

Tom Hinz 4/7/92 444-2612

Legumes + grasses — dense nesting cover
Tall wheatgrass: small part
intermediate
Purser +
yellow Sweet clover
alfalfa.
Not good
to food.
Comes in 3 years;
persists 5 or 10.

Nesting
roosting
perhaps some
wind

Offer have to plow + reseed tall wheatgrass.

Could call Bzr office to get survey + apply
for grant.

Thinks deer would eat the sorghum +
buckwheat.

Sunflower seed would be out of reach
of pheasant. Hasnt seen pheasants using
sunflowers — + use lots of pesticides.

Barley + ~~per~~ wheat are the only 2 crops
in State that can get by w/o bad
insecticides.

One Wheat/Wheatgrass hybrid: agra-
tricum.

Hard to get an organic farmer.

None plant crested. No wildlife value.
Squeezes out other vegetation.

Smooth brome bad - because a monotype.
Lodges in winter.

Mr Sullivan. (605) 352-5268

Bruckhart?

Brome should be mowed or grazed every 3 or 4 years. otherwise lodge.

Could mow $\frac{1}{2}$ & rake & sell for hay every 2 years. Get up deer ~~little~~ better & all.

Could interseed brome & bluegrass with alfalfa. May have to cut & rake down before interseeding.

Intermediate Short grass better than tall.

Barley seed does not last through winter.
Grain sorghum (milo) would be good.

Seed up the grass ~~sorghum~~ with grain sorghum ~~3-5 acres~~. 5 acres at first, ~~change~~ replanting $\frac{1}{2}$ every year. Second-year cover good for insects.

Can throw down wild sunflower seeds.

offer amount $\frac{2}{3} - \frac{1}{3}$.

Would deer get the grain sorghum?

Barley vtr by late winter.

Sorghum has a big head - deer might not get it all. Knocks some of it on the ground.

Sec: Ryegrass would not grow here.
Intermediate wheatgrass probably best bet,
with alfalfa. Can mix barley in too,
to outcompete the weeds.

Mix: sub - short grass (etc etc)
alfalfa
Barley.

DWG + alf. will barely grow first year.

(Buckwheat?
Sun flowers?)

December 14, 1992

Datus Proper
1085 Hamilton Road
Belgrade, MT 59714

Dear Datus,

I understand your frustration at not being able to influence the pheasants on your piece of Montana.

It's true that we have studied pheasants a fair amount, but in the end abundant ringneck numbers are often a gift from the USDA and Mother Nature. Right now, we have about 5 million birds, but we also have 2 million acres of CRP and a string of five mild winters. You'll see in the enclosed book by our long-time pheasant biologist that our past abundances were the product of similar conditions.

Of course, there's also the fact that South Dakota seems like ringneck heaven. I don't guess anyone is sure why.

More specifically, on your plot of land, I'd guess the problem is one of scale. A perfect example is your 3/4 acre attempt at nesting cover. Research has indicated that anything less than 20 acres ends up being little more than a predator snack shop. Maybe your birds understand that and stay away.

Another factor I've discussed with our land management supervisor is that small stands of grasses are almost certain to drift full of snow in the winter. As we saw last winter following a couple of big blizzards, larger plots, 160-320 acres might only drift in 50 to 100 yards on the upwind end. The rest makes reasonable shelter from the wind in an area with little woody winter cover.

On the nesting success, one could suppose that if you planted 40 acres in Dense Nesting Cover (DNC) you might produce more than you now are. I know that on the west edge our pheasant range, a DNC mix exactly like yours produces birds. But my observations about intermediate wheat grass generally agreed with yours until 1992.

This year, I've seen consistent use of almost pure stands of it, as long as there was some reasonable food source nearby. The better the food, the better the bird numbers. None, however, approach the density of a nice cattail slough with adjacent food.

Now, about your deer problem. Damned if I know what will keep them out of the food and trees. Again, larger food plots somehow seem to provide for both deer and ringnecks. Of course, you could try

what we do with hay yards on private land. We give landowners 8-foot wide welded wire usually used for reinforcing concrete. It's cheap, and too high for the deer to jump over.

On predation, you'll find in Trautman (p.63) that your views have been supported by research. However, as Carl notes, it is neither ecologically nor morally acceptable these days to reduce predator numbers so hunters will have more game to kill. (On that point, I think you and I agree.) Moreover, the cost is so high that I wonder if it wouldn't work better to support a major habitat program.

No Here, even when predator numbers are high, we have good pheasant numbers when the other factors are right. Besides, predator numbers are controlled by prey availability, not the other way around. It would be a poorly adapted predator that ate itself out of a future. (Of course, there is that old question of additive vs. compensatory mortality.)

When you talk about big habitat programs, I think of Ralph Grossi at this year's OWAA conference in Bismarck. He's the head of American Farmland Trust. While his motive is the protection of farmland from suburbanization and yours is better habitat, his suggestions are interesting. I've included a copy of his speech.

This is a radical change from farm programs aimed at ensuring food and fiber production. He said the current system of protecting the environment with penalties and regulations is less effective than using incentives.

And finally, the fun part. Thanks to a developing 4 1/2-year old Brittany, and birds that are living in intermediate wheat grass, this has been a banner year. I took my own advice (Which also turns out to be yours.) and hunted by myself behind my dog. Well, actually, it turns out that only some of it is behind her. It works better when I'm doing my part and not trailing along behind like I'm lost.

In case you're interested, I think I know why roosters always turn and run downwind. Your comments in "...the Mind" set the wheels in motion. No, I don't think they're that smart... I do know this, a bird running downwind has a least half a chance of hearing whether or not his pursuers are catching up. And I'm equally as certain that ringnecks are as auditory as sharptails are visual. (I think I've finally found an original thought for my book, "The New Basics of Pheasant Hunting.")

For your amusement, I've included the magazine article that prompted me to start thinking about writing a book. I probably won't get it done, but thinking about it gives me pleasure.

Thanks for the books

Ken

GFP

523 E Capitol

Pierre, SD, 57501

work phone - 605-773-4605

Rich Maggio - Supervisor

Dillon Field office BLM
(406) 683-2337

re Hunting birds along

Lower Madison:

Maybe skip Labor day
weekend. Enforcement
people will be out.

Had not thought of
bird hunting. will think
further. intention is to avoid
trap & rifle shooting.

- Fix up record pen.

- Go at Dennis

5-7 tomorrow

(Friday)

BLM announces changes in Bear Trap Canyon

Bureau of Land Management

Citing the spread of noxious' weeds, erosion, public safety, and damage to cultural and natural resources, the Bureau of Land Management, Dillon and Butte Field Offices announce a closure and restriction order for public lands within the Lower Madison River corridor, southwest of Bozeman.

Scott Powers, BLM Dillon field manager, in declaring the order, stated, "the purpose of the order is to stop the spread of noxious weeds, reduce erosion, prevent damage to cultural resources, reduce fire hazard conditions and increase public safety in the area."

According to Powers, tremendous demand for recreation along the Madison River and unmanaged and uncontrolled use is seriously impacting the recreational, natural and his-

toric values of the area.

The order affects all public lands from the north boundary of the Bear Trap Canyon Wilderness area to the Black's Ford fishing access. A map of the affected lands is available from the BLM Dillon and Butte Field Offices and the Forest Service Ennis Ranger District.

Area restrictions on BLM-administered lands in the area are:

■ Vehicle travel is limited to the road surface of posted, designated routes. Any travel off routes is prohibited unless signed and designated as open.

■ The area is closed to dispersed camping, except for signed, designated sites. Designated campsites are limited to a maximum of three vehicles per site. Camping is further restricted by prior rules to a maximum of 14 days within any 28-day period, after which a person must

move a minimum of five miles.

■ When permanently installed metal fire grates are provided in the area, all open fires must be completely contained within these grates. Establishment or use of existing rock fire rings is prohibited. The area is also closed to the collection of firewood and any chopping or destruction of trees.

■ The entire area is closed to the discharge or use of firearms, except within the Bear Trap Canyon wilderness during open hunting season.

These restrictions will remain in place until a recreation management plan is written for the area. During that time, the BLM plans to make a focused effort to eradicate the weed infestation, clean up debris, and control erosion. Anyone interested in helping with these rehabilitation efforts should contact Rick Waldrup at the BLM, Dillon Field Office, (406) 683-2337.

Outdoor

Check Map

EARLY BI

OUTDOORS

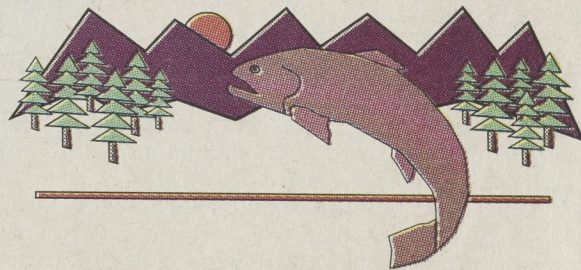
Bozeman Daily Chronicle

17

ntana's

e deer

IN SHORT



**Fly fishing expo scheduled
Saturday, June 5 in Livingston**

The International Fly Fishing Center in
Livingston

Jim Marti

10/22/92

Dear Datus,

I see a change in status there on the letterhead--good for you.

I am reading your "Pheasant Habitat ... " as I type--or vice versa.

I am surprised that you haven't found pheasants in willow new-growth--willow bars along rivers can be very productive. Willows remain one of my favorite pheasant trees, even though they are tough to grow in this country except right in the water. Those willows that get tipped over horizontally by flood, and then grow with vertical growth from the trunk are particularly attractive--as is the boulder to the trout, the drumming log to the ruff.

Pheasants do like barley but see if you could put in some flax sometime--lovely to look at and game loves it, as I found out by accident one time. Like a magnet!

Try taking a piece of the blue grass out at a time, replacing it with tall wheat grass if you have, preferably, a slightly low area that would be damper but not wet. I sometimes take out an old trail with no more help than a big tiller and a lot of walking up and down; then I drive over it and drag an old kennel gate over it, then drive and broadcast seed with a spreader behind the truck and drive on it and drive on it and drive on it. Some wet year it grows. Makes for good travel lanes if it grows tall enough. And good run-into cover--pheasants like run-into cover.

There are always more cocks than ^{hens} he's, it seems. Try feed stacks to keep the hens vital (and a .22 on the roosters). Straw bales with a scoop or two of gravel on them and a steady supply of grain. Some cut brush right close so in the event of raptor attack, the hen has a place to get to quick-like. Place the stack in the windblown places, though.

A total lack of grazing--that is, duff buildup--gradually works against one. The ground must be cleared out and scarified once in awhile. Bugs, you know--takes bugs to build baby birds into shootable birds.

The damn deer! It's why I don't plant corn anymore. They don't bother feed stacks very much--feeders yes, but not stacks. The grains slip down in amongst the straw, saving it for the finite digging of the birds.

The standard dense nesting cover—"DNC"—touted by game people is better than nothing but not what it needs to be. It is, as you guess, too dense at the bottom. Try 2/3s tall wheatgrass, 1/3 alfalfa and let the sweetclover come visit as it does anyway. There is a symbiotic relationship between alfalfa and tall wheatgrass—the one supplying moisture and nitrogen and the other shade which in turn either provides or conserves moisture.

Crested wheatgrass is tough and about the right height. Other than that it serves for very little. My horse don't eat that shit. Pheasants like stuff in bunches and stuff that furnishes some overhead cover. Crested serves there but tall wheatgrass serves better.

Don't be reluctant to try experiments—just do them in smaller doses. Especially on 60 acres, particularly if part of that is water. I learned to do that here, for I have only 60 acres too. It helps to not own a tractor—had-made habitat is self-limiting. Pheasants like this and that in small patches, with the other thing they like right at their elbow. Monoculture, so oft recommended by game managers, is strictly out. The more the birds have to travel to get what they want—which might be no more than comfort on a hot day—the more exposed they are to predation. Predators have a harder time in multiple, changeable patches than they do in ~~multi~~ culture too.

Agree
An absence of predators would not be healthy; there is a limit to all things. Eventually we will have to address the raptor problem officially, *though.*

Winter feeding: Take your share of the barley harvest and put it up high, so it doesn't rot. It is pretty to watch a flock of birds work a stubble grainfield but it is not efficient. One can, if there are old shelterbelts or woods about, pick enough dead branches to build a brush travel lane. It serves as the old be-bushed fencelines of yore. They also serve as four-legged predator huntlanes too, but that can be controlled quite easily.

Alfalfa for a hen is heavenly. It's only substitute is winterwheat, which is green quick in the spring, as is the alfalfa. One can flush birds from the alfalfa in front of the mowers, but the results are limited to a reneest somewhere else. If one does not need the income, alfalfa can be left unmowed—or mowed every third year or so. Or mowed in alternating strips (strips tend to be killing fields for predators, though).

Shelterbelts can be protected by snowfences and cougar crap, I hear. Haven't tried it. Planting only short rows of trees and clumps these days, myself. Especially isolated, separated clumps.

A long row of trees to a deer is just like a bag of peanuts to us. Deer and rabbit-riddled clumps make good pheasant habitat if the trees live; tall shelterbelts make raptor stations.

Could you build one small slough? A push with a CAT, or even a big front-end loader will do if there is clay to be pushed down to. If you could pump water from a pond or a creek to keep it wet, lots of stuff grows in there, including the invaluable cattail.

Pheasants Forever specializes in Mid-west pheasants. They know nothing of the other pheasants. They don't want to know anything from anyone that knows anything—that is, non-biologists. Spend your money at home, not in St. Paul.

Don't underestimate the value of gravel—plain old gravel—to your birds in a tough winter. Pails and piles and mounds and roads of gravel. In and around and to and from feedstacks. Road user. has it.

Sorghum works well, when it makes a crop. The deer bite and the mature heads pop, spilling seed on the ground for the birds. Not especially nutrient rich though.

11 Buy a book called 101 Uses of a Dead Deer. And memorize it for motivation. Have a Big Buck contest, give a trophy for the Most Deer Shot in a Day. Give free rifles to teenagers with time on their hands. Keep cougars about the place.

Pheasants like, above all things, tall overhead cover about 3' high, and enough ground cover to break the wind but not so thick as to interfere with their rapid foot movement; they like calories, weeds, and a good old slough full of insulation is almost ? necessary.

You'll never have many pheasants until your neighbors accuse you—behind your back, usually—of "wasting" all that land; better yet, when they accuse you of "ruining a perfectly good farm/ranch" to your face, you are almost there.

Have fun.

*Late winter, spring-into-summer
feeding is critical for nesting
success. Critical.*

From Tom Sick, SCS

Austrian Winter Peas

Sunflower

Not much luck w/milo or sorghum.

Chris Hancock - Ted Turner Biologist
Gallatin Highway 763-4691

Tim Hancock - up Dry Creek School Road.
No 'phone listed

Box 15
Gallatin Highway 59730

0: 763-4419

Birds like

Crowder vetch } hard to get started.
Birdfoot Trefoil }

Per Matt Weaver

**Montana Department
of
Fish, Wildlife & Parks**



1420 East Sixth Avenue
Helena, Montana 59620
8 April 1992

Datus Proper
1085 Hamilton Road
Belgrade, MT 59714

Dear Mr. Proper,

I discussed the seed mixture for your dense nesting cover seeding with Tom Pick with the SCS in Bozeman. The recommendations he made to me are:

- 1.) The site should be worked and the soil packed with a roller if possible. The seed should then be drilled into the ground.
- 2.) The recommended seed mixture and rates are: 10 pounds per acre tall wheatgrass; 2 pounds per acre pubescent wheatgrass; 1 pound per acre yellow sweetclover; and 2 pounds per acre alfalfa.

If your farmer is only equipped to do broadcast seeding the seeding rate should be doubled for each species to be planted. Tom felt that broadcasting the seed will result in a much poorer stand of vegetation than if you follow recommendation 1.).

Sincerely,

Tom Hinz, Chief
Small Game Bureau

Andrue Taylor - Wildlife biologist,
Montana Fish & Game

(Doubt) pond would fill
with silt. up. Water is flowing through
gravel layer.

Recommends grazing area every
3 or 4 years - in rotation.

Or small strips of protect
grain, w/ shelter belts. Protect
sites like pt. 161d bird
over winter in dense cover -
buffalo berry, cattail. (Shelter
belts were the big factor in Antelope
mountain.) Shelter is the limiting
factor.
Buffalo berry is good shelter

SCS

Have seed in before May 15 - (+ as soon as you can plant)

Brillion drill ~~good~~ ideal: has own roller.

or broadcast, harrow, + roll. Must compact the ground: firm seed bed.
Natives far more expensive + hard to seed - need to be planted more heavily.

Biggest problem was germination followed by dying.

Non-germination no problem.

Waterbuck/wild bite mix (not native) - about 10 lbs./acre.

* Tall Wheatgrass (Not mowed; falls down)
Pubescent or intermediate Wheatgrass

* Sweet clover
Ronde alfalfa?

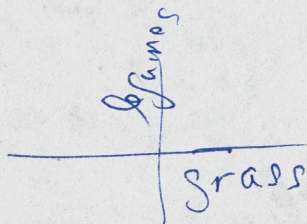
Has a good contact

Shouldn't have to mow; may have to if weeds a problem.

Can use 2-4 DB later

Should not use pre-emergent herbicide

Can cross seed



JOB SPECIFICATION

~~Pasture and Hayland Planting (512)~~

Armed Forces

Datus Proper

(owner/operator)

2.0

(Acres)

(job location, field no., or contract item no.)

1. Soils: (Name) ?; (Texture) Clay loam; (Depth) 1/4-1/2
2. Planting date will be between OCT 15 and MAY 15.
3. Seedbed preparation: cultivated seedbed ☒; seed in stubble ☐; seed in chemical fallow ☐; other seedbed preparation ☐ Describe

Seedbed will be packed.

Firm seedbed so that the tracks of an average size man are not more than 3/8-inch deep.

4. Fertilization: Incorporate into seedbed _____ lbs./ac. of N; _____ lbs./ac. of P_2O_5 ; _____ lbs./ac. of K_2O . List pounds per acre of any other soil amendment or additional fertilizers need:

None

- ## 5. Seeding.

Small grass, forb, and legume seed will be planted no deeper than 1/2 inch.
Large grass seed shall be planted no deeper than 1 inch.

6. Irrigate for establishment in accordance with the following schedule.

7. Management of this planting will be in accordance with the following provisions:

Weed control: with this mixture chemical control

is limited 24D-B will work if label recommendations are followed

Grazing: none (Don't use till in 3- or 4- leaf stage)

Spray on Calm day, probably in June. Check.

Other: Mowing will aid in weed control!

93%

PLS = pure line seed,
SEEDING PLAN AND RECORD 100% germination.

Numbers based
on 100% germination.

Planned Seeding

Prefero²

SCS-MONTANA

Plant species (1)	Lbs PLS/ac. (Pure Stand) (2)	% of mixture ÷ 100 (3)	Lbs PLS/ac. needed in mixture (col. 2 x col. 3) (4)	Acres to be seeded (5)	Total PLS needed (col. 4 x col. 5) (6)
Tall Wheatgrass (Jose, Alkne)	10	100	10	2.0	20 # 25
(Ladak) Alfalfa (2.10)	5	40	2	2.0	4 # 5
Sweet Clover (yellow blossom) (0.84 lbs.)	5	40	2	2.0	4 # 5

Special provisions ☒ None [] See attached sheet.

90% Germ. 85-90% Purity

SCS Approval

Bill Nova
(SCS technician)

3-14-88
(date)

Arnold Norman 587-6929

These labels, and variety label,
must be on package (seed tag - not
white unlabelled).

-2-

Certification

Kinds, Rates, and Quantities of Seed Planted

Plant species (1)	Lbs PLS/ac. (Pure Stand) (2)	% of mixture ÷ 100 (3)	Lbs PLS/ac. in mixture (col. 2 x col. 3) (4)	% PLS = % germination x%Purity÷100 (5)	Bulk seed needed per lb PLS [100÷%PLS (col. 5)] (6)	Lbs. bulk seed needed/ac. (col. 4 x col. 6) (7)	Acres seeded (8)	Total lbs. bulk seed needed (col. 7 x col. 8) (9)	Total bulk seed actually planted (10)

I hereby certify that this practice has been established in accordance with these specifications.

(SCS technician)

(date)

(date seeding was completed)

March 1986

my copy
file name = Habitat (92)

FIELD & STREAM®

Field & Stream
1085 Hamilton Road
Belgrade, MT 59714
(406) 388-3345

Datus Proper
Contributing Editor

April 14, 1992

Mr. Tom Hinz, Chief
Small Game Bureau
Dept. of Fish, Wildlife & Parks
1420 E. Sixth Avenue
Helena, MT 59620

Dear Tom:

Thanks for your interest in my questions about pheasant habitat. Our talk encouraged me to write the short paper that follows, in order to define the problems on my place and record my failed experiments. My hope is that this will be helpful in your work.

As you will see, I have already tried the grasses recommended by the SCS without much success.

I'll pass a copy of all this to Bob Martinka, who has known the area described for a long time. I may also circulate the enclosed paper more widely to anyone who seems interested.

I would appreciate your thoughts and any further recommendations.

Sincerely yours,

Enclosed: "Pheasant Habitat in the Gallatin Valley"

cc. Bob Martinka

Jim Marti on
Pheasant Cover

5/14/91

Datus,

A deer-proof crop: the one one pours from a bag into a feeder that is deer-proof. I do it all the time except here I don't even have to deer-proof my feeder although I did before I got so neighbored-in.

Hog wire works well. On top of a pallet or around a one-high stack of straw or hay bales. The stack, if on open ground, stays up out of the snow mostly. Deep snow country means two layers of bales is all. A scoop of gravel to go with it helps.

I do plant small grains for the birds but I think they use the feed stacks more often during the heavier weather. So would I if I were them. The planted crops are esthetic as much as anything. So the pheasants tell me anyway.

You might also consider this management plan: keep shooting roosters and stock a dozen hens in the spring. Putting them into known haunts of native roosters. I don't give a shit what the biologists say--it works and works well. Just don't put the hens out too early.

After the last six inch wet snow of May 3rd, I had yellow-headed black birds eating grain from my stack--alongside and in amongst the pheasants and the partridge. I didn't know there were so many yellowheads here. Besides, I thought they ate bugs or frogs or something, not wheat and corn.

Just this morning before the mail I was printing more dog books. A tedious task I assure you. I wasn't thinking today about sending it out to a specialty house, but I have in the past.

I am not impressed by Nick Lyons' marketing. There are too many places where Grooms' book is not showing up. Like magazines. Like even in Pheasant Forever's magazine. Like right before Christmas of last year. Dumb.

November 19, 1992

Mr. Dan Kennedy, Member
Wyoming Game & Fish Commission
210 Avenue
Wheatland, WY 82201

Dear Mr. Kennedy:

Glad to get your letter, which just reached me from New York. You asked about recent research on the effects of predation on pheasants. There is lots I don't know, but here goes.

1. The most interesting work I've seen was described in the (British) Game Conservancy Review of 1990, and it was on gray partridges, rather than pheasants. Photocopy enclosed. This one comments on changing attitudes among biologists.

2. See Chapter 8 of Pheasants by Hallet, Edwards, and Burger, 1988. This is a summary of American research. Your upland-bird biologist probably has this one. I cited this work in my recent book titled Pheasants of the Mind.

3. Chapter 39 of Species Management Guidelines for Wisconsin, dated 9/1/83. I have a photocopy here, rather long.

4. Finally, I'm enclosing a short paper (far from scholarly) on my own experiences. My only claim to fame is that all of the leading pheasant predators are present on my small property. I cannot assess the effects on nesting hens and young (if only because I don't want to stomp around in nesting cover). In the fall and winter, I get around. Believe that great horned owls are the main problem at that time, followed by red-tailed hawks and foxes. I am a major predator too, of course -- but only on cocks.

There has been a lot of good research on bobwhites and ruffed grouse, but it is probably much less relevant to pheasants than the work on partridges mentioned above.

I am not advocating large expenditures on predator control. We cannot legally control raptors anyhow, and most hunters cannot identify the few that pose serious problems. Habitat improvement provides a much bigger bang for our buck. On the other hand, it seems to me that we need more research on predation, if only in order to design habitat.