

# The NAP9A Bleat!

The Official Newsletter of the North American Packgoat Association

November/December 2015

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### 1st Newsletter in a Long Time!

Sadly, the newsletter editor spent a lot of his time recently recreating, not keeping his nose to the grindstone. Therefore, we have not had a NL since August. 1000 mea culpas, but I *DID* get some great hiking in this year, well over 200 miles worth. My last night in the wilds of Idaho was at 9000', and was bitter cold overnight. My thought at that point was, maybe we ought to postpone any further hiking until the weather warms up next year... ya think?

This issue will be pretty much exclusively about land use, and the goings-on in the various land agencies. Right now the main focus is the Blue Mountains and even though they have not produced their FEIS (Final Environmental Impact Statement), the prognosis is not good. As with the other agencies, the bighorn sheep (BHS) seem to RULE.

The 2016 Rendezvous. Your BOD have tentatively settled on a location, but since they have not voted on it yet, the formal announcment will have to wait until they make it official.

Regarding the Shoshone NF FEIS, and our appeal response to it, they were required to answer in 90 days... which they did. However the answer was just so much of the same old, same old, and largely just repeated what they had originally said in thier FEIS. At that point it became necessary to resort to the court system, and since the court has no legal obligation to respond in a timely manner, we are waiting, as we have been since the filing. Time will tell.

Much of what you see here was extracted from the most recent Goat Tracks Magazine. However what you don't get here is my great article of hiking in the rain in Oregon's Eagle Cap Wilderness. It is available here:

http://www.goattracksmagazine.org/magazine.html

I'd be Oh-so-Happy to have you subscribe!

### SOLVE [Annual] Beach Clean Up

The Cascade Packgoat Club participated in the fall SOLVE Beach Clean-up again this year. Our group included Janet and Phil Lamberson with Otis, Michael and Stephie Powell with Sam and Hawkeye, Jan Privratsky with Joker and Sandy Joos. Sandy is a new member who is considering acquiring goats. The weather was absolutely beautiful. We hiked and cleaned from Moolack Beach to Beverly Beach and then went to Szabo's restaurant for brunch and some visiting among "goat folks".

[In Privratsky]







# Land Use Report

This is essentially what I put together for the November issue of the NAPgA Newsletter. It is a summation of where we have come from, and what the various status' are at present.

Larry

In 2011, NAPgA's more or less entire focus regarding land issues turned to the Shoshone NF and their pending decision to close the Wind River Range to Packgoats. This led to development of NAPgA's Best Management Practices for mitigation of impact in areas of Bighorn Sheep Habitat.

At the time, the hope was that the Land Use Managers could be swayed from the imposition of a total closure. How naive we were. Later information would reveal that their decision to close the forest to Packgoats preceded even the beginning of public input on this proposal. It eventually would become obvious that this entire land use plan change developed from collusion between the Wyoming land use managers, and an NGO, the Wyoming Wild Sheep Foundation.

Since that time, with the help of our legal representative, Andy Irvine, we filed a response to the DEIS, then filed an appeal to their heavy-handed decision which did not vary from the initial decision to close the forest. Then in response to their appeal rebuttal, Andy took the next step and filed suit to hold them in contempt due to their plainly illegal actions, largely against a single class of forest users, Packgoat folks.

And that's where it stands at the present. We are waiting to hear from the court. Since these kinds of actions proceed generally at a glacial pace, it could be some time before we get a decision.

Meanwhile in the Blue Mountains, we are involved with them in the DEIS process. Our initial response to the DEIS has been filed and we are waiting for their response. One upbeat note in the Blue Mountains, they received so many questions/criticisms about the changes mandated by the EIS, that they interrupted the process with meetings to take input from those that questioned their decisions, including a special meeting just to hear from the Packgoat community. What will happen there? [So What happened there? The same old same old. Lots of rhetoric, lots of opinions, but they didn't budge one micro-inch from their initial proposition that that is that there must be 'ZERO risk' to their darlings, the Bighorn Sheep. Never mind that 'ZERO risk' is only a concept and one that can never be reached, at least in this world; they, like bulldogs, have bitten

in on this one, and they are holding on for dear life.]

Unfortunately, the closures to Packgoats did not come up on our radar until the Shoshone NF decision. What we have subsequently discovered was that the Santa Fe and Inyo National Forests had closures in place prior to the Shoshone NF action. It is unfortunate that someone in the areas of these forests was not aware and did not at attempt to comment on the closures, or at least let us know when they were pending.

The Owyhee mountains in Idaho closed recently in an action that on its surface had nothing to do with Packgoats, and it was only discovered late in the game that they were also closing this area to goats. We submitted input, but it was late in the overall sequence of this action, and it was pretty well ignored. It is worthy to note that the Bighorn species in the Owyhees (as well as the Inyo) is the California Desert Bighorn, one of two Bighorns that are federally listed as endangered. It is even more important to note that this animal never was indigenous to this area\* and is just one more case of the feds dragging in an endangered animal into an area, and then telling everyone else "You gotta get out now!" Can anyone say, heavy-handed and out of control.

Incidentally, this is exactly what they did in the Coronado Mountains in Arizona, i.e., they brought in a bunch of Bighorns, 32 to be exact, and then told Tommy DiMaggio, who had been leading Packgoat excursions in this area for 20 years, "Now you gotta get out!!" Something here about the Federal Government jerking the carpet out from under someone's livelihood and not really giving a da—. The irony here, and somewhat humorous to those watching this nonsense, is that the local mountain lions immediately formed a welcoming committee, put on their bibs, and chowed down. To the tune of over half of the animals they transplanted there. The feds response? They sent in sharpshooters and endeavored to limit the number of cougars preying on the Bighorns. So let me see if I understand this... you set up a buffet in front of the cougars, then tell them, "Now don't y'all be feeding from this table, ya hear?" Can anyone spell insanity? Larry Robinson

<sup>\*</sup> One gentleman at the Pendleton Mtg, 11-10-15, disputed this, & said they had been there previously, but whether or not that is true, they weren't there for a long time, and does not essentially change what I said. After they were re-introduced, then we were forced to leave.

# The Pendleton Meeting November 10, 2015

Dr. Tom Besser, DVM, PhD, a diplomate of the American College of Veterinary Internal Medicine, and a microbiologist at the the Washington Animal Disease Diagnostic Laboratory at Washington State University, Pullman, came armed with the following paper. It discusses a pathogen/sickness that has not to this point reared its ugly head in this goats vs. BHS debate. First it was Pasturella/Manneheimia, now Movi is the definite culprit. So which is it? If you read through his entire piece, note well that during his experiments, none of the BHS died. In the past, all of the BHS captively co-penned (commingled) with sheep or artificially infected with large amounts of the pathogens, died and often died quite rapidly. So why now, that we have definitively named the root cause, is there no death? The difference is too glaring to ignore.

# Are packgoats a risk for epidemic bighorn sheep pneumonia?

What causes bighorn sheep pneumonia? Bighorn sheep pneumonia is caused by Mycoplasma ovipneumoniae (Movi). Movi damages the trachea and bronchi, and this damage blocks these cells from performing their normal function of 'sweeping' out inhaled bacteria. Disease and death result from infection with multiple bacterial species that are inhaled but not cleared from the lungs.

Where does Movi come from? Movi is carried only by sheep and goats. Most (90%) of domestic sheep and goat herds/flocks are infected with Movi. North American wild sheep were Movi-free until it was introduced by domestic sheep and goats arriving with European settlers. More northerly and more remote wild sheep herds are Movi-free (and free of epidemic pneumonia). In the USA, about 90% of bighorn populations that have not experienced epidemic pneumonia are still Movi-free. All (100%) bighorn populations that have experienced epidemic pneumonia tested to date have been Movi infected.

Movi from sheep is particularly deadly for bighorn sheep: Experiementally, exposure to Movi is frequently fatal. In twelve separate studies in captivity, 98% of naive bighorn sheep exposed to domestic sheep (of unknown Movi status, but likely positive) died of epidemic pneumonia. In three captive studies with Movi-free domestic sheep, no epidemic pneumonia

occurred. [It is interesting that Dr. Besser is so sure of the Movi status of all of these bighorn sheep in these past studies considering the fact that the researchers previously did not check for this organism, because it was not on anybody's radar during this time. Did he maybe look at some saved tissue?] Also, native bighorn sheep experimentally commingled with cattle, horses, llamas (or other species that don't carry Movi) survived without pneumonia.

Domestic goat Movi consistently cause bighorn sheep pneumonia: Two earlier studies where captive bighorn sheep were commingled with domestic goats of unknown Movi status were inconclusive: In one study no bighorn sheep pneumonia was observed, and in the other two of seven bighorn sheep died of pneumonia. [One wonders how can he first say that domestic goat Movi consistently cause bighorn pneumonia, and then go on to assume {noting that 'assumptions' have no place in the scientific realm} that the goats in these earlier studies likely did not have Movi?]

We've completed three experiments where domestic goats of known Movi status were commingled with bighorn sheep:

- Bighorn sheep commingled with Movi-free domestic goats: no pneumonia
- Bighorn sheep commingled with Movi-positive domestic goats: 100% bighorn sheep pneumonia.
- Goat Movi strain introduced to commingled Movi-free domestic goats and bighorn sheep: 100% pneumonia in both bighorn sheep and domestic goats.

The pneumonia in these studies was not very severe and no deaths were observed although some animals became quite sick. An important unanswered question is whether bighorn sheep that survive pneumonia become chronic carriers of goat Movi strains.

Goat Movi was detected in pneumonic bighorn sheep in an outbreak in the wild:In the summer of 2014, 30% of adult bighorn ewes and 100% of their lambs at Heller Bar in Hells Canyon died of pneumonia caused by a goat Movi strain.

What can be done to reduce the risk of goat Movi for bighorn sheep? Prevent contact with Movi! This has been done be eliminating access by any domestic sheep or goats. Access only by confirmed Movi-free sheep or goats would reduce risk of bighorn sheep pneumonia significantly. cont. Pg 4

**Possible solution:** Movi-free pack goats likely present greatly reduced pneumonia risk to bighorn sheep.

Greatly reduced risk indeed. When Movi-free goats were commingled with BHS, there was NO sickness, not REDUCED sickness. Those that speak first, frame the

argument.

One thing to keep in mind. Dr. Besser is receiving money from the Wyoming Wild Sheep foundation. That is the organization largely responsible for getting us kicked out of the Wind River Range in the first place. You cannot escape the obvious influence of this money on the supposedly unbiased scientific method.

Following my discussions with Dr. Besser and and during the meeting:

I had to wonder about the emphasis on "100% pneumonia" albeit "mild" and some "became quite sick". Which animals is he referring to that became quite sick? The bighorns that were penned with the domestic goats? Quite mild pneumonia doesn't sound like a "quite sick" clinical picture. One has to wonder if they performed necropsies, and by what standards they diagnosed "mild pneumonia"?

The difference between commingling with domestic sheep and domestic goats, is quite different.

What I know for certain, and something I can agree with Besser on, is that there is NOT a complete understanding of the dynamics of this disease phenomenon in bighorn sheep and it seems that research is again chasing a bug rather than looking at the big picture and the obvious multifactorial component of this disease phenomenon. First is was Pasteurella/Mannheimia now it's Mycoplasma ovipneumoniae. While Mycoplasma ovipneumoniae certainly shows stronger evidence of playing a primary role in bighorn sheep pneumonia, we have to ask ourselves why is it that some bighorn sheep (individuals and herds) cannot handle an infection with this bacteria while others survive with it and have lambs that survive with it.



## Pendleton Meeting Representation

The presentation I put together for the November 10th meeting in Pendleton, and what I used as an outline for my comments.

### PackGoats!

A clear and present danger to Bighorn Sheep? Or is this 'danger' simply a clear and present misconception?

At one time there it has been forecast that there were approximately 2 million bighorn sheep [BHS] in and among the mountain west. The troubles for BHS, and the subsequent large-scale die-offs of entire herds in some cases, have largely been tied to the settlers from the east and the domestic SHEEP that they brought with them when they migrated west. This bighorn's decimation reached its peak in 1960 or thereabouts, and according to some estimates has rebounded to approximately 70-80,000 bighorns, depending on whose figures you believe.

It is assumed from presently available science, that the culprit in these die-offs is one of the multiple variants (bacteria) of pneumonia. Whether or not pneumonia caused by one of the blamed bacteria is wholly responsible, or just one factor in a multiplicity of possible causes working together, is still up for conjecture. A perusal of available research literature echoes what one wildlife biologist said in 2012 or so, "We still don't understand how these pathogens interact." These sort of statements occur again and again in the available literature. In other words, this is clearly NOT a 'done deal' scientifically where the wildlife biologist can say with conviction, "pathogen X and the following circumstances are the absolute cause of the Bighorn Sheep die-offs.

The bottom line here, is that what science there is, has implicated domestic SHEEP and only domestic SHEEP in the decimation of the BHS herds. To date there has been a paucity of relevant research to be able to say conclusively that goats represent the same danger to Bighorns as domestic sheep. And in fact, the implicit role of domestic sheep at this point in time is still not completely understood under natural range conditions, as outbreaks are reported to occur even in the absence of any identifiable potential contact with domestic sheep (or goats).

Those experiments that have been done implicating domestic goats, have been far from conclusive, and in a

preponderance of the stated research efforts, the available cites go directly back to one instance, and that is the feral goat/Bighorn Sheep epizootic in Hells Canyon. There has been significant question placed on the conclusion that the feral goat caused pneumonia in this herd, and whether or not the pathogen(s) that the goat was carrying were in fact replicated in the Hells Canyon bighorn sheep examined after death. In point of fact, the Heller Bar herd has been struggling for over 20 years and the last animals were removed from the canyon in 2014 (for research) due to the unlikelihood of their eventual survival. But it is a fact that many if not all of the Hell's Canyon herds that still exist and survive onward carry Movi, and multiple strains of it.

Goats, due to their limited numbers in comparison to SHEEP, were largely left off the radar in reference to the die-offs and therefore out of the picture as to their scientific interest as well. One complicating and confusing variable in this equation, is that in some studies, done solely with sheep, in the documentation conclusion, the experiment has incredibly morphed to 'sheep and goats' although there were no goats included in the experiment. Picking conclusions out of thin air, solely because they fit the paradigm of where you want the research to go, is *NOT* science, and simply a thinly veiled attempt to muddy the waters in terms of goats.

One of many peripheral questions concerning goats, is whether or not a loose domestic goat would even attempt to mingle with a herd of Bighorns as the SHEEP have been reported to do.

All of the above having been said, how, almost overnight in or around the mid-2000s, did goats become anathema to have anywhere near the environs that BHS inhabit? Why all of a sudden are goats being restricted completely out of the forest anywhere there is a population of bighorn sheep, especially because this is wholly unjustified by the available scientific research. This sort of sweeping rule-making not only is patently unfair to an entire class of users, is unnecessary at its root in order to protect the species in question, and deprives individuals with disabilities or age-related issues the ability to continue to access the forest.

And even if the complete elimination of Packgoats is accomplished, what about the Mountain Goat, which can carry the same pathogens, and is know to be more aggressive than the bighorn, and in some cases have run bighorns out of their current habitats.

# The Packgoat, and why we believe that this animal must be considered entirely separate from the so-called 'domestic goat'.

The Packgoat is an animal that has been specifically targeted for use as an animal of burden, and therefore imprinted on humans at birth, and socialized to consider the human as the pack leader, and as a result, the source of their security while away from the pen.

The reason that this behavioral imprinting is even possible, is due to the goat's genetically predisposed nature as a herd animal, and one which will always desire to, either be in a leadership role, or in submission to that animal that emerges as the dominant, due to size, aggressiveness, etc. Due to our early imprinting and subsequent socializing, the goats in our group consider us as the 'Alpha' goat, and that never changes substantively. Their infrequent dominance moves made towards us are considerably more passive, than what they exhibit towards their peers, and although they do now and then exhibit that they would love to become the Alpha, they never take it to a serious level. In reality, we can count on our animals following passively on the trail or off, and therefore due to this behavior there is no need to string them together as is done with horses.

This desire to be in sight distance of their 'human' is so strong that even in camp, if the goat leader moves as if he/she is going to go anywhere 'away', all the goats stand and begin to follow. When in camp, the only way to insure that your guys don't follow your every move is to put them on a highline.

Which brings us to the inevitable question, "So what if a goat gets away from you, isn't there a risk that he will end up looking for a herd of animals to link with?"

I cannot offer science to answer that one, but my experience would say, absolutely not, and the following is the answer why I don't think that is a viable scenario:

Harkening back to the beginning of the Shoshone NF closure, in response to our protestations, they went to the Internet and immediately found two

cases of lost Packgoats. Their response was to say, "Aha, see, obviously these are die-offs on the hoof. Case closed." At least that is the conclusion that they wanted one to draw. In reality, that was only just the beginning of the story.

In these two situations, there was a group of 3 that disappeared, and a single goat that vanished. In the case of the three, two never did reappear and most likely were predated. The remaining goat from this group eventually showed up at a hunter's camp and made it clear he was 'home'.

The other goat, in similar fashion, turned up at a farm and once again figured he was 'home'.

I am personally familiar with two other similar situations, and in both cases, the goats in question both went looking for human contact.

My assumption, drawing from these 4 cases, is that due to the Packgoats socialization from birth that humans are the head of the herd, when separated from 'their' human, will go looking for another to take his/her place.

They are not prone to go looking for another herd, as that is not what they are familiar with, and one thing a goat fancier learns is that goats are **impossible creatures of habit** and are **ONLY** comfortable with what they know and what is familiar.

This complete document, much longer and larger in scope, will be available for PDF download via this link.

Links, of course, are only available in the PDF;-)

In the The Blue Mountains
Incidentally, regarding what is planned as a
restrictive closure to keep our goats from getting near the BHS, a figure emerged of a 7 mile
buffer around what they consider the BHS core
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is to tell us to stay home. The remainder of my
thoughts on this matter are definitely unprintable.

Larry

And in the way of review...

### **Bighorn Sheep Distribution**

This isn't exactly a news flash, as I have posted this picture/drawing to the newsletter in the past, but it underscores the magnitude of the threat that we face.

To wit:

1) Our goats are percieved as such an exaggerated threat to their vaunted bighorns (and therefore their cash flow by the insane amount of money brought in by the auction of tags to kill one), that they need to keep our da-- goats waaaay away from anywhere any bighorns might be.

### &

2) Their <u>core long-range plan</u> is to bring bighorns back into the territory that they once occupied (the 'pie' in that word 'occupied', is the pie-in-the-sky of *that* particular plan).

OK. Now take a look at that drawing again. Do you see very much area in the drawing on the far left where you would be able to take your goats should they be successful in bringing this plan to complete fruition?

This 'plan' of theirs is exactly why we have been fighting to defeat this nonsense at its source.

BTW: Where did this drawing come from? It was produced in the Wyoming Wild Sheep Foundation's release of data from their last meeting.

### **Bighorn Sheep Numbers:**

**1850**: about 2 million

1960: about 9,000

**2014**: more or less 80,000

As you can easily see from the above numbers, at this point, this does not constitute a crisis.



### Cascade PG Club's Annual Carson Rendy

The Cascade Packgoat Club's annual campout was held September 10th-13th at Camp Howe, which is leased

to the Skamania
Saddle Club by
the National Forest Service. The
Skamania Saddle
Club is generous
enough to share
the camp with us.
This campout is
held each year on
the weekend after



Labor Day. Everyone is welcome to join us!

19 people, 10 goats and 4 dogs attended. Jan & Perry Privratsky & 2 goats; Stephanie & Michael Powell with their grandson, Mason, and 2 goats; Lori & RC Kline with their 2 grandsons, Colin & Caleb, 2 goats and 3 dogs:



Janet & Phil Lamberson with 1 goat, Brad & Mimi Bateman with 3 goats, Larry & Mary Ann Robinson with 1 dog and Taffy Mercer with 2 goats. Tim & Deanne Converse and Carolyn Eddy joined us Saturday evening.

The weather was glorious! Cooler than

at lower elevations, wildfire smoke-free and sunny. The campground is so beautiful. Trapper Creek that runs along the campground was pretty low from the drought conditions we've been having. Last year we watched salmon spawning right next to camp. This year the salmon will struggle to get here. We did find (smelled it first!) one dead salmon but no live ones.

Lori & RC Kline brought their 5 & 9 year old grandsons, Caleb & Colin. It was Caleb & Colin's first camping trip! They just moved to Oregon from a big city in California. Stephanie & Michael Powell brought their 5 year old grandson, Mason, who is a seasoned camper. It's so wonderful to see kids get outdoors and have fun! Especially with goats!

Everyone hiked each day. Some folks went for long hikes while others took shorter hikes from camp. No matter where we hiked it was beautiful. Being on the trail with the goats and friends – priceless.

Both Friday and Saturday mid afternoon we took the goats down to the stream for water training. Jan & Perry's "Little Joe" is a seasoned water goat at only 1 year

old. Stephanie & Michael had 2 just wethered youngsters who did really well for their first time. I took my 3 year old Alpine, Dude and my yearling LaMancha, Bourbon. I



bought Dude, who is 3, in April (as a birthday present to myself!) and had no idea how he'd do. He didn't really "want" to go in but it wasn't a big deal once in the water and he crossed back and forth from one bank to the other just fine after the

first bit of resistance. Bourbon didn't think much of the water. He took some "persuading." At one point he was standing in the river with icy water up to his belly and looking around – while not on a lead. He got better each time and I was proud of his progress.

Powell's wethers, Thunder and Lightning, had just been wethered before the campout and Privratsky's buckling Falcon was due to be wethered the Tuesday following the campout. These 3 little guys had one thing on their mind whenever they were loose. All three thought Mr. Big and Dude (the largest goats) were the ones to woo! Mr. Big and Dude were not impressed!

Mr. Big and Dude had a sparring match and a crowd of fans gathered to cheer on their favorite athlete! I think the fans had as much fun watching as Mr. Big and Dude had sparring! At the end of the match they shook hooves and became friends.

On Saturday, Debbi & Eldon Otta, goat-owning friends of mine who want to begin goatpacking, came up for the day to meet people. see equipment and check out the goats. I took them for a 11/2hour hike with Dude and Bourbon. I had my Sopris Rookie packsaddle and the Rookie panniers on Dude. The panniers were huge for carrying 3 bottles



of water and TP. We were glad to have them though when during the hike we ran across a campsite that was full of aluminum beer cans, plastic food bags, broken plastic 5-gallon water jugs and more. We put it all in the panniers and brought it back to camp. Why do people leave such messes!?

As usual, there was plenty of fabulous food! Dishes made with goat milk, goat milk cheeses, fruits, salads, pastas, and more! No one went hungry! One of the biggest favorites was the chocolate chunk pumpkin seed cookies Stephanie made. The recipe is in the right-hand column. They were to die for!

Mornings and evenings we gathered around the campfire to visit and eat. Actual campfires were banned due



to the fire danger so Perry & Jan brought a propane fire pit for us to sit around. The "real" fire pit was occupied by Lori & RC's goats! Mr. Big and Fancy loved lying in the ashes of the fire pit!

It was really hard to leave Sunday afternoon knowing I was heading home to 95\* weather and smoke from the wildfires. On my way home I had to detour because of a wildfire burning on my route home. Helicopters

were flying between the fire and the Columbia River filling the bags with water to drop on the fire. This season has been horrible for wildfires throughout the west. I hope the drought is lessened by rainfall and snow pack this winter. I'm sure the firefighters will be glad when fire season is over. I'm so thankful for them.

Every year this annual campout leaves me wanting more – more time to visit with friends, more time to hike the forest of new and old growth, more time to enjoy the wonderful campground and more time to enjoy no schedules, cell or internet service.

I'm left with a peaceful feeling each time I've been out hiking with my goats. It's good for the soul and I should take time to do it more often.

# In the The Blue Mountains

Incidentally, regarding what is planned as a restrictive closure to keep our goats from getting near the BHS, a figure emerged of a 7 mile buffer around what they consider the BHS core habitat. Then right after the meeting a figure of 16 miles came out of the woodwork. Might as well make it 100. Both 7 or 16 miles would shove us completely out of the Blue Mountains period. What nonsense. All of our efforts, and the only thing they can think of as a solution is to tell us to stay home. The remainder of my thoughts on this matter are definitely unprintable.

### **Chocolate Chunk-Pumpkin Seed Cookies**

For the ideal chewy brownie-ish texture, take care not to overbake these spiced cookies.

### **Ingredients**

Servings: Makes about 18

- $\Box$  1½ cups raw pumpkin seeds (pepitas)
- $\Box$  2½ cups all-purpose flour
- ☐ ½ cup unsweetened cocoa powder
- ☐ 2 teaspoons kosher salt
- ☐ ½ teaspoon baking soda
- ☐ ½ teaspoon ground cinnamon
- ☐ ¼ teaspoon hot smoked Spanish paprika
- ☐ 1½ cups (packed) light brown sugar
- ☐ 1<sup>1</sup>/<sub>3</sub> cups granulated sugar
- ☐ 1 cup plus 2 tablespoons unsalted butter, room temp
- ☐ 2 large eggs
- $\Box$  1½ cups bittersweet chocolate chunks or chips
- ☐ Flaky sea salt

### Preparation:

- Place racks in upper and lower thirds of oven; preheat to 350°. Toast pumpkin seeds on a large rimmed baking sheet on upper rack, tossing occasionally, until golden brown, 8–10 minutes. Let cool.
- Meanwhile, whisk flour, cocoa powder, kosher salt, baking soda, cinnamon, and paprika in a large bowl. Using an electric mixer on medium-high speed, beat brown sugar, granulated sugar, and butter in a large bowl until pale and fluffy, about 4 minutes. Add eggs one at a time, beating to blend after each addition. Reduce speed to low; add dry ingredients in 3 additions, mixing until well blended after each. Fold in chocolate and pumpkin seeds.
- Portion dough into 18 balls (about ¼ cup each) and divide between 2 parchment-lined baking sheets, spacing 3" apart. Sprinkle with sea salt and bake cookies, rotating pans halfway through, until edges are slightly browned and firm but centers are still soft, 18–20 minutes. Transfer to wire racks; let cool.

