

The AMPAC Impact

January 2009

A Quarterly News Publication



I hope that you all had a GREAT Holiday Season! I wish you all the best in the New Year! We all have had a busy Fall season and hopefully got some rest during the down time. Now is the time to start the engines and keep positive for the 2009 season, even though the cards are stacked against us! One area that I don't see losing too much ground is the wildlife food plot seedings. An article published in a outdoor trade magazine showed that Hunting related item purchases exceeded Golf item related sales for the first time in 2007. Golf has held the #1 position for numerous years. With limited time off from work and less travel by most people, hunters are staying closer to home to harvest their trophy. The money they are saving is going towards improving the habitat on their properties! Below are a few testimonials that have been given to me. As you will see, they are from all areas!

"The Wildlife Perfect Ultimate Plus Mixture draws more deer in than any other food plot mix I have planted. Also it's the only plot that had 100% establishment for me through the drought of this year"

- Bob Ducharme
QDMA Great Lakes Regional Director
Coldwater, Michigan

"I have been planting the Wildlife Perfect Grazing Mixture for over 11 years for customers in Pennsylvania and on my own property. It is my go to mixture that I know I can count on for good establishment even in poor soils and persisting for several years. My customers prefer the Grazing Mixture over all other seed mixtures."

- Steve Trupe,
Wildlife Biologist and Food Plot Installation
Potter County, PA

"We have planted several acres of the Wildlife Perfect Brassica Mixture and the Wildlife Perfect Clover/Chicory Mixture on our New York properties and have photographed and harvested several large bucks and mature does! I especially like the Brassica Mixture since we can get several grazings off of it."

- Ken Allein
Habi-Tech Wildlife Consulting
Buffalo, NY.

"I've used several different seed mixes and by far, Wildlife Perfect® Brassica Mix has been the best! My Wildlife Perfect® Brassica plots offer high nutrition to the animals. The only problem I have is keeping the moose out!

- Bill Finney
Registered Maine Guide, Patten Hunting Lodge
Patten, Maine

"On average, only about 20-percent of grouse chicks survive past their fifth week of life in the Appalachian Mountain Region. Legumes, like clovers, seem to be preferable to grasses, which can become too dense for grouse chicks to walk in and are not generally eaten by grouse. The Wildlife Perfect Grazing Mixture gives us an opportunity to directly address one of the key findings of the Appalachian Grouse Project. Instead of merely recommending good wildlife plantings, we can supply a mix we know is suitable and of the highest quality."

-Mark Banker
RGS Senior Biologist

"I've been hunting the same area for several years but I've never taken or seen a deer in this area as big as the one I took this year. I planted the Wildlife Perfect Chicory Clover Mixture and have shot a 14 point buck and a 10 point buck so far this year. This product really works!"

- Scott Bruce
Dickson County Tennessee hunter

"The deer love your product. We planted the Wildlife Perfect Brassica Mix and the Wildlife Perfect Chicory Clover mix and the deer are actively grazing these plots. Everyday we see several deer in the plots. This year we shot a 12 pointer during muzzleloader season. Thanks for providing a great product."

- Marshall Kent
Mt. Juliet, Tennessee hunter

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"I planted the Wildlife Perfect Grazing Mixture on my personal property in Centre County, PA in the Fall of 2007, we got a great cover that Fall. In the Spring of 2008, the mixture came out of dormancy and matured very well. We saw more whitetail bucks this year during archery and gun season than we ever have in camp history. We were lucky enough to harvest a few doe and a few nice shooters. With the amount of deer we now have on our property, the Grazing Mixture is keeping up with deer."

- Mark Banker
RGS Senior Biologist

"We have tried several mixtures over the years to attract and maintain a healthy deer herd to help in harvesting the animals on video for our show just Kill'n Time. We are using both the Wildlife Perfect Chicory/Clover Mix as well as the Brassica Mix and I, along with our Pro Staff are completely satisfied in how it performs. We have plots stretched from northern Virginia to central North Carolina and the plots have done exactly what we were looking for."

-Don Buchanan
Just Kill'n Time
Mt. Jackson, VA

"We planted both the Wildlife Brassica Mix and the Grazing mix. We couldn't keep the turkey and deer out of it. The Grazing Mix was planted in September once we got moisture. We have a beautiful stand of clover that the deer are keeping trimmed. We are quite impressed with the mixtures and will be planting several more acres in 2009."

- Dan Bell, Guide and Owner
Bell Wildlife Specialties
Harveyville, KS

"I planted the Wildlife Perfect Chicory/Clover Mix and then the Brassica Mix on my property in the Spring of 2008. I am quite impressed in how quick it germinated and matured. We filmed several trophy bucks over the plots for our television show. My neighbors admire the plots so much that they will be re-planting their plots this Spring to the Wildlife Perfect Mixtures over what they find in the box stores!"

- Sam Haag
Trails-n-Traditions
Sandy Lake, PA

AMPAC Seed has sold enough pounds of Wildlife Perfect seed to cover over 7300 acres in Wildlife Perfect Mixes! Wildlife Perfect is only offered to our distributors and no "BOX STORES." You all have done a great job and I hope we can continue doing so and eliminate inferior competition. Wildlife Perfect is gaining ground over other competitors and turning heads to become a leader in the food plot industry. If you haven't tried our mixtures yet, please contact us so that we can discuss the difference over the other competitors! If you are handling Wildlife Perfect Mixtures... THANK YOU! Any assistance you may need to help promote the Wildlife Perfect line of seed, please contact us and we will be there to help! Let's get out there and **Attract the Wild!**



What's your crystal ball look like for spring? If it's anything like mine... a little cloudy. Future markets are not very clear. So many variables and "ifs" make it difficult to know what to expect next.

Imagine trying to determine what the markets will be like 3 and 4 years from now. This is the position that most seed growers are in. Growers are trying to decide which species they want to harvest for the next few years.

According to Oregon Seed Certification as of October 2008, Bentgrass, Bluegrass, and Perennial Ryegrass acres are down. Orchardgrass and Fine Fescues acres remained the same as in 2007. Tall Fescue was the only species to increase compared to 2007. The following is a chart comparing certified acres in 2005 and in 2008:

Acres Passed for Seed Certification in Oregon			
2008 compared to 2005			
	2008	2005	Percent Change
Bentgrass	6,869	8,088	-15.1%
Bluegrass	13,692	18,367	-25.5%
Fine Fescues	16,241	12,687	28.0%
Tall Fescue	118,684	97,565	21.6%
Fawn	5,956	5,641	5.6%
K-31	5,187	1,716	202.3%
Perennial Ryegrass	51,316	82,571	-37.9%

Keep in mind these are only certified acres and they don't account for uncertified or VNS. For complete information visit www.oscs.orst.edu/publications/2008ActivitySummary.pdf.

So what will growers plant this spring and fall? Nobody really knows for sure. Most growers do talk about "getting back to a good rotation" to try and clean up their fields. This means growing grass seed and some alternative crops like small grains, clovers, peas, green beans, etc...

In this ever changing world, some things remain the same and one of those things is that Oregon growers have many opportunities. Growers can choose from seed crops like grass and clovers to berries, nuts and vegetables. The challenge will be to determine which crop the markets will want.

AMPAC Seed Company Hires New International Sales Representative

As many of you may know by now, Ampac hired Doug Toews to help expand our business in the International Markets. Doug's years of experience in the seed industry will not only help Ampac's marketing efforts but also open up new genetic sources. Its part of Ampac's continued commitment to bring the best genetics from around the world to the market.

Below is a brief bio on Doug:

- Grew up on a farm in the San Joaquin Valley of California where they produced alfalfa, cotton, beans and corn.
- Started college majoring in agronomy and agriculture engineering.
- Two years in Brazil with the Peace Corps – 1962 – 64.
- Finished college. BS in biological sciences. US Navy 1966 – 68.
- Married in 1969 – same great woman for almost forty years. One son, daughter-in-law and two grandchildren.

- Research agronomist with Collier Carbon and Chemical. Company focused on liquid fertilizer and chemicals for alfalfa, cotton and grain production.
- Marketing grain cereals – seed and trading.
- Alfalfa seed production.
- Malt barley production and feed barley breeding.
- Alfalfa breeder
- Marketing and sales of alfalfa, corn and winter forage seeds.
- Has spent the last twenty years marketing turf and forage seeds in Latin America, South Africa, Australia and USA.



First off, let me take this opportunity to wish each of you a very happy and prosperous New Year as we start the 2009 season. Across the country, most of the producers I talk to are hopeful for a better year than the last and preparations are under way to improve pasture conditions.

I had a little time over the holidays to spend time with my family and extended family. Children of all ages were present with nieces and nephews watching television when the weather kept them in and the toys were put away. It amazes me how many changes have happened over the years, and yet some things still remain the same, or at least very similar. Television commercials still target children to help promote a particular item and it reminds me of the old breakfast cereal commercial that used a tag line "Kid Tested and Mother Approved." What this particular commercial showed was that not only did children like it, but it was also good for them (based on their mother's approval). Well, that's what Ampac Seed has been doing for years... not that we've been promoting breakfast cereals, but we have University trialed and tested and have animal approval when grazing or being fed improved products.

Forage quality is better determined by the grazing animal than by human standards. We can try to define quality using such terms as color, smell, leafiness or stem thickness, and we can analyze chemical composition measuring protein content, energy composition, and fiber content, but ultimately if the animal doesn't consume and perform at expected levels, then we are missing the mark. Animal performance (including average daily gain, reproduction, and milk production) are true ways to determine the quality of forage. While most companies are offering improved forage products, Ampac Seed

Company really puts it to the test. We evaluate animal preference and palatability in the field; then collect data from the animal performance. Plant species

greatly affect animal preference as well as plant part (stems and leaves), climate, and stage of maturity.

University of Kentucky Private Grazing Trials

Variety	Seedling	Percent Stand						Grazing
	Vigor ¹	2006		2007		2008		Preference ²
	Nov 10, 2005	Apr 12	Oct 24	Mar 30	Oct 31	Apr 9	Oct 22	May 21, 2007
Bronson TF	3.3	91	93	96	97	100	97	1.5
Tekapo OG	3.5	82	88	60	74	81	80	7.0
Duo Festulolium	4.7	99	95	96	87	78	48	6.5
Kopu II White Clover	3.5	50	85	42	25	28	33	9.0
Oasis Chicory	3.0		60	17	25	16	13	9.0
Feast II Italian Ryegrass	4.8	98	83	0	0	0	0	9.0
Mean	3.3	76.7	75.3	57.0	54.2	54.6	52.5	6.2
CV, %	17.7	13.4	16.4	24.2	18.6	18.3	16.3	10.4
LSD, 0.05	0.7	13.1	14.2	15.8	11.5	11.4	9.8	0.8

¹Vigor score based on a scale of 1 to 5 with 5 being the most vigorous seedling growth

²Preference rating scale of 1 to 9: 1= very little eaten; 9= all forage in plot grazed

The above chart shows animal preference with different varieties available in a “cafeteria style” grazing program. In this chart we see that the grazing (steers and heifers) preferred White Clover, Chicory, and Italian Ryegrass over Tall Fescue, Orchardgrass and Festulolium varieties.

Another example, in grazing trials at the University of Kentucky, the following data is interesting to look at. From this data we see that Tekapo Orchardgrass is preferred by these grazing animals over other “hay type” Orchardgrass varieties.

Table 7. Seedling vigor, grazing preference and stand persistence of Orchardgrass varieties sown September 8, 2005 in a cattle grazing tolerance study at Lexington, Kentucky (continuous grazing).

Variety	Seedling Vigor Nov 7, 2005	Grazing Preference		Percent Stand					
		2007	2008	2006		2007		2008	
		May 25	May 16	April 17	Oct 20	Mar 30	Oct 16	Apr 9	Oct 15
Commercial Varieties									
Persist	2.8	3.5	4.2	95	95	99	96	98	97*
Benchmark Plus	3.7	3.5	4.5	96	96	98	93	95	93*
Athos	2.5	6.8	7.8	93	97	95	95	91	91
Tekapo	3.0	7.3	7.8	94	97	80	88	86	93
Experimental Varieties									
IS-OG-28	3.5	4.7	6.0	96	95	98	97	97	95*
AGR DG-101	3.3	8.8	8.2	75	81	33	29	18	17
Mean	3.1	5.8	6.4	91.4	93.3	83.9	82.9	80.8	79.4
CV, %	18.4	17.0	8.0	4.7	5.6	9.5	9.8	5.0	5.0
LSD, 0.05	0.7	1.2	0.6	5.2	6.2	9.4	9.7	4.8	4.7

Vigor score based on a scale of 1 to 5 with 5 being the most vigorous seedling growth.

Preference score based on a scale of 1 to 9 with 9 indicating all forage was grazed.

*Not significantly different from the highest numerical value in the column, based on the 0.05 LSD.

University of Wisconsin Grazing Trial

Lancaster, WI - Palatability Results

		2001	2000	2-yr
Variety	Species	Palat.	Palat.	Palat.
		<u>Ave.</u>	<u>Ave.</u>	<u>Ave.</u>
DUO	Festulolium	3.4	4.2	3.8
ELGON	Perennial Ryegrass	3.3	3.8	3.6
KAY	Orchardgrass	3.1	3.8	3.4
HERBIE	Perennial Ryegrass	3.1	3.6	3.3
MONGITA	Perennial Ryegrass	3.0	3.6	3.3
HAYMATE	Orchardgrass	2.9	3.5	3.2
PROFILE	Orchardgrass	2.8	3.4	3.1
BENCHMARK	Orchardgrass	2.7	3.5	3.1
MAMMOTH	Orchardgrass	2.6	3.4	3.0
BAROLLEX	Tall Fescue	2.5	2.8	2.7
COURTENAY	Tall Fescue	2.3	2.8	2.5
KY 31	Tall Fescue	2.3	2.6	2.5
SELECT	Tall Fescue	1.9	2.7	2.3
LSD (5%)		0.5	0.6	0.4

^bPALAT.=Palatability rating 0=0% grazed, 1=20%, 2=40%, 3=60%, 4=80%, 5=100% grazed
Complete results at www.uwex.edu/ccs/forage

Bronson Tall Fescue Makes More Milk!

University of Wisconsin-Lancaster Grazing Trial
(2000 Grazing Trial Results – Using Milk 95 Calculator)

Variety	Grazing Yield (T/ac.)	% Crude Protein	IVDM	NDF	Pounds of Milk/Acre
Bronson Tall Fescue	1.54	28.5	77.1	46.6	3,042
Ky-31	1.50	26.7	75.3	47.8	2,676

Bronson Tall Fescue makes good feed for your animals! Forage quality tests taken on May 24, 2000 from samples retrieved from the Univ. of Wisconsin

shows Bronson to have good feed value and digestibility as seen in the chart below.

Bronson Tall Fescue Forage Quality Results - 2000

% ADF	% NDF	% CP	% IVTD	RFV
27.2%	46.6%	28.5%	77%	135

Table 11. Italian and Annual ryegrass heading in Wisconsin and Michigan for varieties planted in the Spring of 2008

Specie	Variety	Arlington, WI	Lancaster, WI	Marshfield, WI	Spooner, WI	Chatham, MI
Annual ryegrass	AJAX	no	no	no	no	no
Italian ryegrass	BARDELTA	no	no	no	no	no
Italian ryegrass	BAREXTRA	no	no	no	no	no
Annual ryegrass	DANERGO	no	no	no	no	no
Italian ryegrass	FEAST II	no	no	no	no	no
Annual ryegrass	HERCULES	YES ^a	YES	YES	YES	no
Annual ryegrass	JEANNE	no	no	no	no	no
Annual ryegrass	RIBEYE	YES	YES	YES	YES	YES
Annual ryegrass	SULTAN	no	no	no	no	no
Italian ryegrass	TETRABANA	YES	YES	YES	YES	YES
Hybrid ryegrass	TETRELITE II	no	no	no	no	no
Annual ryegrass	ZORRO	no	no	no	no	no
^a Variety fully headed.						
Heading in the seeding year occurs when plants become vernalized (exposed to sufficient cold to initiate heading).						
Different varieties have differing vernalization requirements. Thus some varieties never head, some always head, and some had varying responses at different locations. Table 11 above indicates those varieties farmers should choose to use when planting Italian or Annual ryegrass as a cover crop with Alfalfa when heading is not desired.						

Ampac Seed Company is dedicated to providing University tested improved forages to your market. It's our goal to help farmers maximize animal

production. For more information please feel visit our website www.ampacseed.com or contact us at 1-800-547-3230.



Now it's easy being GREEN™

Our Green Friendly™ line of turf seed helps maximize environmentally friendly requirements. With extensive on going research and technology Ampac is able to offer CFR (Color Fade Resistant), DT (Drought Tolerance), Improved Disease Resistance, and increase ST (Salt Tolerance). Varieties that are part of our Green Friendly™ lineup are:

- Phenom Perennial Ryegrass
- Amazing GS Perennial Ryegrass
- Sidewinder Turf Type Tall Fescue
- Cochise IV Tall Fescue
- Gibraltar Creeping Red Fescue
- Rushmore Chewings Fescue (Limited availability)



Drought Tolerant

Must demonstrate ability to resist wilting and show minimum 25% ground cover at 25 days when irrigation is withheld. Now you can use less water.

- Phenom Perennial Ryegrass
- Rushmore Chewings Fescue (Limited availability)
- Gibraltar Creeping Red Fescue



Color Fade Resistant

Must demonstrate color retention at minimum 25% green cover at 25 days when irrigation is withheld. These varieties stay green longer and green back up faster.

- Phenom Perennial Ryegrass
- Rushmore Chewings Fescue (Limited availability)
- Gibraltar Creeping Red Fescue

NOTE: CFR and Drought Tolerance are interrelated. The more days of green cover (varieties that are last to go dormant due to lack of moisture) result in a faster green up when moisture is applied. This is due to those varieties being under stress for a much smaller period of time.



Salt Tolerant

Must demonstrate high survival rates when subjected to high levels of total soluble salts (ECe = 6.0 – 9.0 mS/cm) in studies at University and other accredited Private Research Facilities. These varieties are great for roadsides or near sidewalks where ice melt is used or in turf settings where high salinity is a problem.

- Sidewinder Turf Type Tall Fescue
- WinterStar Perennial Ryegrass



Gray Leaf Spot Resistant

Gray leaf spot, or blast, is caused by the fungal pathogen *Pyricularia grisea*, a disease affecting perennial ryegrass in several regions of the United States. Research has produced new varieties of Perennial Ryegrass that are resistant to this disease. This means less chemicals used; not only better for the environment but also less expensive. Amazing GS (7.5 mean*) and Phenom (8.5 mean*) Perennial Ryegrass both are top NTEP varieties that offer Gray Leaf Spot Resistance.

*(2005 NTEP Data, 9=no disease, 1.1 LSD)

- Phenom Perennial Ryegrass
- Amazing GS Perennial Ryegrass



Brown Patch Resistant

Brown patch, *Rhizoctonia solani*, is a disease of hot, humid weather. It is most common when night temperatures and relative humidity stay high for several days and are accompanied by rain. Disease development can be very rapid under such conditions. This means less chemicals used; not only better for the environment but also less expensive to maintain.

- Cochise IV Turf Type Tall Fescue
- Cochise III Turf Type Tall Fescue
- Gibraltar Creeping Red Fescue



Aggressive Spreading Type

The next generation of improved spreading type tall fescues is available.

Cochise IV Turf Type Tall Fescue is not only top of its class in the 2006 NTEP. (#1 on Schedule A and shows a 6.1 out of 6.4 rating on Schedule B), it was bred for aggressive tillering at Rutgers University. This characteristic contributes to its natural self repairing capabilities, high traffic tolerance, and its dense turf quality.

Sidewinder Turf Type Tall Fescue, new this fall, is an aggressive spreading type via rhizomes.

Expedition Turf Type Tall Fescue also falls into the aggressive spreading type and is Ampac original spreading tall fescue.

Tillers = Shoots that come from the crown of the plant
Rhizomes = Underground lateral shoots that produce new plants

Our goal is for you to immediately be able to identify the logo and the stand out characteristics associated with it at a glance. Thus, helping you pick the correct variety for your turf application.

Ampac will continue to develop and research new varieties and categories to add to this line up. For more information contact Ampac or visit www.ampacseed.com.