back to initial research work in 2001. It required 14 years of breeding and development to bring this patent-pending product to market. But the idea actually goes back even further. Arden Jacklin, who founded Jacklin Seed in 1936, authored an opinion article back in January 1991, in which he describes the most common question he was asked from homeowners' groups: "When will you have for us a lawn grass that doesn't have to be mowed?"

Arden's response was classic: "You just think you want a grass that does not require mowing. Reduced mowing maybe. But no mowing – not at all."

Arden went on to explain that if a grass is not actively growing and producing topgrowth, it won't be able to withstand normal wear and tear. Grasses repair themselves by growing new foliage into bare spots. Without topgrowth, he says, there would be no root

growth. And without root growth, there would be no sod production.

Arden neglected to point out another practical drawback of a never-mow grass: If the grass doesn't require mowing, that would have to mean it never puts up a seedhead. And if it never puts up seedheads, how do you plant your lawn?

Famous turfgrass sod producer, Ben Warren, back in the 1970's thought he had the answer. Ben found a beautiful bluegrass growing on an old golf course fairway that he wanted to reproduce for the Western Open golf tournament. But his grass produced little to no seed. So he tried what southern turf producers have done for decades: Vegetative reproduction or sprigging.

Long story short, Kentucky bluegrass was just not meant for vegetative reproduction. It took a long time to produce a solid sod crop and the crop was loaded with undesirables. But the biggest reason the concept failed was its enormous cost versus a seed variety.

TRIAL AND ERROR

Every good research project has its series of blind alleys (see photo, page 2). Frustrating as it may be, they can actually point us in the right direction if we're willing to listen.

Back in the 1990's I started noticing a few runty inbred Kentucky bluegrass plants popping up in our breeding nursery from time to time. Some of these curious plants were only inches tall at maturity including seedheads. Compare that with a normal bluegrass which matures at waist height. Would it be possible to develop one of these dwarfs into a no-mow lawngrass, I wondered?

The quick answer is "no." But the reason why is interesting.

In 2002 we assembled a turf trial containing plots of all the dwarf mutants we could locate at the time. It actually was a small trial of only 40 entries. But it was intended as a proof of concept. -continued-

We monitored this trial for 2 years, interrupting it only 2 or 3 times a year for mowing. The results were something less than desirable. Because the grasses weren't actively growing, they were sitting ducks for rust disease. The entire

Blind alley: This fully mature breeding mutant is only 4 inches (10 cm) tall. Though it looked enticing in terms of its potential for a no-mow grass, it did not make an attractive lawn.

plot area turned orange from rust spores, including my new formerly white tennies.

But the biggest disappointment was that the grasses looked dismal under infrequent mowing. They just weren't pretty.

Our eureka moment came a couple years later when we had tractor and plow poised to recycle several large aging turf quality trials. What if we turned these trials into factories for infrequent-mow varieties?

The technique worked amazingly well. In all, we tested 10,000 plots that were mowed 2 or 3 times a year. We rated the plots as we normally would, with a rating of 1 being undesirable, 5 being minimally acceptable, and 9 being get-down-on-your-knees-and-kiss-the-grass beautiful. And believe it or not, out of 10,000 plots there were a handful that got me down on my knees.

THE SOD CONNECTION

The next step in the development of this lawngrass was to figure out how to grow it. I could foresee dark clouds ahead if a homeowner went to a box store, bought a bag of My Holiday Lawn seed, sprinkled it on her existing lawn, and wondered what went wrong.

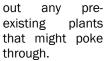
It didn't take long to realize that turfgrass sod was going to be key to the process. A turf producer would produce a clean weed-and-offtype-free sod that a homeowner could lay over top of a cultivated seedbed, hopefully smothering

Jacklin employee, Julie Tobler, volunteered to be the home lawn guinea pig for My Holiday Lawn. Researchers killed her existing lawn of clover and dandelion and planted it to My Holiday Lawn.

Photo was taken 9 weeks after seeding.

More information can be learned at

www.MyHolidayLawn.com



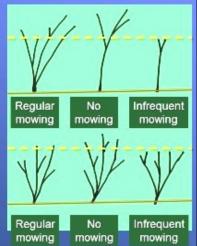
In 2007 the concept was field tested on turf farms in Maryland and Ohio where we grew an acre of turf each, mowed twice per year.



Scan here for My Holiday Lawn website

Normal lawngrass

Holiday lawngrass



As it turns out, the difference between a normal lawngrass and My Holiday Lawn is far more complex than just less topgrowth. In this diagram, the dotted line indicates the mowing height.

A normal lawngrass grows substantially above the intended mowing height, whereas the My Holiday Lawn grass grows most of its foliage beneath the mowing height. As a result, it retains green foliage under infrequent mowing whereas a normal lawngrass turns grocery sack brown.

From those plots we selected the 10 best, which were later whittled down to the 3 best in seed production trials. Two of the new Holiday Lawn varieties have outstanding resistance to rust and mildew disease.

The selected varieties are somewhat shorter than a typical Kentucky bluegrass plant, but they are not miniature or dwarf. Being shorter in stature, these grasses do not produce as much seed as a normal lawngrass and so their seed price is somewhat higher – but not prohibitively expensive when

you consider the savings in mowing costs. They can actually pay for themselves the first year in less mowing (see "Cost to Mow" sidebar).

Look for more on My Holiday Lawn in the next Jacklin Research Newsletter — Part 2.



Cost to Mow a Lawn

- For an average 4000 ft² lawn: \$50 to \$200 per mow
- Once weekly mowing: \$1300 to \$5200 per 6 mo.
- Once monthly mowing: \$300 to \$1200
 Savings: \$1000 to \$4000 (77% less)
- According to <u>www.homewyse.com</u>

Approximate cost for a commercial lawn service company to mow your yard, as calculated by an online maintenance calculator. Results indicate a 77% reduction in mowing costs with My Holiday Lawn.

SEED NOW AVAILABLE



Revolutionizing the way people care for their turf!