

The Ampac Impact

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A Quarterly News Publication

We Proudly Welcome and Introduce New Employee

By **Randy Waldie**
General Manager of Ampac Seed Company

We are privileged and honored to announce and introduce Richard H. Watson, Ph.D. as Ampac's newest employee. Richard represents a huge step in Ampac's continued commitment to develop the proprietary forage market in North America. He will be working with our current distributors in the northeast, while developing new distribution channels in the eastern and southeastern US. Although Richard will have responsibility in the expansion of Ampac's turf market, his major focus will be on forage.

Richard was raised on a farm in New Zealand and completed his undergraduate, graduate, and post graduate degrees from Massey U. in Palmerston North, New Zealand. He earned his BA (1994) in Ag. Science, his MA (1996) in Animal Science, and his doctorate (2000), also in Animal Science with an emphasis in Grazing Management. Richard completed a Farm Management Internship and managed various forage-based farming operations including sheep, beef, dairy, and horse production systems. In 1994 Richard was employed by AgResearch Grasslands (Palmerston North) as a Research Assistant. In this capacity he conducted research that evaluated the use of various forage species in grazing systems. In 2000 Richard accepted a position with the Univ. of Georgia's Department of Crop and Soil Science in Athens, Georgia where

he was a Postdoctoral Research Associate responsible for the design, conduct, and reporting of forage grazing trials. Richard was also involved in the evaluation of new forage lines in grazing systems.



Richard H. Watson

Early in January 2003, Richard and his soon-to-be bride Belinda will be moving to Charlottesville, Virginia to set up their home and his field office. By the time this newsletter is published Richard will not be officially on board yet. We are anxiously awaiting government approval of his necessary visa status change. When he is in place, Richard and Dave Robison will bring a wealth of forage experience and knowledge to help meet the needs of Ampac's customers. It is my hope that each of you will have the opportunity in the near future to meet and personally welcome Richard to the Ampac team.

DEVELOPMENTS

2002 Harvest Results & Outlook for Spring 2003

Willamette Valley weather patterns have not been normal for the past year. The fall of 2001 was exceptionally wet, followed by a very dry spring. We also experienced a late frost during orchardgrass pollination. This dramatically affected yields. Most grass species yielded 10 to 20 percent less than normal. Some reports out of the Willamette Valley show perennial ryegrass yields off by as much as 50 percent! The world economy has affected supply as well.

A weakening dollar has slowed imports from Europe and Australia into the US, while export volume has increased significantly. More PRg is being exported than imported, which hasn't been the case in recent years. Creeper prices are also up due to US dollar devaluation, not low supply.

The bluegrass market has also been volatile recently. We anticipate that KBg prices will remain unstable. Growers seem to be holding on to this year's crop for higher prices. Increased field burning restrictions and a decrease overall in KBg acres has limited production. The strengthening wheat price also has growers in the W. Valley looking at other production options. Timothy too is in short supply due to a drought in Canada that caused crop failures.

Although the supply of many species is short, the demand is relatively high. Many crop prices should increase, and increasing wheat prices along with the devaluation of the US dollar will only speed the process.

Ampac strives to provide the best products available with excellent service and competitive prices. Though markets fluctuate, our commitment to you does not. For current prices, please call us at 800-547-3230.

Dave's Corner:

Endura Kura Clover inoculated with *SuperBug*™ inoculant is proving to establish well from Maryland to Wisconsin and from the Upper Peninsula of Michigan to Kentucky.

One of the better locations for establishment was near Albany, Ohio where Ampac is working in cooperation with the Ohio State Univ. and a family who implement Managed Intensive Grazing (MIG) on their

dairy farm. On this farm we established *Endura* as a mono-culture and also sowed it with different grasses. We are taking stand counts throughout the summer and fall and will have the results available soon. I observed 5-7 plants per square foot established at this farm in July – a wonderful establishment year stand. The field was grazed mid-summer when the *Endura* was nearly eight inches tall.

Ampac is also doing work with Michigan State Univ. with *Endura*. I

recently observed *Endura* planted with warm and cool season grasses. Both of the grasses have excellent stands of *Endura*. In both Ohio and Michigan *Endura* established better planted with *Tekapo* orchardgrass or Bronson tall fescue than it did with any of our forage ryegrasses or *Duo* Festulolium (because ryegrass and *Duo* establish more quickly than orchardgrass or tall fescue). Mono-culture stands of *Endura* also established well in most areas.

What constitutes a good stand of *Endura*? Dr. Rich Leep, Forage Agronomist for Michigan State Univ. stated he has seen initial stands of one plant per two square foot turn into thick stands of Kura Clover within two to three years. Obviously we would desire more plants per square foot during establishment year, and in most cases we are seeing very good stands (similar to Ohio and Michigan). However, *Endura* Kura clover spreads by rhizomes and it will persist for many years. Even if the establishment is slow, it will be worth the wait!

Agronomist Dave Robison is our mid-west forage and turf representative – specializing in legumes and pasture mixes. You can send Dave your questions at: dave@ampacseeds.com



Endura Kura Clover at 4 months



At 4 months in Albany, OH

Amazing Perennial Ryegrass Gains National Attention

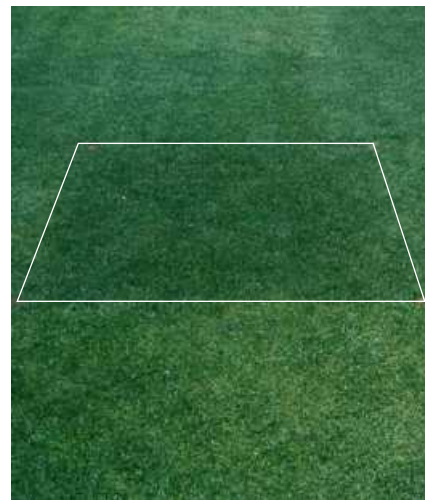
Amazing Perennial Ryegrass from Ampac was featured in the Sept. '02 *This Old House Magazine* as the ryegrass that homeowners would want to use to darken their lawns. Since the publication hit the magazine rack, we have had several calls from



homeowners who want to purchase *Amazing* for their home lawns. Many of you have already received leads from us because of this article.

You can recommend *Amazing* with confidence to these folks .

While the first characteristic that people notice about *Amazing* is its dark, lush green color, it has many other positive attributes. The most recent NTEP report on perennial ryegrass ranks *Amazing* at or near the top of the charts in virtually every category. One of the most impressive areas where *Amazing* shines is in its premium disease resistance. It rates *Excellent* for nine of the twelve diseases tested, and *Very Good* for the other three. Dazzling, superb, marvelous, terrific; however you want to describe it, it is *Amazing*!



Amazing at NTEP Trials

Fall Management of Forage Perennial Ryegrass Pastures

By Dave Robison
Agronomist/Sales Rep. for Ampac Seed Company

Farmers in from New England to the Midwest experienced an abnormal amount of winterkill in their perennial ryegrass pastures during the past few winters. Both tetraploid and diploid were affected. To ensure a strong stand next spring, effective management plans for PRg pastures must be implemented this fall.

Winterkill or winter injury often occurs in PRg when excess leaf tissue remains upon entering the winter season. It is best to graze perennial ryegrass harder than usual late in the growing season. To assure better winterhardiness, graze or clip the field to 1-2" entering the winter.

In Wisconsin in the winter of 2000-01, many pastures with 4-6" of leaf growth going into the winter experienced nearly 100 percent stand loss. However, most fields that had approximately 2" of growth often ex-

perienced very little winterkill (see photos). In a central New York forage trial plot, alleyways were cut low with a lawn mower and survived very well. The PRg plots that had 4" or more of growth suffered substantial stand loss. But the cutting height entering winter is not always the determining factor for winter survival. In several incidences in Illinois and Iowa, pastures were grazed low entering the winter, yet they still suffered great loss. In other regions, fields that entered the winter season above 4" survived with excellent stands. While grazing low entering winter enhances winterhardiness, it does not guarantee winter survival.

A second factor that may determine the extent of winterkill is the length of time that snow remains on the fields. In Wisconsin and much of Iowa, snow remained on the fields

from early December 2000 to mid-March 2001 and substantial winterkill occurred in PRg pastures. Much of it was due to snow mold. (Because of their dense growth habit diploid varieties are often damaged more by snow mold). Yet, in Ohio and Maryland university trials, much of the snow melted before cold temperatures returned. When the coldest temperatures and winds came, the exposed PRg was "freeze dried." In both instances snow cover, or lack of it, was blamed for stand loss.

Thirdly, varietal differences can be significant. At the Ohio State Univ. PRg trials* at Wooster, OH (sown in April 1999) winterhardiness ranged from 0 to 90 percent after the cold open winter (measured in stands in the spring of 2001). Very little significant difference was noted between diploid and tetraploid varieties. *Duo Festulium* (PRg x MF) suffered less winterkill than either the tetraploid or diploid PRg in the trials.

The fourth factor affecting winterhardiness in PRg is soil fertility. Plants that enter the winter with less stress from disease, lack of moisture, and lack of fertility generally overwinter better than stress ridden plants. Healthy plants produce and conduct photosynthesis better and store carbohydrates more effectively in the fall than stressed plants do.

In review, four factors affect the winter survivability of PRg: grazing height, snow cover, varietal selection, and soil fertility. Snow cover cannot be controlled, but the other three factors can be. The opportunity for successful PRg winter survival can be significantly enhanced by utilizing improved management practices.

Recommended reading: Cool Season Forage Grasses; (chap. 19, Ryegrass) edited by L.E. Moser, D.R. Buxton, and M.D. Casler, Number 34 in the series Agronomy, ASA, CSS, SSSA, Madison, WI, 1996.

*For complete trial data go to: www.ag/ohio-state.edu/~per/forage00/index.htm on the web.



Winterkill damage in PRg entering the winter with 4-6" growth.
(Hay trial, planted April 1999)
Lancaster, WI - May 2001



PRg that over-wintered well entered winter with 2" growth.
(Grazing trial, planted April 1999)
Lancaster, WI - May 2001

Dealing With Drought

By Richard Watson

Contributing Agronomist for Ampac Seed Company

You don't have to watch the daily weather report to realize that much of the United States is in a drought. Understandably, this does not inspire many hay and livestock producers to consider sowing seed. However, it is times like these that issues such as pasture renovation need to be considered and some action taken.

After a dry summer, producers will be faced with pastures that are generally short, poor quality, and in many cases have suffered moderate to severe stand loss. These pastures will be in serious need of renovation if they are to continue to produce.

Several products in Ampac's forage line will fight against drought. The first priority after a dry summer is to find a short-term alternative forage supply for livestock. This allows damaged pastures to rest during renovation.

Annual Ryegrass to the Rescue

A great way to provide extra forage is by oversowing an annual ryegrass into an area not immediately required for renovation. Annual ryegrass produces large amounts of high quality forage quickly. This can be used for direct consumption by livestock, and/or to replenish depleted hay and silage supplies.

Annual ryegrass should ideally be direct-drilled in the fall when the rain

arrives. If sown early enough, these pastures will provide some grazing before the winter, and again in the spring and early summer.

For fall sowing, *Abundant** annual ryegrass is a great option. This tetraploid produces quality forage that is excellent for silage, hay, or for grazing. As a later maturing variety, *Abundant* allows a longer grazing period into the late spring and early summer. This helps newly renovated perennial pastures to regenerate in the spring. Oversowing a clover in early spring is also recommended. *Star Fire** red clover is an ideal addition to the ryegrass stand. Red clover is a great summer producer and will provide high quality forage well into the season.

Since fall moisture may be late in arriving, sowing may need to wait until spring. In this case producers may want to try an early maturing annual ryegrass such as *Fantastic**. *Fantastic* will produce high yields of quality forage in a very short time.

Annual ryegrass pastures should be strip-grazed to maximize forage utilization.

Renovating or Replacing Perennial Pastures After a Drought

The need for renovation of perennial pastures will vary greatly depending on drought impact and pasture

management. Some pastures will need oversowing in patches to thicken them, while others may need a complete overhaul. This is an opportunity to add new cultivars and species to forage systems which will help alleviate future drought problems. One of the best ways to prevent forage shortages is to diversify varieties within and between pastures. When climatic conditions reduce the production of a particular species, others will continue to perform. It is a great idea to have at least a small area of the farm in forage species that can withstand dry summers.

Some of the products in Ampac's forage line that can be used for dry conditions include:

*Lakota** and *Dixon** prairie bromes are adapted for Northern and Southern use respectively. These bromes are more drought tolerant than many other cool-season grasses and provide highly palatable forage into late summer and fall. Bromes do require controlled grazing to ensure maximum productivity and persistence.

*Duo** festulolium is also a great option. It will provide added summer survival and high quality forage.

These grasses should be sown with clover. Red clover is a great companion species, especially for the erect bunch-type bromes. It will greatly enhance summer production.

Also promising is the new *Endura** kura (Caucasian) clover. *Endura*, a great companion species, needs care in establishment, but once established, it is very drought tolerant and an excellent compliment to any dry-land pasture.

An additional benefit of using these species is that they will also produce quality forage in wet summers. The best way to deal with drought is to be prepared. Make sure you have the varieties and management to provide reliable forage in the bad times as well as the good.



Abundant in S. CA in March, 2002 - notice the dormant warm season grass to right.

*For information on sowing methods, rates, fertilization, and management for the varieties mentioned, you can view fact sheets from Ampac's web site at www.ampacseed.com.

Fantastic provides fast growth for fall and spring and excellent forage after a season of drought.

This plot of Fantastic Italian Ryegrass was planted 8-4-01 at Langdon Brothers in Hartford City, Indiana. It has nearly 18" of growth. (Photo taken 9-13-01).



This plot, planted 8-28-01, was cut from 12" to 4" five times before Christmas 2001.