

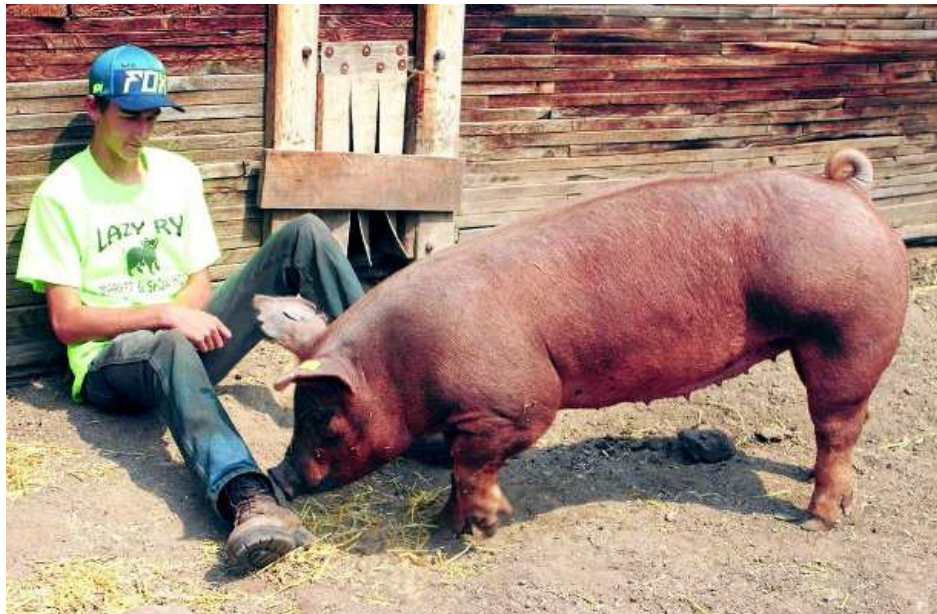
A SPECIAL PUBLICATION OF  
The MONTANA STANDARD *Independent Record* 

# 2016 AG DIGEST





# 4-H hog project transitions into successful business



Pat Hansen photo

Dyllon McDermid, of Deer Lodge, is pictured with his Duroc gilt Rosie whose full brother is on the Southern show circuit.

*"The price of success is hard work, dedication to the job at hand, and the determination that whether we win or lose, we have applied the best of ourselves to the task at hand."*

— Vince Lombardi, head coach of the Green Bay Packers (1959-1967)



Pat Hansen photo

Dyllon McDermid plays with piglets so they are easier to handle as they grow up, but also because "they are funny and always have a good sense of humor," he said. McDermid turned a 4-H project into successful business.

**PAT HANSEN**  
for Agricultural Digest

*"The price of success is hard work, dedication to the job at hand, and the determination that whether we win or lose, we have applied the best of ourselves to the task at hand."*

— **Vince Lombardi,**  
**head coach,**  
**Green Bay Packers**  
**(1959-1967)**

A true entrepreneur is a doer, not a dreamer, and Dyllon McDermid of Deer Lodge is a doer.

The young man has his own business, is an active 4-H member, competes in football, basketball, and track, and works in the field for neighbors during the summer.

The Powell County High School freshman is in his

seventh year of 4-H as a member of the Clover Club where he began raising market hogs as a project. The choice of hogs he said was because, "I wanted to do something easier and less expensive than a beef and I didn't want sheep or goats. Market hogs are a short-term project from April to August."

He tasted success his first two years in 4-H with his market hogs winning Reserve Champion each year at the Tri-County Fair in Deer Lodge, and he has been in the final drive every year. His hogs won the Symbol of Excellence carcass award in both 2013 and 2014.

The Symbol of Excellence is presented by MSU Extension and the

Montana Pork Producers Council for "selecting and raising a market hog which meets carcass merit standards and demonstrates a commitment to excellence in producing quality pork products."

## FROM PROJECT TO BUSINESS

Three years ago McDermid began a 4-H breeding project with a young Yorkshire/Hampshire cross (Blue Butt) gilt he purchased from Jason Stenberg in Big Timber. He named her Annie and she is a good producer and a kind hog.

Since then he has worked to establish his business, Lazy RY Hogs, by actively developing a breeding program that

See HOG, Page 4A

## Always something going on!

### Find events in the Butte community!

The go-to source for art, music, sports, food, education, government, business and special events like festivals all in one spot at

**EVENTSINBUTTE.COM!**

It's easy to submit your own events! Help make the calendar even better by submitting your events today.

Access it from your smart phone!







Four free-range runs to house Dyllon McDermid's hogs are built on each side of the barn, and two separate pastures provide grass for grazing and room to run.

Pat Hansen photo

**Ready. Set. Save on Kubota's M6 Series mid-size ag tractors.**

**GET SET TO SAVE**  
SALES EVENT



**\$0 Down, 0% A.P.R. Financing for 60 Months\***  
Offer ends 3/31/16.



**BELGRADE, MONTANA**

**877-431-1505**

**PARTS, SERVICE, AND SALES TO SERVE ALL YOUR KUBOTA NEEDS!**

**310 Alaska Frontage Road in Belgrade**  
**at Rocky Mountain Truck Center, your local Freightliner Dealer**

**Contact a representative today:**  
**local (406)388-1505 toll free (877)431-1505**

**OPEN 7 DAYS A WEEK**



\*\$0 down, 0% A.P.R. financing for up to 60 months on new Kubota M6 Series Equipment is available to qualified purchasers from participating dealers' in-stock inventory through 3/31/2016. Example: A 60-month monthly installment repayment term at 0% A.P.R. requires 60 payments of \$16.67 per \$1,000 financed. 0% A.P.R. interest is available to customers if no dealer documentation preparation fee is charged. Dealer charge for document preparation fee shall be in accordance with state laws. Inclusion of ineligible equipment may result in a higher blended A.P.R. 0% A.P.R. and low-rate financing may not be available with customer instant rebate offers. Financing is available through Kubota Credit Corporation, U.S.A., 3401 Del Amo Blvd., Torrance, CA 90503, subject to credit approval. Some exceptions apply. Offer expires 3/31/2016. See us for details on these and other low-rate options or go to [www.kubota.com](http://www.kubota.com) for more information. Optional equipment may be shown.



© Kubota Tractor Corporation, 2016



## Hog

Continued from Page 2A

produces award-winning pigs marketed for show and meat.

His mother, Tammy Perkins, said, "Dyllon is tireless. He gets up, feeds the pigs, goes to work (or school and sports practice), comes home, plays with the pigs, goes to bed and does it all again the next day."

McDermid purchased two Yorkshire cross gilt piglets he raised to maturity. The Yorkshire is muscular with a high proportion of lean meat but is also a durable maternal sow with longevity and carcass merit.

There is a demand by some 4-Hers for Duroc hogs, so he purchased a Duroc gilt he calls Rosie from Hugh Braaten of Townsend. Her full brother is on the Southern show circuit. Duroc is a breed that forms the basis for many mixed-breed commercial hogs with an excellent rate of gain.

McDermid and his mother artificially inseminate the sows/gilts with semen from Cain Super Sires of Chariton, Iowa, and two litters are usually scheduled each year in February and July. Sows are in heat for 24 hours, so when it is time for them to cycle McDermid said they keep a close watch for start of cycling so semen can be ordered and shipped by UPS express in order to get it on time. Hog semen is good for only four days. Gilts breed at nine months of age and they cycle every 21 days, the gestation period is "three months, three days and 3 a.m." McDermid said with a grin. Four sows are in the midst of farrowing at this time and many hours are spent in the barn to assure all goes well.

McDermid said 2015 was his first successful year



Pat Hansen photo

This 4-foot by 8-foot steel crate is Dyllon McDermid's first welding project. It can be picked up with a Skid-Steer to move hogs of any size.

because one of his sows had a twisted uterus in 2014 and the piglets were delivered by Caesarian section, but died shortly after birth.

In 2015, two sows farrowed in February with 22 piglets born. He sold 18 as 4-H show pigs in mid-April. The 4-Hers did well with those hogs during the Tri-County Fair in the various weight classes.

Each year, after the weight classes have been judged, there is a "home-grown" class consisting of hogs from breeders in the Tri-County area. In 2015 there were 21 hogs in the "homegrown" class; more than half of them were produced by McDermid, and all but one of those received either purple or blue ribbons and one placed second while another was third in the class.

"I'm pretty happy with the results," McDermid said.

He has a lot of family support and mentoring from with his mother and stepdad Tammy and John Perkins and stepbrother Scott Perkins. The entire

family worked together to build the barn with poles harvested on the ranch and wood sawed by a local sawmill. The farrowing side is insulated, has a wood burning stove and a plastic liner to keep it warmer this time of year.

Four free-range runs are built on each side of the barn and last fall two larger pens were built for finishing market hogs. To clean the pens, a Skid-Steer loader is used, but because pigs are clean and use one area for defecation, he said usually all that is necessary is to rake the runs and plant grass. He rotates usage of the runs to allow the grass to grow.

His first welding project was 4'x8' steel and wire carrying crate that can be picked up with a Skid-Steer to move pigs from a full-grown sow to piglets.

### FARM RANGE HOGS

McDermid is proud of his all natural, farm range hogs that are treated humanely. They are raised in the runs and pastures where they have room to run and, in addition to barley and ground corn, they

Last year two sows farrowed in July with 25 piglets that he sold for meat and fed out to the desired weight.

Dan Chladek of Chladek Meats of Deer Lodge comes to the ranch to butcher, so pigs are never on a truck and never stressed. A pen holds the pigs scheduled that day with a chute for killing so the others aren't stressed.

Tammy said, "Dan was very helpful in helping us understand the female and male reproductive parts; he opened them up so we could see what we were feeling during (artificial insemination)."

McDermid set a goal last year to have four sows farrow in February 2016 and is trying to build his business to six sows before graduating from high school.

He spends considerable time thinking about how to improve his business, and at this time is

contemplating selling one of the Yorkshires and purchase a Hampshire, a breed that is noted for being well-muscled, rapid growers with good carcass quality. The sows are praised as good mothers with longevity.

When McDermid goes to college, Tammy said she will continue to run the business of raising 4-H pigs with the help of his younger siblings until he returns.

For McDermid, his business is not just about ideas, but making ideas happen. Success comes from hard work and dedication, and he loves what he is doing and seems to be well on the road to being successful.

The late Steve Jobs, co-founder and CEO of Apple once said, "I'm convinced that about half of what separates the successful entrepreneurs from the non-successful ones is pure perseverance."




# H&E

## EQUIPMENT SERVICES

**HE-EQUIPMENT.COM**

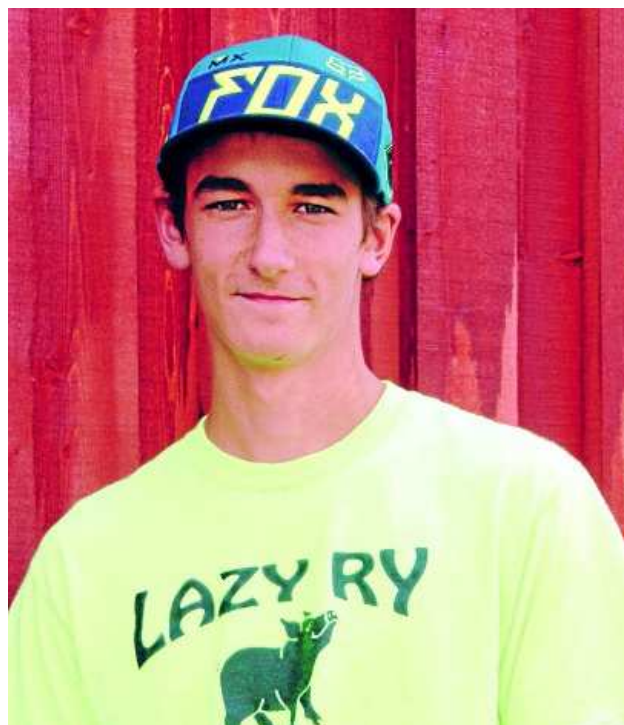
**406-388-2308**

**We're an equipment company, run by equipment people.**

Where others stop, we continue.  
H&E Equipment Services, the higher standard in **EQUIPMENT RENTALS, SALES, PARTS, AND SERVICE.**

**MONTANA**  
**343 FLOSS FLATS ROAD**  
**BELGRADE, MT 59714**  
**+ LOCATIONS NATIONWIDE**





Pat Hansen photos

Dyllon McDermid, a Powell County High School freshman, is in his seventh year of 4-H as a member of the Clover Club where he began raising market hogs as a project.



Building the Lazy RY Hog barn was a family project.

## TRACTOR SEASON IS ANY SEASON



**1700 Compact Premium Tractor**  
Advanced engineering.



**All New! 2700E Series Tractor**  
Combining the practicality of a compact tractor with the functionality of a utility tractor



**4600 Series Tractor**  
The epitome of utility.



**5600 Series Tractor**  
Amazing multi-tasker.  
Get loads of power versatility and visibility with this advanced mid-range multi-tasking tractor.



**6600 Series Tractor**  
The Unmatched Mid-Range

More performance in midrange? You got it. The 6600 is for anyone who needs high performance with excellent maneuverability and visibility. Choose from 3 packages - and get one nimble, hard-working partner.



**7600 Series Tractor**

Reliable Power. Sunrise to Sunset.

Choose your engine, transmission and hydraulics, then head out in the 7600 Series. It's the versatile powerhouse, that's designed and built to stick with you through those long days in the field or around the farm.



**8600 Series Tractor**

One Serious Tractor with Power to Spare.

No other combination of engine and transmission is more productive or fuel efficient.

### MF Rental & Demo Returns

Check out out certified Preowned units with 1 season warranty

Compact Tractors	Was	Now	Save
MF 1726E hydro, 26 hp, loader, 80 hrs.	\$25,900	\$19,900	\$6,000
MF 1739E hydro, 39 hp, loader, 17 hrs.	\$29,750	\$22,750	\$7,000
<b>Utility &amp; Mid Range</b>			
MF 4610, 4WD, 60 hp, 150 hrs, 12x12 shuttle	\$69,900	\$71,900	\$12,000
MF 6615, 4WD, CVT, 110 hp, 118 hrs, 956 hrs.	\$170,700	\$150,700	\$20,000
MF 7622, CVT Premium, PFA, 485 hrs, 165 hp, duals	\$203,250	\$148,250	\$55,000
MF 7619 PFA, 14, Premium CVT, 325 hrs	\$202,900	\$142,000	\$60,900
MF 7624, CVT Premium, 180 hp, 450 hrs, duals	\$229,090	\$199,000	\$30,000
MF 7620 PFA, Dyna 6, 13, 150 hp, 270 hrs	\$164,800	\$115,800	\$49,000

JD 4630, '75, 6700 hrs, cab with air, 150 hp, no 3 pt, quad range trans, 1000 PTO	\$12,500
Duetz Allis 6275, MFD, '89, 6200 hrs, Deutz Allis 468 loader/grapple	\$16,900
White 2-105, '79, 3200 hrs, 2wd, 18 speed, hydraulic shift, dual PTO	\$16,900
JD 4040, '78, 100 hp, cab w/ air, 3pt, dual PTO, quad range	\$24,900
Agco LT70, '02, 4WD, 70 hp, power shuttle, 2260 hrs, cab with air	\$38,000
Agco RT115, PFA, '02, 4500 hrs, 32 spd, quad shift, power shuttle, 115 hp	\$48,000
NH TS130A, w/840TL loader PFA, '06, 110 hp, 1950 hrs	\$74,000
MF6460PFA, 105, 30hp, 3200 hrs, power shuttle, clean unit	\$54,000
MF7478PFA, 110, 110hp, 1100 hrs, CVT, sharp	\$89,000
Agco H1155A, PFA, '07, 2970 hrs, CVT, susp cab, loader w/grapple	\$89,000
MF 7616, '13, MFD, 120 hp, 926 hrs, MF965 loader	\$119,000
White 6144, 4WD, '97 145 hp, duals, 5000 hrs	\$49,750
Agco Allis 9435 PFA, '94, 135hp, 32 spd, dyna shift w/shuttle, Detroit diesel, new rubber	\$39,000
JD 7800, PFA, '93, 145hp ldr, 15K hrs, new rear tires, fully serviced, consign.	\$42,500
Challenger MT 565, '02, PFM, 2150 hrs, 145 hp, front suspension, 32 spd, PS, sharp	\$69,000
Ford 8870 PFA, '97, 9800 hrs, eng o'haul, 3000 hrs, 180 hp, frt wts	\$49,800

### Used Tractors

IH 444, utility tractor, '69, Koyker loader, consign.	\$6,500
Ford 641, gas, 32 hp, PS, 3 pt, tires excellent	\$3,500
MF 1240 Tractor, '98, 4WD, 25hp, loader, 1590 hrs, MECHANICS SPECIAL	\$4,900
MF 1250, compact tractor, MFD, '98, 40 hp, new paint, 1870 hrs, 16 spd shuttle, loader	\$15,900
New Holland Boomer 40, '13, 41 hp, 34 pto, 4WD ldr, 210 hrs	\$21,500
Zetor 12145 PFA, 102 hp, 300 hrs on eng o'haul, consign.	\$14,500
Case 1690, dsl, 2WD, '80, 90 hp, cab w/air, 2600 hrs, 3 pt dual PTO, rebuilt injection pump	\$12,950
JD 2840, '78, cab with air, 4000 hrs, 95 hp, 158 loader, consigned, 2WD	\$18,500

# CHURCHILL EQUIPMENT

800-488-3753 • 7150 Churchill Rd • Manhattan, MT • 406-282-7252 • More inventory at [www.churchillequipment.com](http://www.churchillequipment.com)





# Cover crops grown specifically to improve SOILS

**PAT HANSEN**  
for Agricultural Digest

*"The nation that destroys its soil, destroys itself"*

— **Franklin D. Roosevelt**

Degradation of soil is subtle — whether in agricultural fields or family gardens, but there is good reason to care about soil health.

That's because healthy soils equal healthy crops equal healthy people. It's not just about dirt, but about building soils from the bottom up.

Each year up to three million people are added to the United States population, and more than one million acres are lost

## On the cover

Tom Heggelund, left, a Galen area rancher, and Glen Green, NRCS District Conservationist of Deer Lodge stand among a field of sunflowers that are part of Heggelund's cover crop to explain how cover crops are helping build healthy soil on his ranch.

to cultivation annually as farmland is converted for homes, businesses or highway construction. In addition, another two million acres of prime cropland are lost each year to erosion, salinization and water logging — saturation of the soil by groundwater.

The Deer Lodge Conservation District hosted a workshop and cover crop field trip to three area ranches last October that was attended by more than

30 area producers.

District chairman John Hollenback said, "We don't just have an obligation to conserve and maintain soils, but we have an obligation to improve and build soil."

A cover crop is grown specifically to improve the soil and feed the "underground herd" by adding organic matter and nitrogen, to suppress

See SOIL, Page 9A



Pat Hansen photo

The Dry Cottonwood Creek Ranch broadcast seeded a cover crop last year that included 50/50 turnips and daikon radishes, hay barley and oats to begin the process of breaking up the compacted soil of an old alfalfa field.



**Helena Farm Supply**  
313 East Main Street  
P.O. Box 1290  
East Helena, MT 59635  
**(406) 227-6821**

Introducing the new DK10 Series from Kioti.<sup>®</sup> Six new open station models from 45 to 55 hp. It may just be the perfect utility tractor. Learn more at [Kioti.com](http://Kioti.com) or stop by and try one out.

choose:

**0% UP TO 60 MO\* OR FREE LOADER OR UP TO \$5000\* CASH BACK**  
(tractor, loader & backhoe)

\*Offer available 01/1/2016 - 03/31/2016. Offers valid only at participating dealers. Pricing, payments and models may vary by dealer. Offer based on the purchase of eligible new equipment defined in promotional program. Some restrictions apply. Financing subject to credit approval. Prior purchases are not eligible. Offer cannot be combined with any other offer or low rate financing. Offers subject to change or cancellation without prior notice. See your dealer for full details ©2016 Kioti Tractor Division | Daedong-USA, Inc.




## O'KEEFE DRILLING

**Also specializing in:**

- **Water Wells**
- **Large Diameter Wells**
- **Caisson Foundation Drilling**
- **Geotechnical Drilling**
- **Environmental Drilling**
- **Air Rotary Drilling**
- **Pump Sales & Service**
- **Enhance Your Water Well**

**Performance With Our Airburst<sup>®</sup> Well Rehabilitation Technology!**



# 494-3310

Toll Free 1-800-745-5554

SERVING  
MONTANA  
SINCE 1959





# STEELE'S

FURNITURE • TV • APPLIANCE



## 85th Anniversary SALE!

**12 MONTHS  
INTEREST  
FREE  
FINANCING!**

**25% off**



ALL Accessories, florals, mirrors, wall hangings, and wall clocks!

Buy **1 Lamp**  
get **2nd Lamp**  
of equal or lesser value for  
**half price!**



## SERTA QUEEN SIZE MATTRESS SETS

**\$285**



### AMANA DISHWASHER



**\$245**

#ADB1100AWW  
Full Console Dishwasher  
with 12 Place Settings,  
3 Cycles, 2 Options, Triple  
Filter Water System, Heated  
Dry Option and Energy Star  
Qualified: White

### AMANA TOP LOAD WASHER



**\$355**

#NTW4605EW  
7.4 cu. ft. Capacity,  
6 Drying Cycles, Quick Dry  
Cycle, Eco Boost, Wrinkle  
Shield, Advanced Moisture  
Sensing System and Quad  
Baffles

### AMANA OVER THE RANGE MICROWAVE



**\$185**

#AMV1150VAW  
1,000 Cooking Watts, 10 Power Levels, Two-Speed  
Fan/220 CFM Exhaust Hood, Touchmatic Controls

### AMANA COIL-TOP ELECTRIC RANGE



**\$325**

#ACR3130BAW  
30" Manual clean coil top range.  
4.8 cu.ft. oven capacity  
2-8" and 2-6" coil elements  
2 oven racks storage drawer.

### WHIRLPOOL FRONTLOAD WASHER



**\$675**

#WFV72HEDW  
7 Wash Cycles, Cold Wash  
Cycle, Clean Washer Cycle,  
4 Temperature Settings and  
Automatic Water Level

### QUEEN SIZE UPHOLSTERED BED



**\$325**

### 3PC DROP LEAF DINING SETS



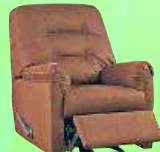
**\$314**

### 5PC WOOD APARTMENT SIZE DINING SET



**\$285**

### WALL RECLINER



**\$195**

### RUSTIC OAK ROCKERS



**\$225**

### VAIL RECLINER



**\$285**

### CHAISE RECLINER



**\$355**

### LA-Z-BOY CHAISE ROCKER RECLINER



**\$575**

### TRADITIONAL STYLE SOFA



**\$485**

### OVERSIZED RECLINING SOFA



**\$675**

### FULLY RECLINING CHASE SOFA



**\$785**

### 2-PIECE CHAISE SECTIONAL



**\$875**

### 42" ENTERTAINMENT CENTER



**\$275**

### RUSTIC OAK ENTERTAINMENT CENTER



**\$375**

### "SPECIAL ANNIVERSARY PRICE" YOUR CHOICE DARK OR GOLDEN OAK ELECTRIC FIREPLACES



**\$595**

### LARGE SELECTION OF COUNTER AND BAR HEIGHT STOOLS



**FROM  
\$75**



# STEELE'S

FURNITURE • TV • APPLIANCE



**BUTTE: 800 S. Wyoming • 782-4231**

**DEER LODGE: 417 Main • 846-3311**

**WWW.STEELESFURNITURE.COM**



## Principles of healthy soil include diversity and organic matter

**PAT HANSEN**  
for Agricultural Digest

Healthy soils reduce water run-off and soil erosion, improve water-holding capacity, maintain soil temperature, have better crop/forage production, increased nutrients, and require fewer inputs so use less oil and gas resulting in more profit.

Building soil health includes using plant diversity to increase soil nutrients and pest resistance, less disturbance of the soils to reduce hardpan formation, letting plants grow as long as possible throughout the year to feed the soil, planting a cover crop after harvest rather than leaving fallow,

keep the soil covered as much as possible, and diversify through crop rotation and cover crops.

Lack of soil cover will result in less water retention and higher soil temperatures that kill "the underground herd" of single cell bacteria and microbes. Spiders, centipedes, insects, and dung beetles increase organic matter in the soil and help control pest insects by burying organic matter, and tunnelers aerate the soil for increased water infiltration. Other microscopic 'critters' are important to nitrogen cycling, and decomposition of organic matter. All organisms are interrelated and important to the

entire process.

Carbon provides food for the soil biology; no-tillage results in minimum carbon loss and starts to build the soil. Cover crops provide maximum carbon input and greater sustainability because the typical green plant is 42 percent carbon and a multi-species cover crop can influence the type and diversity of organic residues added to the soil.

The carbon cycle is the road to building soil with 1/3 going into the crop, 1/3 to residue and 1/3 to root mass. Good healthy soil will absorb water faster, and quite a bit of dirt clinging to plant roots,

See ORGANIC, Page 10A



Retired NRCS soil scientist Huey Long examines the soil in Tom Heggelund's cover crop field where the soil is improving, but would like to see a more granular structure.

## LISAC'S TIRE WE DO FARM TIRES



**Lisac's Tire**  
On The farm Service

**American Car Care**



3600 Harrison • Butte 494-4450

**Lisac's Tire**



2109 Yale • Butte 782-4294

**Lisac's Tire of Anaconda**



1100 W Park Ave • Anaconda 563-6110

**Montana Muffler AND SUPPLY**



441 S Montana St. • Butte 782-9108



Open up a charge account, six months no interest!





## Soil

Continued from Page 6A

weeds, reduce erosion, increase water infiltration, decrease nutrient losses, provide livestock forage, wildlife food/cover, and attract beneficial insects/pollinators. A diversity of plant species yields the best results.

Types of cover crops include a combination of grasses such as barley, oats, wheat, corn, millet, sorghum, rye; legumes — clover, vetch, peas and soybeans, and broadleaf — radish, turnips, collards, lentils, canola, buckwheat, sunflowers.

Plants to use depend on climate and whether the location is irrigated or dryland. Once the plant roots are established, to maximize the soil building benefits, the crop can be used for livestock grazing for a short time in concentrated

## No-till drill available for rent

The Deer Lodge Valley Conservation District recently purchased a 10-foot John Deere 1590 No Till Drill that is available for rent and use starting spring. For more information, visit the NRCS office at 1002 Hollenback Road, Suite C, Deer Lodge, or call 406-846-1703

numbers so they graze uniformly and trample vegetation into the ground.

### COVER CROP FIELD TRIP

At the Clark Fork Coalition Dry Cottonwood Creek Ranch, south of Deer Lodge, the group saw a first year cover crop being used to break up the compacted soil of an eight-year-old alfalfa stand under pivot irrigation.

See SOIL, Page 11A



Pat Hansen photo

Gold Creek rancher John Hollenback (red cap) talks about his first experience with a cover crop that he planted last July for fall forage and to open soil structure to retain moisture. Elk ate much of the corn, millet, sorghum and sunflowers, but he grazed cattle on the remaining peas, daikon radishes and turnips.



Jay Brooker, NRCS Resource Soils Specialist, from Missoula, shows an example of compacted soil that will have slow water infiltration and more run-off.

## THE PERFECT PAIR.

FLEXIBLE. EASY. AFFORDABLE. THAT'S AGSENSE®.

Valley® and AgSense® have come together to take work and worry off your shoulders.

- Suite of Remote Farm Management Tools
- Mobile Management (smartphone, tablet, computer)
- Digital Cell Network
- Cable Theft Monitoring
- Easy-To-Use
- Works With Any Pivot Brand

To see how AgSense fits your farm, contact your Valley dealer.

[valleyirrigation.com](http://valleyirrigation.com)



**PIVOTS PLUS**  
WE SELL THE BEST & SERVICE THE REST

1045 Selway Dr., Dillon, MT  
(406) 683-4418



**VALLEY**

The Leader in Precision Irrigation.



## Organic

Continued from Page 8A

represents better microbial life.

To test the microbial activity in your soil, cut a 6"x6" piece of unbleached muslin, wash it without detergent; then cut a slit in the soil with a shovel and push the cotton into the ground vertical to the surface of the soil; leave it for 6-8 weeks. If there is good microbial activity the cotton will be eaten.

Kevin Bossert, Soil Conservation Technician with Natural Resource and Conservation Service in Deer Lodge, cautioned that the effect of dewormers on organisms — especially in the spring — will affect microbial activity; so if possible hold livestock in a lot for three days before putting them on green pasture.

Bossert said, "I cannot stress enough the importance of organic matter. Natural grassland loses five percent organic matter per year; tillage increases the loss.

Improving organic matter management is at the heart of building healthy soils. Active organic matter has dead microorganisms, insects, earthworms, old plant roots and crop residue, that improve soil structure, reduce compaction, increase infiltration rates, improve water holding capacity and reduce erosion.

Good ways to maintain or build organic matter in the soil are to reduce or eliminate tillage, use diverse crop rotations and cover crops — with different root levels. Rotational grazing, leaving more residue so as livestock graze they break



Pat Hansen photos

A demonstration of two loam soils -- the first lacks carbon and organic matter and is prone to erosion, while the second is a healthy soil with organic matter that holds the soil together, absorbs moisture and resists erosion.



down organic matter and improve the soil.

Deer Lodge NRCS District Conservationist Glen Green said it takes time to get the soil biology working good, but you can get to the point where you do not need to apply artificial herbicides and fertilizers. He cautioned that what works for one, may not work for another, so make changes on a small scale.

Begin by developing a plan with objectives and goals for what you are trying to accomplish.

A soil test is critical to know where you are in regard to organic matter, microbe activity and soil respiration. Consider the soil condition, climate and specific issues — erosion, hardpan, late fall or early forage.

Powell County MSU Extension Agent Jodi Pauley said spring is the best time for a soil test, but it depends on your goal, adding that the NRCS and Extension Service are willing to help in any way possible.



Pat Hansen photo

Soil Conservation Technician Kevin Bossert holds a daikon radish that is part of Hollenback's cover crop; the long root helps breakup compacted soil. It is delicious to eat, too.

# BEAVERHEAD LIVESTOCK AUCTION



Auctions Every  
Thursday at 1:00pm

406-683-2002

5747 Hwy 91, South • Dillon, MT 59725



## Soil ...

Continued from Page 9A

A 50/50 ratio of turnips, daikon radishes, hay barley and oats was broadcast seeded in May and was cut and baled in July with a yield of 2.5 T/acre. After cutting, the field was irrigated and they were surprised at how much regrowth there was on the turnip and radish tops.

Ranch manager Maggie Schmidt said, "We had 100 head of cattle on it, but wish we had done rotational grazing so the cattle would have done more trampling of vegetation into the ground."

Glen Green, Natural Resource and Conservation Service District Conservationist in Deer Lodge, said standard rotation with a cash crop

like hay is two to three years of a cover crop before going back to hay. Powell County/MSU Extension agent Jodi Pauley added that rotation from alfalfa needs to be two to three years for nutrient recovery and to break a disease cycle.

Tom Heggelund Ranch near Galen has been using cover crops for several years. Heggelund explained there were many bull thistles he wanted to get rid of, but wanted to get away from spraying. The field was in alfalfa and grass but wasn't getting good production, so he farmed it, sprayed the thistles and seeded a pea, oat and barley hay mix. The first year the hay was good, but then it started decreasing.

The first cover crop he planted included peas, oats, barley, triticale, rye,

vetch and turnips.

"We had too many turnips and the cows lost weight until we fed straw," he said, but when we put them back on grass they did ok." He rototilled in the cover crop residue that year.

In 2014 he planted the 25 acres with a cover crop that included sorghum, plantain, corn, buckwheat, vetch, collards and chicory. He let cattle graze it in December, creating small paddocks with electric fencing and allowing the cattle to graze two-three days in each paddock with the goal that they trampled at least half of the vegetation into the ground, and moved them frequently for good manure distribution, he said.

Heggelund said the corn died out about Labor Day, but the vetch and collards grew later

with growth in January.

He said, "I thought about grazing it in the summer, but decided I wanted to keep the roots in the ground longer. I didn't put the cows in until December 2015, but supplemented with alfalfa hay when it was real cold.

In that field, the cover crop was followed by seeding barley.

Last year a cover crop was seeded June 20 and included sunflowers, peas, turnips, corn, collards and vetch under irrigation.

"This has more diversity with the nitrogen and carbon plants together for hay or grazing," he said. "The bull thistles are mostly controlled by haying before the thistles bloom."

Heggelund said, considering the alluvial fan and the historic Anaconda

Co. smokestack that produced tons of arsenic on the surface of the land it this area, these soils are headed in the right direction with soil structure and soil aggregates looking better.

### CHALLENGE OF ELK

The final stop was the John Hollenback Ranch at Gold Creek where a herd of 400 elk came and ate some of the first crop alfalfa, but the second crop "they came in by droves and cleaned off the field and broke fences."

A neighbor is protecting them, he said, but I'm working with FWP officials who are trying to reduce the numbers.

In the fall of 2014, Hollenback sprayed a hayfield with Roundup and then seeded it to winter wheat. Even though elk were eating in the field, he got more than 3 T/acre

when he cut the wheat for hay on July 1, 2015 — before it was headed so he wouldn't have a nitrogen problem.

On July 5, he seeded a cover crop of lentils, peas, millet, corn, turnips, daikon radishes, sorghum and sunflowers, irrigated by a pivot.

Hollenback said, "I hoped to protect the cover crop for fall grazing, but it is getting beat up pretty badly by elk. I'm going to turn cattle in now so they will have some forage."

He said, "I have a lot of things to learn, but saw things at the other places that I can learn from. Each individual has to make their decisions, but I'm planning to do the same on an alfalfa field next year to open soil structure and retain moisture; that's a plus for me."

**REBATES UP TO**  
**\$1,400**  
**ON RANGER XP® 900**

OR

**FINANCING AS LOW AS 1.99% FOR 60 MONTHS**

**REBATES UP TO**  
**\$500**  
**ON RANGER® 570**



**STOP BY TODAY FOR INCREDIBLE OFFERS AND UNBEATABLE SERVICE.**



**POLARIS®**



**POLARIS / SLINGSHOT**

21 Fork Horn Trail,  
Bozeman (Near Four Corners)  
(406) 578-0083  
[WWW.GALLATINREC.COM](http://WWW.GALLATINREC.COM)

VISIT [POLARIS.COM](http://POLARIS.COM) FOR MORE OFFERS.

RESTRICTIONS: Rebates vary by model valid on select new 2010-2016 models. Offers valid from 2/16/16-4/30/16. Financing available on select new 2011-2016 Polaris® Off-Road Vehicles. Youth models excluded. Does not apply to prior purchases. APR as low as 1.99% for 60 months requires monthly payments, in lieu of rebates. Valid on Amount Financed of \$5,000 or more of select new Polaris® ATV, RANGER®, 6 RZR® models made between February 16, 2016 and April 30, 2016 on your Polaris® installment loan account. Model & year exclusions apply. Rate of 1.99%, 8.99%, or 11.99% will be assigned. Examples of monthly payments required over a 60-month term at a 1.99% rate: \$17.52 per \$1,000 financed; and at an 11.99% rate: \$22.21 per \$1,000 financed. Program minimum amount financed is \$5,000 and down payment may be required. Rate and down payment based on credit approval criteria. Offer is subject to credit approval. See dealer for complete details.

WARNING: Polaris® off-road vehicles can be hazardous to operate and are not intended for on-road use. Driver must be at least 16 years old with a valid driver's license to operate. Passengers, if permitted, must be at least 12 years old. All riders should always wear helmets, eye protection, and protective clothing. Always use seat belts and cab nets or doors (as equipped). Never engage in stunt driving, and avoid excessive speeds and sharp turns. Riding and alcohol/drugs don't mix. All riders should take a safety training course. Call 800-342-3764 for additional information. Check local laws before riding on trails. ©2016 Polaris Industries Inc.





# National FFA officer visits Montana



Pat Hansen photo

National FFA Vice President Sydney Snider of Ohio encouraged the audience, "Wherever you are, be all there," and not just be focused on destination because the middle part of the journey of life can make it all worthwhile.

"We often forget to be present. Are you all there? We need to be 110 percent present, wherever we are."

—Sydney Snider, National FFA Vice President

**PAT HANSEN**  
for Agricultural Digest

A national FFA officer and FFA members from throughout Western Montana celebrated National FFA Week in Deer Lodge on Feb. 25.

Special guests were Sydney Snider, National FFA Vice President for the Eastern Region, Ben Meyer, Western Regional Manager of the National FFA Organization, Jim Rose, Montana FFA Advisor and three State FFA officers: President Lauren Melhoff, Treasurer Todd Lackman



Starr

and Parliamentarian Trevor Motley.

Having a national officer speak is a special occasion – the last visit of a national officer to Montana was in 2006.

There was a sea of blue as nearly 200 Western Montana FFA members and their advisers from Beaverhead, Corvallis, Deer Lodge, Missoula, Ruby Valley, St. Regis, Stevensville and Victor, as well as a few parents and interested citizens filled the Elks Lodge.

## AWARDS CEREMONY

During the awards program, Discovery, Greenhand, Chapter degrees and Creed Speaker awards were presented by the individual chapters to

members who had completed the requirements for each. Montana FFA Parliamentarian Trevor Motley announced the degree recipients.

Eleven young people, who are new members just beginning their FFA journey, received the Discovery degree. The Greenhand degree and bronze pin was awarded to members who have accomplished a number of basic requirements of the FFA program.

Eight Greenhands received Creed Speaker awards for their knowledge of, and ability to recite the FFA Creed. The creed was written by E.M. Tiffany and reciting it has become a rite of passage for Greenhorn members. The creed strengthens



**Lowest Upfront  
Dealer in the U.S.  
Guaranteed!**

**ON THE  
JOB**  
THE COST OF DOING BUSINESS  
JUST WENT DOWN.

VIEW OUR INVENTORY AT [YellowstoneCountryMotors.com](http://YellowstoneCountryMotors.com)

USED  
Belgrade  
388-3306

**YELLOWSTONE  
COUNTRY**

Jeep  
RAM  
Livingston  
222-8600



their belief in the future of agriculture based on the achievements of present and past agriculturists, while looking forward to the promise of better days through better ways, while enjoying the things they have.

FFA members believe that to live and work on a good farm or to be engaged in other agricultural pursuits is pleasant as well as challenging as they gain knowledge and skills to work efficiently, think clearly and become leaders who produce and market the products of their toil; and become an influence in their homes and communities as they contribute their part

The Chapter degree and silver pin, is the highest degree a chapter can bestow on its members. It is usually awarded during the second or third year of membership and recognizes the member's

agricultural studies, SAE project work, leadership, and scholastics. An SAE—supervised agricultural experience—can be raising livestock at the school farm, horticulture, entrepreneurship, agri-science research, agricultural service or any of several other activities.

Victor FFA Advisor Tassy Tintzman who brought 12 students to the open house said, “It was nice for them to receive the awards from a national officer. We were at the national convention last fall and they saw her get elected as a national vice president.”

Mariah Millhouse, a member of the Missoula FFA chapter said she really enjoyed the event especially “the ice breaker and degree ceremonies where we were recognized somewhere other than



A sea of blue is seen as nearly 200 FFA members and their advisers from eight western Montana chapters gather in Deer Lodge for a recent National FFA Week open house that featured a national FFA officer and other special guests.

Pat Hansen photo

See FFA, Page 14A

# Visit our show booth at the HBIA Home Show at the Lewis & Clark County Fairgrounds in Helena, MT



**Agricultural Buildings**  
**Call for FREE Estimates**



Agricultural Offerings		*Price Includes*	
		1-entry door and 1-split sliding door	
Ag 50x80x16	\$36,000-Installed	Ag 70x120x16	\$70,000-Installed
Ag 60x100x16	\$48,000-Installed	Ag 80x152x16	\$99,000-Installed

**[www.mqsbar.com](http://www.mqsbar.com) • (855) MQS BARN (677-2276)**

*Prices based on a 40 lb. snow load - Delivery fees may apply*



## FFA

Continued from Page 13A

our chapter.”

Watching the young people interact with each other, Deer Lodge FFA Adviser Bill Lombardi said, “This is exciting. We had the opportunity to have Sydney visit, and it was too big of an opportunity not to share it. Often people do not realize how rare these opportunities are. Western Montana chapters are a pretty tight group, and it was cool for them to get Greenhand and Chapter degrees in front of other chapters.”

## MEET SYDNEY SNIDER

National FFA Vice President Sydney Snider is a vivacious, energetic young woman who grew up on a small farm near the town of Moscow in southern Ohio where they raise beef cattle. She and her sister raised goats and pigs as their 4-H and FFA projects. This fall she will be a sophomore at Ohio State University studying Ag Communication.

“I’ve had a lot of fun this week,” she said. “Montana is beautiful with the mountains and prairie, and the people are very welcoming.”

Ben Meyer, Western Regional Manager of the National FFA Organization and Jim Rose, Montana FFA Adviser escorted



Pat Hansen photo

National FFA Vice President Sydney Snider, holding cell phone camera, takes a selfie with a group of western Montana FFA members in Deer Lodge recently.

Snider of her tour of FFA chapters throughout the state starting in Bozeman and traveling to Big Timber, Joliet, Billings, Roundup, Lewistown, Great Falls, Cascade, Helena and Deer Lodge. She was interviewed on radio, television and Northern Ag Network, visited with Office of Public Instruction officials and had breakfast with the Collegiate FFA and Ag Ed Club at Montana State University in Bozeman before returning to the National FFA Center in Indianapolis, Indiana.

“Wherever you are, be all there”... this quote by missionary Jim Elliott is Snider’s favorite.

“We often forget to be present,” she said. “Are you all there? We need to

be 110 percent present, wherever we are.”

Snider can’t cook, but enjoyed the day a friend helped her bake cupcakes and cookies to take to FFA camp to share with other staff members. However, enroute she was thinking about camp and not totally concentrating on driving until she almost went through a stop sign and slammed on the brakes propelling the goodies off the back seat into her hair and all over the front of the car!

She ruefully admitted, “I was too focused on the destination and missed the opportunity to be present.”

On another occasion, Snider was skiing with friends and was convinced she could win a race with them down the hill. I

is the middle part of the journey that can make it all worthwhile,” she said.

Although planning to relax during an airline flight, Snider said a conversation with an elderly man seated next to her was the most meaningful encounter of her life.

Don Harris, 84, was the former executive vice president and chief merchandising officer of Wal-Mart. He retired at age 46 because he wanted to spend more time with his wife and children, and the company provided him the opportunity to do so. For the next 10 years he and his wife traveled extensively, until she died suddenly.

“He was spending time with those who meant the most to him,” Snider said. “Are we all there for those in our life? We can feel completely alone, but step back to see those we truly value and those who

value us.”

She cited an example of Seth, a disabled high school senior at camp who was confined to a wheel chair, but his goal was to ride the zip line. There was concern about how to get him to the top, but one of the staff members worked most of the night to develop a lift; and while his friends cheered him on, Seth experienced his dream.

“That was only part of the journey for Seth,” Snider said. “He is now a junior at Ohio State University and wants to become an agriculture mechanic to help those of us in agriculture.”

“Are we all there for those who are there for us?” she asked. “Tonight we are celebrating the accomplishments of FFA members here. We have the same chance to be all there and allow our journey to be meaningful.”



**Honda**

**dream**

**garage**

**SALES EVENT**

UP TO

**\$500**

**BONUS BUCKS**

on select models\*\*






AS LOW AS

**2.99%**

**FIXED APR FINANCING**

for 36 months on approved credit\*

**FOURTRAX® RANCHER®**

**STOP IN AND CHECK OUT OUR GREAT LINE UP!**

**FULL SERVICE PARTS, CLOTHING AND ACCESSORIES**



**ADVENTURE CYCLE & SLED INC**

201 E HELENA, DILLON, MT

(406)683-2205 • [www.adventurecycleandsled.com](http://www.adventurecycleandsled.com)

**SEE DEALER FOR DETAILS**

**powersports.honda.com** UTILITY ATVs ARE RECOMMENDED FOR RIDERS 16 YEARS OF AGE AND OLDER. BE A RESPONSIBLE RIDER. ALWAYS WEAR A HELMET, EYE PROTECTION AND PROTECTIVE CLOTHING, AND PLEASE RESPECT THE ENVIRONMENT. Honda RECOMMENDS THAT ALL ATV RIDERS TAKE A TRAINING COURSE. OBEY THE LAW AND READ YOUR OWNER'S MANUAL THOROUGHLY. \*2.99% Fixed APR financing available for customers who qualify for super preferred credit tier for up to 36 months through Honda Financial ServicesSM. Payment example: 36 monthly payments of \$29.08 for each \$1,000 financed. Offer good on all new and unregistered ATV models. Not all buyers may qualify. Higher rates apply for buyers with lower credit ratings. Offer ends 3/31/16. \*\*Up to \$500 Bonus Bucks valid with purchase of select new and unregistered FourTrax Rancher models. Bonus Bucks redeemable only for purchases at dealer on purchase date. No cash value. Non-transferable. Redemption value is not to exceed \$500. Offer ends 3/31/16. Check with participating Honda Dealers for complete details. FourTrax® and Rancher® are trademarks of Honda Motor Co., Ltd. ©2016 American Honda Motor Co., Inc. (3/16)



# Headwaters Livestock

25 Wheatland Road • Three Forks, MT 59752

Phone: 406-285-0502 • Toll Free: 1-877-917-COWS

[www.headwaterslivestock.com](http://www.headwaterslivestock.com)



## Stockgrowers offer scholarships to area

Three \$500 scholarships, provided by Rocky Mountain Stockgrowers Association, are available to high school seniors and/or college students in the Tri-county area of Anaconda/Deer Lodge, Granite and Powell counties and families of RMSGA members elsewhere.

Applicants must have an agriculture background but don't need to live on a farm or ranch; an interest in agriculture through membership in 4-H and/or FFA will be considered.

Applicants will be selected based on scholastics, community involvement, agricultural

background, and work experience. Scholarship recipients may attend any University, two-year College or Vocational Technical School of their choice.

Applications are available at each of the high schools in the Tri-county area; or by contacting Travis Cline.

Application deadline is April 1.

For more information and application, contact Rocky Mountain Stockgrowers Association, attn: Travis Cline, Scholarship Committee, 96 N. Mullan Trail, Gold Creek, MT 59733 or [clinegenetics@hotmail.com](mailto:clinegenetics@hotmail.com)

## Beef herd rebuilding continues in United States

Brenda Boetel

U.S. beef cow herd rebuilding continued throughout 2015, as shown by the USDA National Agricultural Statistics Service release of the CATTLE report in January 2016.

The number of all cattle and calves in the U.S. on Jan. 1, totaled 92.0 million head, a 3 percent increase over 2015. Note that National Agricultural Statistics Service did revise downward the July 1 2014, cattle and calves inventory by 0.6 percent and the 2014 calf crop by 1.1%. Inventory of cattle and calves on Jan. 1, 2015 was also revised downward by 0.7 percent.

According to the report, on Jan. 1, the number of beef cows and heifers that calved at 30,300,800 head was up 3.5 percent from

the 29,302,100 head on Jan. 1, 2015. The number of beef replacement heifers at 6,285.2 thousand head increased over 3% from 2015; however industry expectations were for a 5% increase. Finally, the number of beef replacement heifers expected to calve in 2016 at 3,924.6 thousand head was up over 5.7 percent from the 3,712 thousand in 2015. This suggests that the 2016 calf crop should increase by approximately 3.8 percent this year as compared to a 2.3 percent in 2015.

The five states with the largest numbers of beef cows that have calved include Texas, Oklahoma, Missouri, Nebraska and South Dakota. These states account for over 38 percent of the U.S. beef cows and over 46 percent

of the increase in the beef cows occurred in these five states. Texas, which has 4.3 million cows and over 14 percent of U.S. beef cows, saw a 3.9 percent increase in their beef cow numbers. Additionally, Oklahoma, Missouri, Nebraska, and South Dakota averaged over 4 percent increases in beef cows. In spite of continued drought in parts of California in 2015, beef cow numbers increased to 625,000 (5.9 percent) although milk cow numbers decreased slightly from 1.78 million head to 1.775 million head (0.3 percent).

Oklahoma saw the greatest increase in U.S. beef replacements of 40,000 head to 460,000 (9.5 percent), followed by increases of 32,000 head (21 percent) in Arkansas and 30,000 head each in Colorado (18

percent) and Texas (4 percent). Interestingly, South Dakota, Nebraska, and Kansas all saw decreases in the number of heifers held for beef cow replacements.

A combination of 2.7 percent more beef and milk cows, and 2.9 percent more beef and dairy replacement heifers expected to calve should lead to a larger calf crop again in 2016. The combined total of calves under 500 pounds and other heifers and steers over 500 pounds (outside of feedlots) is 25.9 million head. This is 5 percent above one year ago. Those cattle that were grazing small grain pastures at 1.9 million were down 30,000 head from 2015.

Brenda Boetel is with the Department of Agricultural Economics, University of Wisconsin-River Falls.

## A HEAVY-DUTY TRUCK FOR HEAVY-DUTY WORK

MSRP ..... \$43,965 : Final Price  
Mile High Discount..... \$4,164 :  
Rebate ..... \$5,000 : **\$34,801**



**MILE HIGH MOTORS**  
ON HARRISON AVE., NEXT TO WALMART  
BUTTE, MONTANA  
**406-533-3634**  
[www.MileHighCJD.com](http://www.MileHighCJD.com)

2016  
Ram 2500  
Tradesman  
R6738



**Exploration  
Water Wells**

**Geotechnical  
Environmental**



Proudly Leading the Drilling  
Industry for 33 Years

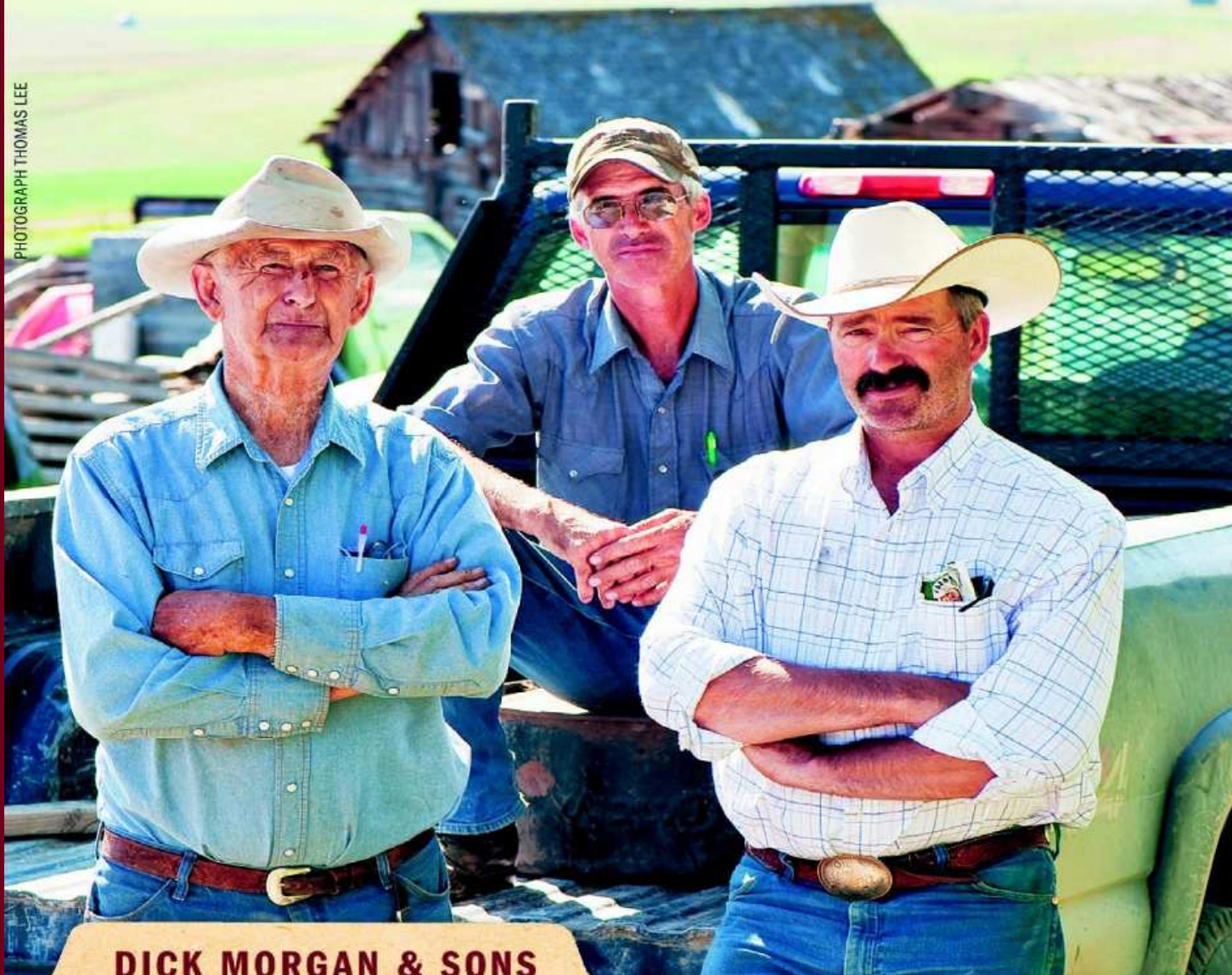
**AK DRILLING INC.**  
185 South Parkmont  
Butte, Montana 59701  
406-782-8506





# ASK THE MEN WHO DRIVE THEM

PHOTOGRAPH THOMAS LEE



## DICK MORGAN & SONS

### **OCCUPATION:**

Ranchers in the Gallatin Valley for over 60 years

### **CLAIM TO FAME:**

Driving Danhof trucks for over 50 years

### **DRIVES:**

¾ Ton Chevy Pickup or whatever has gas in it and a set of keys

Pictured left to right:  
Dick Morgan,  
Wade Morgan  
& Craig Morgan

QUALITY YOU CAN COUNT ON



7 mi. south of Manhattan  
6685 Amsterdam Road  
406.282.7231 • 800.750.7231  
[danhofchevy.net](http://danhofchevy.net)