

2017 RANGE AND PASTURE Management Manual



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&

The **Cattleman**



Supplement to *The Cattleman* magazine



Manage your weeds.
Maximize your yield.



Cimarron[®]
MAX

Cimarron[®] MAX offers excellent weed control to help improve the quality and yield of your pastures and rangeland. A single application of Cimarron[®] MAX herbicide can help provide season-long control of a broad spectrum of weeds. Effective and affordable weed control is the key to realizing the full potential of today's pastures and rangeland. Managing weeds maximizes grass yield and quality, which ultimately leads to more cattle weight gain.

For more information, visit BayerVM.com.

Do not use Cimarron MAX in the following counties of Colorado: Alamosa, Conejos, Costilla, Rio Grande and Saquache.

ALWAYS READ AND FOLLOW LABEL INSTRUCTIONS CAREFULLY.

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Problem Plants

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Acronyms and Abbreviations

Extension – Texas A&M AgriLife Extension Service and Oklahoma State Extension Service

IPT – Individual Plant Treatment

K – Potassium

N – Nitrogen

P – Phosphorous

USDA NRCS – U.S. Department of Agriculture Natural Resources Conservation Service

Photos courtesy of Bayer, Texas A&M AgriLife Extension Service, USDA NRCS and Clint Rollins.

Always read and follow all label directions and precautions for use.

Contact your local Bayer Range & Pasture Specialist for information on timing and application specific to your area.

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Herbicide Sprayer Calibration Tips

Fill the sprayer tank half-full with water.

Adjust the spray pump to the same pressure you will use to spray herbicide — broadcast ground sprayer 30 psi (pounds per square inch) or lower pressure to reduce spray drift, down to 20 psi if the spray pattern is maintained.

Boomless sprayer calibration

Spray a swath on a hard surface that can be easily measured. Measure the width of the swath in feet almost to the edges, allowing for a small amount of overlap. Use this chart to choose your “calibration course.”

If your swath is this wide (feet)						
20	25	30	35	40	45	50
Then, spray a row this distance (feet) to equal 1/8 mile						
273	218	182	156	136	121	109

A 1/8 acre swath will be sufficient to calibrate your sprayer.

Mark the length of the course and drive the course in the gear and at the rpm you’d use to spray. Record your drive time. This is how long it will take to spray 1/8 acre.

Park the tractor, maintain rpm used to drive the course and turn on the sprayer.

Catch the water being sprayed from the nozzle for the same time it took you to drive the calibration course.

A clean, 2-liter soft drink bottle with a hole cut in the side is a handy funnel into a container. If you’re calibrating a cluster nozzle, tie a garbage bag around the nozzle to catch water.

Run the sprayer, collecting the output, for the same time it took to drive the calibration course.

Measure the volume of the water using a container graduated in pints.

Pints of water caught in the bucket are equal to number of gallons the sprayer will deliver per acre.

Boom sprayer calibration

Measure the nozzle spacing.

Use this chart to determine your calibration course length.

Nozzle spacing (inches)			
18	20	30	40
Length of calibration course (feet)			
227	204	136	102

Mark the course and record the time required to drive in the desired gear and rpm. This is the amount of time required to spray 1/128 of an acre.

Catch the water from 1 nozzle for the time it took to drive the calibration course.

The number of ounces of water caught will determine the number of gallons that will be sprayed per acre.

Catch water from each nozzle to determine if all of the nozzles are delivering the same volume. If the flow is uneven, examine the nozzles and screens checking that everything is the same size and not blocked with debris.



Bayer Range & Pasture Field Staff

Call on these professionals to answer your questions about Bayer Range & Pasture solutions.



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JANUARY 2017

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1 NEW YEAR'S DAY Begin to send soil samples to the labs for analysis. Plan your nutrient program for needed or projected yields. See page 64 for a list of soil testing labs. Fertilize to soil lab recommendations. Lime if necessary. Phosphorus (P) and potassium (K) are nutrients that are virtually immobile in the soil. Plan early applications to get the most benefit from these nutrients. Test for micronutrients as well.	2	3	4	5 Begin to line up your custom applicator for both hay meadows and native pasture spraying. Avoid the rush. Continue to implement pasture renovations in hay meadows if compaction is an issue.	6	7
8	9 Delay nitrogen (N) applications until soil temperature is 60° F or higher. Now is the time to plan applications and timings for your herbicides. It's a good idea to order sprayer parts, Velpar® L VU SpotGuns and soil thermometers this month.	10	11	12	13 FORT WORTH STOCK SHOW & RODEO, JAN. 13 – FEB. 4	14
15	16 MARTIN LUTHER KING DAY	17	18	19 Now is a great time to begin or to continue Velpar® L VU IPT or fenceline applications to control mesquite, juniper or many other brush species. Do not apply Velpar® L VU to saturated soil.	20	21
22	23 Interesting fact: Every ton of bermudagrass hay that is removed from your pastures contains 50 pounds of nitrogen (N), 14 pounds of phosphorous (P) and 42 pounds of potassium (K). Remember the ratio: 4-1-3 for N, P & K removal.	24	25	26 Always read and follow all label directions and precautions for use. Not all products are registered for sale or use in all states. Contact your Bayer Range & Pasture Specialist for details and availability. Copyright © 2016. All Rights Reserved. The Bayer logo and all products denoted with a ® or ™ are registered trademarks or trademarks of Bayer or its affiliates. Contact your local Bayer Range & Pasture Specialist for application timing of any Bayer Range & Pasture product specific to your area.	27	28
29 January and February are prime months for prescribed burns, which can help with grass stands as well as sandbur/grassbur (15) control. Coordinate prescribed burning with your local USDA NRCS office, your local burn board, the Extension agent for your county, your state wildlife agency or organizations such as The Nature Conservancy. There are also commercial companies, which can assist you by providing a turnkey burn service. Be aware of local burn bans that are enforced on a county-by-county basis. Inventory and assess early weeds and unwanted grasses in hay meadows and implement a control plan. Contact your Bayer Range & Pasture Specialist for assistance.	30	31		1 Fall or winter rains can bring on unwanted weeds or unwanted grass pressures in range and pastures. Cimarron® MAX, Cimarron® Plus or Pastora® can help manage your weed or unwanted grass problems. January is a great time to attend winter CEU or OCA classes to obtain or renew a herbicide applicator's license. Check with your local Extension offices for dates in your area. Certain products are restricted-use or State Limited Use (SLU) and in most states, both categories require a herbicide applicator's license. Cimarron® MAX, Cimarron® Plus, Pastora®, Velpar® L VU and Esplanade® EZ are not restricted use products. Cimarron® MAX is SLU in Texas and does require a license to purchase.		

Common name: Rescuegrass

Scientific name: *Bromus unioloides* or *willdenowii*

Treat with: Pastora®



Common name: Annual ryegrass

Scientific name: *Lolium perenne* or *multiflorum*

Treat with: Pastora®



Common name: Little barley

Scientific name: *Hordeum vulgare* or *pusillum*

Treat with: Pastora® (late winter/early spring timing)



Common name: Foxtail


Scientific name: Yellow foxtail — *Setaria glauca*; Giant foxtail — *Setaria magna*;
Green foxtail — *Setaria viridis*

Treat with: Pastora®



Yellow foxtail

FEBRUARY 2017

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
<p>Tune up your sprayers – calibrate, change nozzles and update pumps or hoses. Learn about sprayer calibration on page 4.</p> <p>On native range or introduced pastures, late fall or early winter rains can initiate heavy weed or grass germination. Many thistles (14) or broomweeds (13) can germinate in the fall as well as spring. Cimarron® MAX (2, 4-D + dicamba + metsulfuron) or Cimarron® Plus can help manage many problem broadleaf weeds early. Smaller weeds (less than 2 inches) require less herbicide to provide good results.</p>			<p>1 CATTLE INDUSTRY ANNUAL CONVENTION & TRADE SHOW, FEB. 1-3</p>	<p>2</p>	<p>3 SAN ANGELO STOCK SHOW & RODEO, FEB. 3-19</p> <p> Order your soil thermometer and begin scouting for sandburs/grassburs. They start to emerge at 72° F soil temperature.</p>	<p>4</p>
<p>5 SUPER BOWL</p>	<p>6</p> <p>When yucca (37) begins to break dormancy and approaches bloom, broadcast or use an IPT application of Cimarron® MAX or Cimarron® Plus for control. Check with your local USDA NRCS, Extension agent or your Bayer Range & Pasture Specialist for the proper tank mix. Refer to Zee recommendations.</p>	<p>7</p>	<p>8</p>	<p>9 SAN ANTONIO STOCK SHOW & RODEO, FEB. 9-16</p>	<p>10</p>	<p>11</p>
<p>12</p> <p>In southern areas, implement milkweed control with Cimarron® MAX. In central and South Texas, begin to scout bermudagrass pastures for KR bluestem (41), sandburs/grassburs (15) or johnsongrass (31).</p>	<p>13</p>	<p>14</p> <p>Based on your location and January soil test results, consider starting nitrogen (N) applications to hay meadows and introduced pastures when soil temperatures reach 60° F or warmer.</p>	<p>15</p>	<p>16</p> <p>Begin or continue Velpar® L VU IPT applications to control mesquite, juniper and many other brush species in range and pastures or along fencelines. Velpar® L VU also controls huisache (49), osage orange (bois d'arc), hackberry (48), locust (48), sweetgum and many more unwanted brush species.</p>	<p>17</p>	<p>18</p>
<p>19</p> <p>Train your herbicide applicator to know how and where Velpar® L VU fits in your brush management program. Consider hiring a professional applicator for this task. Do not apply Velpar® L VU to saturated soil. Always be aware of slope and/or other potential non-target issues with Velpar® L VU. Apply Esplanade® EZ along fencelines, in and around pens, machinery yards and around farm and ranch buildings. Esplanade® EZ can also be used along driveways, sidewalks and other non-crop areas to keep these places clean for up to six months.</p>	<p>20 PRESIDENT'S DAY</p>	<p>21</p>	<p>22</p>	<p>23</p> <p>If seeding new grasses in range and pastures, an application of Cimarron® Plus (1/8 ounce per acre) can be made pre-planting, pre-emergence or early post-emergence to the grasses. Apply after the new grasses are at the three- to four-leaf stage if applying at early post-emergence. *This is a new and much needed use and label for Cimarron® Plus.</p>	<p>24</p>	<p>25</p>
<p>26</p> <p>Always read and follow all label directions and precautions for use. Not all products are registered for sale or use in all states. Contact your Bayer Range & Pasture Specialist for details and availability. Copyright © 2016. All Rights Reserved. The Bayer logo and all products denoted with a ® or ™ are registered trademarks or trademarks of Bayer or its affiliates. Contact your local Bayer Range & Pasture Specialist for application timing of any Bayer Range & Pasture product specific to your area. Contact your Bayer representative about cattle health solutions this spring.</p>	<p>27</p>	<p>28</p>	<p>Bermudagrass Producers</p> <p>Don't let unwanted winter annual grasses or broadleaf weeds use expensive nitrogen (N), phosphorus (P) and potassium (K). Scout bermudagrass pastures for annual ryegrass (8), little barley (9), cheatgrass (12), rescuegrass (8), downy or Japanese brome as well as broadleaf weeds such as henbit (12), thistles (14), chickweed, Carolina geranium (15) and many others. In central or South Texas, begin or continue to scout for johnsongrass (31) and sandbur/grassbur (15) germination and for KR bluestem (41) emergence. An application of Pastora® or Cimarron® Plus mixed with glyphosate can manage both broadleaf weeds and unwanted grasses to ensure a clean hayfield from the beginning. Cimarron® Plus mixed with glyphosate is a good treatment if bermudagrass is <i>completely</i> dormant. Use Pastora® if the bermudagrass has broken dormancy or if any green bermudagrass growth is present at the base of the plant. Pastora® or Cimarron® Plus controls more than 25 grasses and 100-plus broadleaf weeds in bermudagrass pastures.</p>			

Common name: Cheatgrass

Scientific name: *Bromus tectorum* or *secalinus*

Treat with: Pastora®



Common name: Henbit

Scientific name: *Lamium amplexicaule* L.

Treat with: Cimarron® MAX or Cimarron® Plus or Pastora®



Common name: Broomweed

Scientific name: *Amphiachyris dracunculoides*

Treat with: Cimarron® MAX or Cimarron® Plus



Common name: Marestalk

Scientific name: *Conyza canadensis*

Treat with: Cimarron® MAX or Cimarron® Plus



Common name: Thistles complex

Scientific name: *Cirsium* spp. and *Silybum* spp.

Treat with: Cimarron® MAX herbicide or Cimarron® Plus



Common name: Carolina geranium

Scientific name: *Geranium carolinianum*

Treat with: Pastora®



Common name: Sandbur/grassbur

Scientific name: *Cenchrus echinatus*


Treat with: Pastora®

 Monitor soil temperatures on your farm or ranch; this is a reliable way to determine sandbur germination. Sandbur or grassbur will germinate at 72° F.





MARCH 2017

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
<p>Early control of unwanted grasses or weeds in rangeland, pastures or in bermudagrass pastures will return the most dollars. Ask your Bayer Range & Pasture Specialist how long control can be expected with a herbicide. Cimarron® MAX, Cimarron® Plus and Pastora® have the residual benefit of Cimarron®. Controlling weeds today is essential, but being able to control weeds that germinate later is a big advantage as well. In native pastures, either Cimarron® MAX or Cimarron® Plus can provide long-lasting weed control that helps to keep your pastures clean. In bermudagrass pastures, Pastora®, Cimarron® MAX or Cimarron® Plus can provide the same benefit. These products can help manage annual milkweed or crotons that emerge later (see pages 27 & 40).</p>			1	2	3	4
				<p>If phosphorus (P) and potassium (K) were applied earlier as suggested, plan your nitrogen (N) applications to maximize hay yields. Soil temperatures need to be 60° F or more to utilize nitrogen (N). If bahiagrass (30) is an issue in bermudagrass pastures, implement control with Cimarron® MAX, Cimarron® Plus or Pastora®. At least ½ ounce per acre of Cimarron® is needed to do a good job on this invasive grass, so do the calculations to make sure the product of choice has that amount of Cimarron® in it. In South Texas, implement KR bluestem (41) control with Pastora®. Two applications will be needed to manage this tough and invasive grass. Repeat the second application four to eight weeks after the first application. Talk to your Bayer Range & Pasture Specialist for additional advice and recommendations. Continue applications of Pastora® for early-season unwanted grass control in bermudagrass pastures. When bermudagrass has broken dormancy, stop any glyphosate applications, in accordance with current labels.</p>		
5	6	7 HOUSTON LIVESTOCK SHOW & RODEO, MAR. 7-26	8 OKLAHOMA YOUTH EXPO, STATE FAIR, MAR. 8-17 WICHITA FALLS FARM & RANCH EXPO, MAR. 8-9	9	10	11 WORLD BLACK HEREFORD ASSOCIATION NATIONAL SHOW AUSTIN RODEO, MAR. 11-25
<p>Apply or continue to apply Esplanade® EZ along fencelines, in and around pens, machinery yards and around farm and ranch buildings. Esplanade® EZ can also be used along driveways, sidewalks and other non-crop areas to keep these places clean for up to six months. Begin or continue control of mesquite, juniper, huisache (49) and many more species with Velpar® L VU on rangelands and in pastures or along fencelines. Be aware of any possible non-target issues. Review earlier months for application tips on Velpar® L VU. Scout and begin native pasture applications with Cimarron® MAX or Cimarron® Plus if broomweed (13) or other weeds are at economic levels.</p>				<p>Some weeds or grasses may be tolerant or resistant to certain herbicides. Change your cultural practices and/or choose a herbicide with a different mode of action to handle these resistant weeds or grasses. Be proactive in managing them.</p>		
12 DAYLIGHT SAVINGS TIME BEGINS	13	14	15	16	17	18
<p>Continue to use IPT or broadcast applications of Cimarron® MAX or Cimarron® Plus to control yucca (37). Check with local USDA NRCS, Extension agent or your Bayer Range & Pasture Specialist for the proper tank mix. Refer to 2ee recommendations.</p>						
19	20	21	22	23	24 NATIONAL CUTTING HORSE ASSOCIATION SUPER STAKES, MAR. 24 – APR. 15	25
<p>Always read and follow all label directions and precautions for use. Not all products are registered for sale or use in all states. Contact your Bayer Range & Pasture Specialist for details and availability. Copyright © 2016. All Rights Reserved. The Bayer logo and all products denoted with a ® or ™ are registered trademarks or trademarks of Bayer or its affiliates. Contact your local Bayer Range & Pasture Specialist for application timing of any Bayer Range & Pasture product specific to your area. Contact your Bayer representative about cattle health solutions this spring.</p>				<p>Begin or continue to scout for many broadleaf weeds. Many weeds germinate when the soil temperature reaches 80° F or more. Once again, soil thermometers and soil probes are very useful tools to have around your farm or ranch.</p>		
26	27	28	29	30	31 CATTLE RAISERS CONVENTION, MAR. 31 – APR. 2	
<p>Implement dewberry (19) control before blooming or berry set with Cimarron® Plus at a minimum of 5/8 ounce product per acre. If seeding any new pastures, an application of Cimarron® Plus, at a rate of 1/8 ounce per acre, can be made pre-plant (before planting), pre-emergence (after planting but before emergence) or early post-emergence after the newly seeded grasses have three to four true leaves. Check with your Bayer Range & Pasture Specialist for more information in grass establishment and weed management in newly seeded grasses.</p>					<p>Please come by the Bayer booth to hear about new products and product updates.</p> 	

Common name: Curly dock

Scientific name: *Rumex crispus*

Treat with: Cimarron® MAX or Cimarron® Plus or Pastora®



Common name: Red sorrel

Scientific name: *Rumex acetosella*

Treat with: Cimarron® MAX



18

Common name: Texas groundsel

Scientific name: *Senecio ampullaceus*

Treat with: Cimarron® MAX or Cimarron® Plus



Common name: Dewberry

Scientific name: *Rubus spp.*


Treat with: Cimarron® MAX or Cimarron® Plus



19



APRIL 2017

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
<p>Fall, winter or early spring rains are great indicators of possible heavy weed or grass pressure in range and pastures. Seedling weeds are often hard to detect. Scouting and weed identification are your best tools. Start early! Download weed identification information (64) to help you address your farm or ranch weed issues. Early application of Cimarron® MAX or Cimarron® Plus is useful in maximizing grass production and can help stop late-season weed problems. These products in a good program can help manage many weed or grass problems. Talk to your Bayer Range & Pasture Specialist to determine which one fits your program: Cimarron® MAX – native, bermudagrass or introduced grasses; Cimarron® Plus – native, bermudagrass or introduced grasses (also new seeding plantings); Pastora® – bermudagrass. Implement bahiagrass control in bermudagrass pastures or hay fields with any of the above products. Ensure you have at least 1/2 oz/acre Cimarron® MAX in mix.</p>				<p>When soil temperatures reach 75° F at 12 inches of depth, begin suppression or control of mesquite. Use Cimarron® MAX or a tank mix of Cimarron® Plus mixed with 2-4D or Banvel® to implement mesquite suppression.</p>		1
2	3	4	5	6	7	8
<p>In bermudagrass pastures, initiate control or suppression of sandbur/grassbur (15), johnsongrass (31) and KR bluestem (41) with Pastora®. Applications to sandbur should be made when the seedlings are two inches or less. Johnsongrass should be in the 12- to 18-inch size, and in the preboot stage. Good coverage on both of these species is also very important. Nozzle spacing and size of nozzles are also very important. Flat fan type nozzles with narrow spacing (20 inches) are recommended. Pastora® can be applied in nitrogen (N) fertilizer, but should be limited to 30 pounds of actual nitrogen (N) per/acre or less. Talk to your Bayer Range & Pasture Specialist to ensure best results. Scout and continue or begin applications of Cimarron® MAX or Cimarron® Plus herbicide in native or introduced pastures. Early applications of these herbicides when weeds are small (less than two inches) will provide the best results and most return for dollars invested..</p>				<p>Talk to your custom applicator or your Bayer representative about Bayer's new generation of brush herbicide. Keep your fencelines clear of brush, greenbriar and other damaging plants.</p>		
9 PALM SUNDAY	10 PASSOVER BEGINS	11	12	13	14 GOOD FRIDAY	15
<p>Use Cimarron® MAX or Cimarron® Plus to manage weeds in introduced or native pastures this spring and <i>still be able to plant legumes in the same pasture this fall</i>. See product label for guidance on planting legumes or wildlife plants four months after application. Implement saw palmetto control with Cimarron® MAX or Cimarron® Plus. Make applications of Velpar® L VU for rattail smutgrass (41) control. Use three pints of product per acre, with no surfactant, to lessen injury to the bermudagrass. Control requires an annual application for the next two years. Begin weed and mesquite suppression in rangeland using Cimarron® MAX. Assess nitrogen (N) needs in introduced or bermudagrass pastures. Soil temperatures need to be at 60° F or above to best utilize nitrogen (N).</p>				<p>Useful information: Use these products on these labeled areas — Cimarron® MAX: Native, introduced, bermudagrass Cimarron® Plus: Native, newly seeded, introduced, bermudagrass Pastora®: Bermudagrass pastures</p>		
16 EASTER	17 TAXES DUE	18	19	20	21 SAN JACINTO DAY	22 EARTH DAY
<p>Initiate Sericea lespedeza (47) suppression with Cimarron® MAX or Cimarron® Plus (resume control in September and October). In central and South Texas, manage the nightshade (42) complex and 150 more weeds with Cimarron® MAX, broadcast or as an IPT treatment.</p> <p>Review 2ee recommendation or contact your Bayer Range & Pasture Specialist.</p>				<p> Monitor soil temperatures on your farm or ranch. This is a reliable way to determine sandbur germination. Sandbur or grassbur (15) will germinate at 72° F. Other key weed species, including crotons (27) and milkweed (40) species, will not germinate until soil temperatures reach 80° F or more.</p>		
23	24	25	26	27	28	29
<p>West of IH 35, continue to identify pastures with broomweed (13), broom snakeweed (43), sunflower (30) or yucca (37) problems. Continue to use broadcast or IPT applications of Cimarron® MAX or Cimarron® Plus to control yucca on rangeland. Check with local USDA NRCS, Extension agent or your Bayer Range & Pasture Specialist for the proper tank mix. Refer to 2ee recommendations. Be aware of potentially sensitive crops when applying herbicides, as well as regulations and restrictions for your county. Plan ahead and consult with your applicator or Extension agent for restrictions for your county. Apply or continue to apply Esplanade® EZ along fencelines, in and around pens, machinery yards and around farm & ranch buildings. Esplanade® EZ can also be used along driveways, sidewalks and other non-crop areas to keep these places clean for up to six months.</p>				<p>Always read and follow all label directions and precautions for use. Not all products are registered for sale or use in all states. Contact your Bayer Range & Pasture Specialist for details and availability. Copyright © 2016. All Rights Reserved. The Bayer logo and all products denoted with a ® or ™ are registered trademarks or trademarks of Bayer or its affiliates. Contact your local Bayer Range & Pasture Specialist for application timing of any Bayer Range & Pasture product specific to your area. Contact your Bayer representative about cattle health solutions this spring.</p>		
30						

Common name: Barnyard grass
Scientific name: *Echinochloa crus-galli*
Treat with: Pastora®



Common name: Wild mustard/bastard cabbage
Scientific name: *Brassica juncea* (L.) Czern.
Treat with: Cimarron® MAX or Cimarron® Plus or Pastora®



Common name: Antelope horn milkweed
Scientific name: *Asclepias viridis*
Treat with: Cimarron® MAX



Common name: Beebalm or horsemint
Scientific name: *Monarda citriodora*
Treat with: Cimarron® MAX or Cimarron® Plus or Pastora®



Common name: Marsh elder

Scientific name: *Iva annua*

Treat with: Cimarron® MAX or Cimarron® Plus



Common name: Bitter sneezeweed

Scientific name: *Helenium amarum*

Treat with: Cimarron® MAX, Cimarron® Plus or Pastora®



Common name: Buffalobur nightshade

Scientific name: *Solanum rostratum*

Treat with: Cimarron® MAX, Cimarron® or Pastora®



Common name: Cocklebur

Scientific name: *Xanthium strumarium L.*

Treat with: Cimarron® MAX, Cimarron® Plus or Pastora®



Common name: Western ragweed
Scientific name: *Ambrosia psilostachya*
Treat with: Cimarron® MAX



Common name: Giant ragweed
Scientific name: *Ambrosia trifida*
Treat with: Cimarron® MAX



Common name: One-seed croton
Scientific name: *Croton monanthogynus*
Treat with: Cimarron® MAX or Cimarron® Plus




Common name: Woolly croton
Scientific name: *Croton capitatus*
Treat with: Cimarron® MAX or Cimarron® Plus



Woolly croton



MAY 2017

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1 Herbicide timing, and weed or grass identification, are keys to success. Control weeds or grasses when they are small and actively growing to obtain maximum benefits from herbicide dollars. Check page 64 for some excellent resources for identifying problem weeds or contact your local Bayer Range & Pasture Specialist for further help.	2	3	4 Oklahoma — Treat buckbrush with Cimarron® MAX or Cimarron® Plus. Contact your Bayer Range & Pasture Specialist for specific recommendations. Continue to scout range and pastures for any new or introduced weeds. Begin or continue with weed and mesquite suppression using Cimarron® MAX.	5 CINCO DE MAYO	6
7 Continue to scout for sandbur/grassbur (15) and johnsongrass (31), along with KR bluestem (41) and bahiagrass (30) in bermudagrass pastures. Remember these tips to get the most from your Pastora® applications: Apply when bermudagrass has less than two inches of growth; Apply when sandbur/grassbur seedlings are two inches or smaller – if the seedlings are larger, a tank mix of Pastora® mixed with glyphosate may be recommended or needed. Check the Pastora® label for additional information; Apply when johnsongrass is in the pre-boot stage; Limit nitrogen (N) to 30 pounds actual nitrogen (N) when applying Pastora®. Coverage is essential, so flat fan type nozzles on 20-inch spacing are preferred. Ask your Bayer Range & Pasture Specialist for Bayer's technical sheet on sandbur/grassbur or Dr. Paul Baumann's, Texas A&M University, fact sheet on grassbur for additional information on controlling this problem.	8	9	10	11	12	13
14 MOTHER'S DAY	15	16	17 Continue Sericea lespedeza (47) control with Cimarron® MAX or Cimarron® Plus. Resume treatment in September and October. Use IPT or broadcast applications of Cimarron® MAX or Cimarron® Plus to control yucca (37) on rangeland. Check with local USDA NRCS, Extension agent or your Bayer Range & Pasture Specialist for the proper tank mix. Refer to 2ee recommendations. Timing studies by Dr. Paul Baumann, Texas A&M University, and Dr. Ron Sosebee, Texas Tech University, have indicated the best control results on nightshades (42) and horse nettles (42) have been when applications are made during the green-berry stage. Contact your Bayer Range & Pasture Specialist for further information on these tough-to-control weed problems and for local recommendations.	18	19	20 Continue IPT applications with Velpar® L VU to manage mesquite, juniper and many more species in range and pasture and along fencelines. Continue with Esplanade® EZ applications where extended control of weeds or grasses is desired, along fencelines, around buildings and in non-crop areas. Esplanade® EZ can provide these areas with up to six months control of unwanted weeds and grasses.
21	22	23	24	25 Talk to your custom applicator or your Bayer representative about Bayer's new generation of brush herbicide. Keep your fencelines clear of brush, greenbriar and other damaging plants.	26	27
28 Bayer, the Bayer Cross, Esplanade, Cimarron, Pastora, Velpar and Baythroid are registered trademarks of Bayer. Verify state registration of these products in your state before selling, using or distributing. © 2016 Bayer CropScience LP. Always read and follow all label directions and precautions for use. Not all products are registered for sale or use in all states. Contact your Bayer Range & Pasture Specialist for details and availability. Copyright © 2016. All Rights Reserved. The Bayer logo and all products denoted with a ® or ™ are registered trademarks or trademarks of Bayer or its affiliates. Contact your local Bayer Range & Pasture Specialist for application timing of any Bayer Range & Pasture product specific to your area.	29 MEMORIAL DAY	30	31	 Monitor soil temperatures on your farm or ranch; this is a reliable way to determine problem weed or grass germination. Sandbur or grassbur (15) will germinate at 72° F. Other key weed species, including crotons (27) and milkweed (40) species, germinate when soil temperatures reach 80° or more.		

Common name: Sunflower

Scientific name: *Helianthus annuus*

Treat with: Cimarron® MAX or Cimarron® Plus or Pastora®



Common name: Bahiagrass

Scientific name: *Paspalum notatum*

Treat with: Cimarron® MAX or Cimarron® Plus



Common name: Johnsongrass

Scientific name: *Sorghum halepense*

Treat with: Pastora®



Common name: Purpletop tridens

Scientific name: *Tridens flavus*

This is a beneficial grass often confused with johnsongrass. It is **not** controlled with Pastora®





JUNE 2017

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
<p>Wrap up weed control and/or mesquite suppression applications on range and pastures. Always be aware of sensitive crops and or county restrictions for 2, 4-D and/or Banvel®.</p> <p>Join Texas and Southwestern Cattle Raisers Association (TSCRA) members at the TSCRA Summer Meeting. A relaxed schedule allows you to enjoy your surroundings and still learn about issues important to cattle raisers. June 15-17, Galveston.</p>				1	2	3
				<p>Initiate broadcast and IPT applications to perennial weeds and yucca with Cimarron® MAX or Cimarron® Plus. See 2ee recommendations or talk to your Bayer Range & Pasture Specialist for more information. Continue Velpar® L VU IPT applications to juniper, mesquite and other brush species in ranges and pastures, as well as along fencelines. Always be aware of potential non-target issues. Continue bermudagrass nutrient and weed or grass control management. Use Pastora® to manage sandbur/grassbur (15), johnsongrass (31) and 26 other grasses. Pastora® can also be used as a spot treatment. Refer to spot treatment section on the label. For best results, mix 2.5 ounces in 100 gallons of water along with a good adjuvant.</p>		
4	5	6 D-DAY	7	8	9	10
11	12	13	14 FLAG DAY	15 TSCRA SUMMER MEETING, JUNE 15-17	16	17
<p>Make applications of Velpar® L VU for rattail smutgrass (41) control. Use three pints of product per acre, with no surfactant. Contact your Bayer Range & Pasture Specialist for more information on local recommendations. Control requires an annual application for the next two years. Continue to scout and manage weeds, grasses and/or insects on both rangeland and in introduced pastures.</p>						
18 FATHER'S DAY	19	20	21	22	23	24
<p>As you continue your nutrient management program for bermudagrass, remember that every ton of bermudagrass hay has 50 pounds nitrogen (N), 14 pounds phosphorus (P) and 42 pounds of potassium (K). Don't mine the nutrients from your soils. Always be aware of potentially sensitive crops when applying all herbicides, as well as the regulations and restrictions for your county. Plan ahead and consult with your applicator or Extension agent for restrictions for your county.</p>				<p>Talk to your custom applicator or your Bayer representative about Bayer's new generation of brush herbicide. Keep your fencelines clear of brush, greenbriar and other damaging plants.</p>		
25	26	27	28	29	30	
<p>Continue with Esplanade® EZ applications where extended control of weeds or grasses is desired, along fencelines, around buildings and in non-crop areas. Esplanade® EZ can provide these areas with up to six months control of unwanted weeds and grasses.</p>				<p>Always read and follow all label directions and precautions for use. Not all products are registered for sale or use in all states. Contact your Bayer Range & Pasture Specialist for details and availability. Copyright © 2016. All Rights Reserved. The Bayer logo and all products denoted with a ® or ™ are registered trademarks or trademarks of Bayer or its affiliates. Contact your local Bayer Range & Pasture Specialist for application timing of any Bayer Range & Pasture product specific to your area. Contact your Bayer representative about cattle health solutions to plan your fall herd health program.</p>		



Season-long control for more successful results.



Cimarron[®]
PLUS

Cattle and forage producers have wanted and needed a herbicide to help manage problem weeds in rangeland and pastures. They are looking for solutions that are economical and have no grazing or haying restrictions. Cimarron[®] PLUS delivers on all three. It offers residual control to protect pasture and rangeland grasses from problem broadleaf weeds, and it offers good activity on woody species.

For more information, visit BayerVM.com.

Do not use Cimarron PLUS in the following counties of Colorado: Alamosa, Conejos, Costilla, Rio Grande and Saquache.

ALWAYS READ AND FOLLOW LABEL INSTRUCTIONS CAREFULLY.

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Manage unwanted brush.



Control smutgrass in pastures.



Velpar[®] L
VU

Velpar[®] L VU is an effective herbicide that handles two unwanted problems – tough brush and smutgrass. This water-dispersible liquid is applied undiluted for the spot treatment of the toughest brush species, or sprayed as a broadcast treatment for smutgrass control.

For more information, visit BayerVM.com.

ALWAYS READ AND FOLLOW LABEL INSTRUCTIONS CAREFULLY.

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Common name: Curlycup gumweed
Scientific name: *Grindelia squarrosa*
Treat with: Cimarron® MAX



Common name: Devil's claw
Scientific name: *Proboscidea louisianica*
Treat with: Cimarron® MAX



Common name: Yucca
Scientific name: *Yucca spp.*
Treat with: Cimarron® MAX or Cimarron® Plus



Common name: Filaree
Scientific name: *Erodium Spp.*
Treat with: Cimarron® MAX or Cimarron® Plus





JULY 2017

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Some perennial weeds are best controlled or managed during the green-berry or flowering stages of growth. Identify and implement control of these species with Cimarron® MAX during this time. Contact your Bayer Range & Pasture Specialist for further local recommendations.						1
2	3	4 INDEPENDENCE DAY	5	6	7	8
				Continue to scout your bermudagrass pastures and hay meadows. Pastora® can be applied between cuttings. Plan a post-cutting or spot treatment application of Pastora® if sandbur/grassbur (15) or other problem grasses are present. A tank mix of Pastora® and glyphosate can increase control of bigger sandburs. Sequential applications of Pastora®, up to 2.5 ounce per season, are also allowed. Implement spot treatment of unwanted weedy grasses such as KR bluestem (41), johnsongrass (31) and bahiagrass (30) with Pastora® after the first hay cutting. (2.5 ounces of Pastora® in 100 gallons of water plus a good adjuvant is recommended.) Check with your Bayer Range & Pasture Specialist for application timings.		
9	10	11	12	13 TEXAS WILDLIFE ASSOCIATION CONVENTION, JULY 13–16	14	15
Consider planting wildlife-friendly food plots. If you used Cimarron® MAX or Cimarron® Plus, you can successfully plant crops that will benefit wildlife species or provide additional grazing forages for your cattle. Evaluate your pastures after they've been grazed off to see which grasses are increasing or decreasing. Clean out stock tanks and remove algae growth. Maintain the integrity of your dams by removing vegetation that could weaken the structure through root growth.				Cimarron® Plus has a label for newly seeded grasses. This product can be used: <ul style="list-style-type: none"> • Pre-plant — before planting • Pre-emergence — after planting, but before grass emergence • Post-emergence — after young grasses are in the three to four true-leaf stages Contact your Bayer Range & Pasture Specialist for more information and for specific tank mixes or grass species.		
16	17	18	19	20	21 OKLAHOMA CATTLEMEN'S ASSOCIATION CONVENTION, JULY 21–22	22
Continue your IPT plan with Velpar® L VU to control mixed brush species such as mesquite and juniper with Velpar® L VU, in range and pastures as well as along fencelines. Always be aware of non-target species or off-target movement. Continue to monitor nutrients in bermudagrass pastures. Apply additional nutrients if needed. One ton of bermudagrass hay contains 50 pounds of actual nitrogen (N), 14 pounds of actual phosphorus (P), and 42 pounds of actual potassium (K). Continue with Esplanade® EZ applications where extended control of weeds or grasses is desired, such as along fencelines, around buildings and in non-crop areas. Esplanade® EZ can provide these areas with up to six months control of unwanted weeds and grasses.				Talk to your custom applicator or your Bayer representative about Bayer's new generation of brush herbicide. Keep your fencelines clear of brush, greenbriar and other damaging plants.		
23	24	25	26	27	28	29
	Earlier applications of Cimarron® MAX and Cimarron® Plus can help provide control or suppression of many weeds that emerge this time of year. These include crotons (27), buffalobur (25) and annual milkweed (40) species.			Always read and follow all label directions and precautions for use. Not all products are registered for sale or use in all states. Contact your Bayer Range & Pasture Specialist for details and availability. Copyright © 2016. All Rights Reserved. The Bayer logo and all products denoted with a ® or ™ are registered trademarks or trademarks of Bayer or its affiliates. Contact your local Bayer Range & Pasture Specialist for application timing of any Bayer Range & Pasture product specific to your area. Contact your Bayer representative about cattle health solutions to plan your fall herd health program.		
30		31				

Common name: Milkweed — Snow-on-the-Prairie/Snow-on-the-Mountain

Scientific name: *Euphorbia bicolor*/*Euphorbia marginata*

Treat with: Cimarron® MAX



Common name: Goldenrod

Scientific name: *Haplopappus heterophyllus* or *Solidago odorata*

Treat with: Cimarron® MAX



Common name: Rattail smutgrass

Scientific name: *Sporobolus indicus*

Treat with: Velpar® L VU



Common name: KR bluestem

Scientific name: *Bothriochloa ischaemum*

Treat with: Pastora®



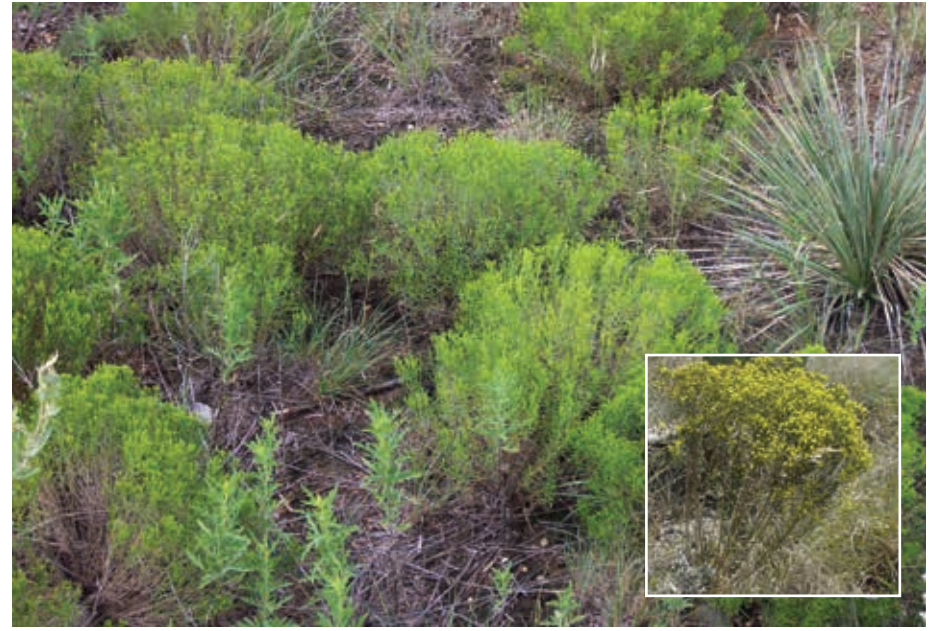
Common name: Carolina horse nettle
Scientific name: *Solanum carolinense*
Treat with: Cimarron® MAX



Common name: Silverleaf nightshade
Scientific name: *Solanum elaeagnifolium*
Treat with: Cimarron® MAX



Common name: Broom snakeweed
Scientific name: *Gutierrezia sarothrae*
Treat with: Cimarron® MAX or Cimarron® Plus



Common name: Bull nettle
Scientific name: *Cnidoscolus texanus*
Treat with: Cimarron® MAX





AUGUST 2017

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1	2	3 Wrap up saw palmetto (46) control with Cimarron® MAX or Cimarron® Plus. Certain perennial weeds are best controlled during green-berry stage. Talk to your Bayer Range & Pasture Specialist for further information on management of perennial weeds such as horse nettle (42), silverleaf nightshade (42) or others.	4	5
6	7 TEXAS A&M UNIVERSITY, BEEF SHORT COURSE, AUG. 7-9 Bayer is a proud sponsor of this event. Come by the Bayer booth to catch up on new labels or current recommendations.	8	9	10 Talk to your custom applicator or your Bayer representative about Bayer's new generation of brush herbicide. Keep your fencelines clear of brush, greenbriar (51) and other damaging plants.	11	12
13	14	15 Continue KR bluestem (41), sandbur/grassbur (15), johnsongrass (31) and bahiagrass (30) treatments with Pastora® between bermudagrass hay cuttings.	16	17	18	19
20 Continue Velpar® L VU IPT applications in rangeland and pastures as well as fenceline treatments. Continue with Esplanade® EZ applications where extended control of weeds or grasses is desired, such as along fencelines, around buildings and in non-crop areas. Esplanade® EZ can provide these areas with up to six months control of unwanted weeds and grasses.	21	22	23	24 Initiate fall huisache (49) suppression applications with Cimarron® MAX or Velpar® L VU. Talk to your Bayer Range & Pasture Specialist for further recommendations on timing and applications.	25	26
27	28	29	30	31 Always read and follow all label directions and precautions for use. Not all products are registered for sale or use in all states. Contact your Bayer Range & Pasture Specialist for details and availability. Copyright © 2016. All Rights Reserved. The Bayer logo and all products denoted with a ® or ™ are registered trademarks or trademarks of Bayer or its affiliates. Contact your local Bayer Range & Pasture Specialist for application timing of any Bayer Range & Pasture product specific to your area. Contact your Bayer representative about cattle health solutions to plan your fall herd health program.		

Common name: Camphorweed

Scientific name: *Heterotheca latifolia* Buckl. or *Heterotheca subaxillaris*

Treat with: Cimarron® MAX



Common name: Saw palmetto

Scientific name: *Serenoa repens*

Treat with: Cimarron® MAX or Cimarron® Plus



Common name: Lamb's quarters

Scientific name: *Chenopodium album*

Treat with: Cimarron® MAX or Cimarron Plus®



Common name: Sericea lespedeza

Scientific name: *Lespedeza cuneata*

Treat with: Cimarron® MAX or Cimarron® Plus



Common name: Honey locust
Scientific name: *Gleditsia triacanthus*
Treat with: Velpar® L VU



Common name: Hackberry
Scientific name: *Celtis occidentalis* L.
Treat with: Velpar® L VU



Common name: Huisache
Scientific name: *Acacia farnesiana*
Treat with: Velpar® L VU



Common name: Prickly ash
Scientific name: *Zanthoxylum clava-herculis*
Treat with: Cimarron® MAX or Velpar® L VU



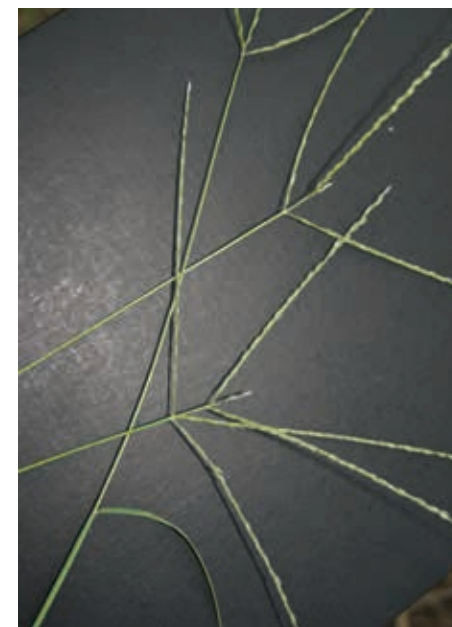
Common name: Chinese tallow
Scientific name: *Sapium sebiferum*
Treat with: Velpar® L VU



Common name: Whitebrush
Scientific name: *Aloysia gratissima*
Treat with: Velpar® L VU



Common name: Crabgrass
Scientific name: *Digitaria sanguinalis*
Treat with: Pastora®



Common name: Greenbriar
Scientific name: *Similax* spp.
Treat with: Contact your Bayer representative for management options.





Check *The Cattleman* calendar for CEU and CCA opportunities this fall. Huisache (49) and 25 other species can be spot-treated year round with Velpar® L VU. A broadcast application of Cimarron® MAX this month can provide great suppression.

SEPTEMBER 2017

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	 <p>Texas and Oklahoma dove seasons start Sept. 1</p>				<p>1</p> <p>Scout for new weed species on your way to your favorite hunting spot. Treat these weeds with Cimarron® MAX or Cimarron® Plus.</p>	<p>2</p>
<p>3</p>	<p>4 LABOR DAY</p> <p>Implement Sericea lespedeza (47) control with Cimarron® MAX or Cimarron® Plus. Continue until frost. Wrap up control of KR bluestem (41), johnsongrass (31), sandbur/grassbur (15) and bahiagrass (30). Continue with Esplanade® EZ applications where extended control of weeds or grasses is desired, such as along fencelines, around buildings and in non-crop areas. Esplanade® EZ can provide these areas with up to six months control of unwanted weeds and grasses.</p>	<p>5</p>	<p>6</p>	<p>7</p>	<p>8</p>	<p>9</p>
<p>10</p>	<p>11 PATRIOT DAY</p>	<p>12</p>	<p>13</p>	<p>14 OKLAHOMA STATE FAIR, SEPT. 14–24</p>	<p>15</p>	<p>16</p>
<p>17</p> <p>Now is a good time to continue control and management of KR bluestem (41) with a second application of Pastora®. Send hay samples to a lab for analysis to evaluate your feeding needs and requirements. Scout fall pastures for any early germinating winter broadleaf or grasses. Implement control if necessary. Remember that you need at least three weeks prior to frost for adequate control of weeds or grasses in range and pastures. Check the long-term weather forecast and plan ahead.</p>	<p>18</p>	<p>19</p>	<p>20 ROSH HASHANAH BEGINS</p>	<p>21</p> <p>Always read and follow all label directions and precautions for use. Not all products are registered for sale or use in all states. Contact your Bayer Range & Pasture Specialist for details and availability. Copyright © 2016. All Rights Reserved. The Bayer logo and all products denoted with a ® or ™ are registered trademarks or trademarks of Bayer or its affiliates. Contact your local Bayer Range & Pasture Specialist for application timing of any Bayer Range & Pasture product specific to your area.</p>	<p>22</p>	<p>23</p>
<p>24</p>	<p>25</p> <p>Begin to soil test and start preparations for fall applications of phosphorus (P) and potassium (K). These nutrients are fairly insoluble and immobile in the soil, so early applications will provide the best results and the most from your nutrient dollars.</p>	<p>26</p>	<p>27 TSCRA POLICY CONFERENCE, SEPT. 27–29</p> 	<p>28</p> <p>Combat illness in your cattle herd with Bayer products. Contact your Bayer representative for cattle health solutions.</p>	<p>29 STATE FAIR OF TEXAS, SEPT. 29–OCT. 22 YOM KIPPUR BEGINS</p>	<p>30</p>

Common name: Flameleaf sumac
Scientific name: *Rhus copallina* L.
Treat with: Cimarron® MAX or Velpar® L VU



Common name: Pokeweed or pokeberry
Scientific name: *Phytolacca americana*
Treat with: Cimarron® MAX



Common name: Eastern persimmon
Scientific name: *Diospyros virginiana*
Treat with: Cimarron® MAX or Velpar® L VU




Common name: Brushy erylngo
Scientific name: *Eryngo diffusum*
Treat with: Cimarron® MAX





OCTOBER 2017

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1 Continue with Esplanade® EZ applications where extended control of weeds or grasses is desired, along fencelines, around buildings and in non-crop areas. Esplanade® EZ can provide these areas with up to six months control of unwanted weeds and grasses.	2	3  Potentially the first frost in many areas across Texas or Oklahoma or New Mexico (be prepared)	4	5 October is a good month to begin early season soil testing. Send soil samples to the lab for fertility analysis. Send hay samples to the lab for complete nutrient analysis. Knowing what your hay provides will help determine your livestock feeding needs for the upcoming winter months.	6	7
8	9 COLUMBUS DAY Scout winter wheat pastures for moisture-robbing unwanted grasses and broadleaf weeds.	10	11	12	13 Check the long-range weather forecast for your area. Allow three weeks before the first frost for huisache (49) and Sericea lespedeza (47) applications.	14
15	16 Implement liming, phosphorous (P) and potassium (K) applications according to soil test analysis.	17	18	19	20	21
22	23	24	25 SOUTH TEXAS FARM & RANCH SHOW, OCT. 25-26	26	27	28 Pasture, forage and rangeland insurance deadline for 2018 coverage is Nov. 15. Look for agents and information at rma.usda.gov .
29 If you applied Cimarron® MAX or Cimarron® Plus to spring pastures, you can safely plant legumes in those pastures this month. Check your legume-interseeding program. Continue to plant legumes and clovers in pastures as well as food plots for wildlife. Overseeded pastures that are planted to wheat or triticale can be treated with Cimarron® Plus for winter annual weed control. Continue huisache (49), Sericea lespedeza (47) and dewberry (19) control this month with Cimarron® MAX or Cimarron® Plus. This also helps manage many early weed problems.	30	31 HALLOWEEN		Always read and follow all label directions and precautions for use. Not all products are registered for sale or use in all states. Contact your Bayer Range & Pasture Specialist for details and availability. Copyright © 2016. All Rights Reserved. The Bayer logo and all products denoted with a ® or ™ are registered trademarks or trademarks of Bayer or its affiliates. Contact your local Bayer Range & Pasture Specialist for application timing of any Bayer Range & Pasture product specific to your area. Combat illness in your cattle herd with Bayer products. Contact your Bayer representative for cattle health solutions.		

Common name: Big bluestem

Scientific name: *Andropogon gerardi*

Desirable grass for cattle and wildlife.



Common name: Sideoats grama

Scientific name: *Bouteloua curtipendula*

Desirable grass for cattle and wildlife.



58

Common name: Switchgrass

Scientific name: *Panicum virgatum*

Desirable grass for cattle and wildlife.



Common name: Indiangrass

Scientific name: *Sorghastrum nutans*


Desirable grass for cattle and wildlife.



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NOVEMBER 2017

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
<p>Consult with custom applicators/dealers and Bayer Range & Pasture Specialists about any early purchase incentives on herbicide products for range, pasture, wheat or other crops you may grow.</p> <p>Consult with the experts at USDA NRCS and Texas Grazing Lands Conservation on 2018 land use plans.</p> <p>Pasture, forage and rangeland insurance deadline for 2018 coverage is Nov. 15. Look for agents and information at rma.usda.gov.</p>			<p>1 U.S. HEALTH-CARE OPEN ENROLLMENT BEGINS</p>	<p>2 Wrap up applications of Esplanade® EZ along fencelines, in pens and machinery yards, around buildings, along driveways and sidewalks and other non-crop applications to keep these areas clean for up to six months.</p>	<p>3</p>	<p>4  Deer hunting season opens this month across our states. Check bow and long-gun season regulations for your area.</p>
<p>5 DAYLIGHT SAVING TIME ENDS</p>	<p>6 While you are hunting this season, scout for emerging weeds such as broomweed (13) and thistles (14) and any wildlife-friendly forbs. This information will help you make weed control decisions next spring.</p>	<p>7</p>	<p>8</p>	<p>9</p>	<p>10</p>	<p>11 VETERANS DAY</p>
<p>12</p>	<p>13 Consider including a dye with Velpar® L VU IPT treatments for mixed brush and fenceline applications.</p>	<p>14</p>	<p>15 2018 PASTURE, FORAGE AND RANGELAND INSURANCE DEADLINE</p>	<p>16</p>	<p>17</p>	<p>18</p>
<p>19</p>	<p>20</p>	<p>21</p>	<p>22</p>	<p>23 THANKSGIVING</p>	<p>24</p>	<p>25</p>
<p>26</p>	<p>27 Control unwanted brush on hunting lanes with Velpar® L VU.</p>	<p>28</p>	<p>29</p>	<p>30 Always read and follow all label directions and precautions for use. Not all products are registered for sale or use in all states. Contact your Bayer Range & Pasture Specialist for details and availability. Copyright © 2016. All Rights Reserved. The Bayer logo and all products denoted with a ® or ™ are registered trademarks or trademarks of Bayer or its affiliates. Contact your local Bayer Range & Pasture Specialist for application timing of any Bayer Range & Pasture product specific to your area. Combat illness in your cattle herd with Bayer products. Contact your Bayer representative for cattle health solutions.</p>		



DECEMBER 2017

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Continue your IPT brush control program with Bayer Velpar® L VU while feeding or working cattle, fixing fences or performing other chores at the ranch.					1 Look for bargains on spring purchases and take advantage of special year-end pricing and buying opportunities.	2
3	4 Attend workshops to complete CEU or CCA requirements. Continue or begin Esplanade® EZ applications where extended control of weeds or grasses is desired, such as along fencelines, around buildings and in non-crop areas. Esplanade® EZ can provide these areas with up to six months control of unwanted weeds and grasses.	5	6	7	8	9
10	11	12 CHANUKKAH BEGINS	13	14	15	16
17	18	19	20	21	22	23
24 CHRISTMAS EVE	25 CHRISTMAS DAY	26	27	28 Always read and follow all label directions and precautions for use. Not all products are registered for sale or use in all states. Contact your Bayer Range & Pasture Specialist for details and availability. Copyright © 2016. All Rights Reserved. The Bayer logo and all products denoted with a ® or ™ are registered trademarks or trademarks of Bayer or its affiliates. Contact your local Bayer Range & Pasture Specialist for application timing of any Bayer Range & Pasture product specific to your area.	29	30 Combat illness in your cattle herd with Bayer products. Contact your Bayer representative for cattle health solutions.
31 NEW YEAR'S EVE						

Apps for iPad or iPhone

Invasive Plants in Southern Forests-Identification and Management
Leafsnap
Weed ID Guide-University of Missouri Extension Service
Ag Weed ID, from Farm Progress
BRIT Guide to Texas Range & Pasture Plants
Field Guide from AgPhD
Weed ID from Monsanto-Canada
Wildflowers of the Great Plains

Resources

Enter any of these titles into your favorite Internet search engine to order or download these publications.

Grasses

Guide to Texas Grasses-Shaw
Grasses of the Texas Hill Country: A Field Guide
Grasses of Southern Oklahoma and North Texas:
A Pictorial Guide-Noble Foundation
Grasses of South Texas-Everitt, Drawe, Little & Lonard
Grasses of the Texas Hill Country-Loflin & Loflin
Know Your Grasses-Rector, Winn & Colvin

Woody Species

Trees, Shrubs, and Vines of the Texas Hill Country:
A Field Guide-Jan Wrede
A Field Guide to Common South Texas Shrubs-
Taylor, Rutledge, & Herrera
Trees, Shrubs, and Woody Vines: A Pictorial Guide-Noble
Foundation
A Field Guide to Wildflowers, Trees & Shrubs of
Texas-Tull & Miller
Trees of Texas Field Guide-Tekiela
Forest Trees of Oklahoma-Oklahoma Dept. of Forestry
Trees, Shrubs, & Cacti of South Texas-Everitt,
Drawe & Lonard
Brush & Weeds of Texas Rangelands-Texas
Agrilife Extension
Reference Guide for Texas Ranchers-Texas
Agrilife Extension, McGinty
Grazing Land Stewardship: A Manual for Texas
Landowners-Texas Agrilife Extension, Lyons,
Hanselka, and Moseley

Flowers and Forbs

Southwestern and Texas Wildflowers-Peterson Field
Guides-Niehaus
Weeds in South Texas and Northern Mexico-Everitt,
Lonard, & Little
Field Guide to the Broad-Leaved Herbaceous Plants of
South Texas-Everitt, et al.
Wildflowers of North America-Golden Field
Guides-Venning
Texas Wildflowers: A Field Guide-Campbell & Lynn
Loughmiller
Wildflowers of Texas-Ajilvsgi
Wildflowers of the Texas Hill Country-Enquist
Wildflowers of the Western Plains: A Field Guide-
Kirkpatrick
Weeds of the West by the Western Society of Weed
Science-Tom Whitson-Editor
Wildflowers of Texas Field Guide-Nora & Rick Bowers &
Stan Tekiela
Plants of the Rio Grande Delta-Alfred Richardson

Common Rangeland Plants of the Texas
Panhandle-NRCS-GLCI
Range Plants of North Central Texas, Ricky Linex
Roadside Flowers of Texas-Wills & Irwin
Roadside Flowers of the Southern Great Plains-Freeman
& Schofield
North American Range Plants-Stubbenieck,
Hatch & Hirsch
Weeds of Nebraska and the Great Plains-
Stubbenieck, Frisoe & Bolick
Horse Owner's Field Guide to Toxic Plants-Burger

Plant Identification Websites

noble.org/imagegallery
texnat.tamu.edu
aggie-horticulture.tamu.edu
uvalde.tamu.edu/herbarium/index
weeds.iastate.edu
plants.usda.gov/gallery.html
wildflower.org/plants
artemis.austincollege.edu/acad/bio/gdiggs/

Testing Labs

Texas A&M AgriLife Extension Service Soil, Water and
Forage Testing Laboratory
2478 TAMU; College Station, Texas 77843-2478;
soiltesting@ag.tamu.edu; soiltesting.tamu.edu;
979-845-4816

A&L Plains Labs, Inc.
302 34th St, Lubbock, Texas 79404
806-763-4278; al-labs-plains.com

Servi-Tech Labs, Amarillo
Lawn, Garden and Landscape Soil Analysis
servitechlabs.com; 800-557-7509

Oklahoma State University Soil, Water and Forage
Analytical Laboratory
045 Agriculture Hall; Stillwater, Oklahoma 74078;
soiltesting@okstate.edu; soiltesting.okstate.edu;
405-744-6630

The Samuel Roberts Noble Foundation
2510 Sam Noble Parkway, Ardmore, Okla. 73401;
noble.org; 580-223-5810

Stephen F. Austin State University Soil, Plant, and
Water Analysis Laboratory
P.O. Box 13025 SFA Station, Nacogdoches, Texas
75962-3025; ag.sfasu.edu; 936-468-4500

Dairy One
720 Warren Road, Ithaca, New York 14850;
dairyone.com; 800-344-2697

Purchasing Sources

Velpar® L VU Spot Gun – visit your local farm and ranch
supply store, or contact your Bayer Range & Pasture
Specialist. To order, call 800-251-1141, and ask for
Brenda. Refer to Part #ST15 VELDO.

Dye – visit your local farm and ranch supply store or
contact your Bayer Range & Pasture Specialist.

Soil Thermometers – Visit your local farm and ranch supply
store or retailers such as Forestry Suppliers, Gemplers or
online sources.

Common name: Silver bluestem

Scientific name: *Bothriochloa saccharoides*

Treat with: Contact your Bayer representative for management options.



Silver bluestem
seedhead

Common name: Dallisgrass

Scientific name: *Paspalum dilatatum*

Treat with: Contact your Bayer representative for management options.



Dallisgrass seedhead

Dallisgrass after cutting



Recommended Mixing Order for Bayer Range & Pasture Herbicides

Read and understand all product labels being used before you begin

1. Start with a clean tank, nozzles and pump systems. Replace any worn or leaking parts.
2. Calibrate sprayer (see calibration page).
3. Fill tank 1/2 full of clean water.
4. Start tank agitation.
5. If spraying glyphosate, add any water conditioners needed (dry products should be pre-slurried before adding to the tank). Allow to agitate until well dispersed throughout tank. Some water conditioners may lower the pH of the water. A buffering agent may be needed to raise the pH to an acceptable level.
6. Pre-slurry, in water, all dry products (e.g. wettable powders (WP), dry flowable (DF) and drygranule (DG) products. Examples include Cimarron-Part A of Cimarron Max, Cimarron Plus and/or Pastora). Make sure to use a clean container.
7. Add suspension concentrates (Esplanade EZ if treating non-crop areas or fence lines).
8. Add emulsifiable concentrates (EC's).
9. Add water soluble liquids (Method if treating fence lines or wildlife refuge areas, or Part B of Cimarron Max [2, 4-d + dicamba]).
10. Add glyphosate products, if needed.
11. Add proper adjuvants, if needed or recommended (e.g. non-ionic surfactant (NIS), methylated seed oil (MSO), crop oil concentrate (COC), etc.).

ALWAYS READ AND FOLLOW LABEL INSTRUCTIONS CAREFULLY.

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Residual that works
as hard as you do.



EsplAnade[®]
EZ

If you're in charge of a farming or livestock operation, one of your many jobs is to control weeds on your fence lines and around buildings. You need to keep large areas clear, and you don't have the time or the budget to keep making retreatments. You need Esplanade[®] EZ, the pre-mixed, backpack-applied weed control product with the longest-lasting residual on the market.

For more information, visit BayerVM.com.

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Hay so good you'll
envy your livestock.



Pastora[®]

Pastora[®] herbicide helps hay and forage producers grow high-value, weed-free bermudagrass pastures and hay fields. It controls a broad spectrum of undesirable grasses and broadleaf weeds that can easily spread, lower hay value and be toxic to animals. This outstanding control ultimately leads to a higher yield of improved-quality product that hay and forage producers demand.

For more information, visit BayerVM.com.

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