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UniversityofIdaho

College of Forestry, Wildlife and Range Sciences Moscow, Idaho 83843 U.S.A.

March 6, 1991

Dr. Greg White Idaho National Engineering Laboratory EG&G Idaho, Inc. INEL P. O. Box 1625 Idaho Falls, ID 83415-2213

Dear Greg:

It was good talking with you yesterday morning and learning that the momentum of the INEL research program continues despite the loss of Bruce Wiersma. We are eager to continue our cooperation with INEL at Taylor Ranch.

Jeff Yeo, Sonny LaSalle and I will be presenting a paper at the Wilderness Economics Conference in Jackson, Wyoming, May 9-11, titled "Wilderness Research Economics: The Taylor Ranch Wilderness Field Station in the Frank Church River of No Return Wilderness." In that paper we will tell about the Taylor Ranch Wilderness Field Station and the move of the building from Cabin Creek in addition to addressing wilderness research economics issues of such a field station, and wilderness policy constraints. An underlying issue will be the need to take more advantage of the environmental monitoring and assessment opportunities in wilderness while respecting the naturalness and solitude required by the Wilderness Act.

I had a good meeting with Doug Fox and presented the proposal for cooperative support in our joint project with INEL to monitor air quality at Taylor Ranch Wilderness Field Station. Doug will be visiting the University of Idaho May 20–22 and I hope to take him to Taylor Ranch the morning of May 21, returning the morning of May 22. If you could also be at Taylor Ranch at that time it would be a wonderful opportunity to discuss and evaluate our cooperative environmental monitoring and assessment. An effort that I would be very interested in pursuing would be a "pulse study" at Taylor Ranch which would give us some important base-line data that would help make the location even more attractive for study by other scientists. Let's make that an item for discussion if you can make it to Taylor Ranch when Doug is there.

The session I'm chairing, the Wilderness Session Working Group of the Society of American Foresters, titled, "Global Wilderness in Forestry's Future" still has room for a paper such as we discussed. An essential focus should be on problems in establishing global Dr. Greg White Page 2 May 6, 1991

monitoring networks in worldwide wilderness and protected areas; the issues you and I discussed such as what is measured, methods, etc., would be interesting and appropriate. I will wait for an abstract by you and Bruce that describes your proposed content. The session will be Monday afternoon, August 5 in San Francisco.

I hope to see you May 21-22 at Taylor Ranch when Jeff Yeo and I will be there with Doug Fox. Please stay in touch about these items and if you cannot get through to me, please feel free to talk with Leon Neuenschwander, associate dean for research, who is acting director of the Wilderness Research Center. For items pertaining directly to Taylor Ranch, don't hesitate to talk with Jeff Yeo, although he may be the hardest of all to reach as spring arrives and he spends more time in the wilderness.

Sincerely,

John C. Alndee

John C. Hendee Dean

JCH/nm

cc: Dr. Jeff Yeo, Scientist/Manager, Taylor Ranch Wilderness Field Station Dr. Leon Neuenschwander, Associate Dean for Research—Acting Director, Wilderness Research Center

Dr. Bruce Wiersma, Dean, College of Forestry, University of Maine Sonny LaSalle, Supervisor, Payette National Forest

MAYL 8-91 WED	14:22	COLLEGE of FORESTRY UI	P.01/13
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THE TAYLOR RANCH WILDERNESS FIELD STATION WILDERNESS ECONOMICS CONFERENCE SLIDE PRESENTATION Jackson, Wyoming May 10, 1991

Introduction of John Hendee by Moderator

Hendee introduces Jeff Yeo, highlights the title and acknowledges other authors. Explains that Jeff will make the presentation and then we will both be available to answer any questions. Jeff takes over and begins:

Scientific values were a recurring theme in the campaign to establish the National Wilderness Preservation System. Scientific values were espoused by early leaders of the wilderness movement, such as John Muir and Aldo Leopold, and are specifically mentioned in the Wilderness Act.

Scientific values of wilderness are even more valuable today. Study of protected natural systems can reveal valuable knowledge that will be applicable everywhere, and by monitoring wilderness conditions we can learn about natural change and the extent to which changes are occurring from human influence. But, the lack of wilderness research funding, the remoteness of wilderness, and to some extent management regulations limiting the means by which data may be gathered, have restricted wilderness research. We struggle with these wilderness research issues in trying to develop and maintain a wilderness research program and our Wilderness Research Field Station in the middle of the River-of-No-Return Wilderness. Lights on

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COLLEGE of FOREST

¹Idaho contains more classified wilderness and roadless land than any of the lower 48 states, and thus has tremendous wilderness research opportunities. When additional roadless lands are classified, this slide will show more wilderness.

14:2

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²In 1969, the University of Idaho purchased the 65-acre Taylor Ranch in the middle of what was then the Idaho Primitive Area. Taylor Ranch is situated on Big Creek, seven miles upstream from its confluence with the Middle Fork of the Salmon River and has three side streams that cross the property: Pioneer Creek, Rush Creek and Cliff Creek. The ranch is accessible by a 34-mile trail from the settlement of Big Creek which is at the end of 87 miles of dirt road, or by bush plane using the private air strip at the ranch, a grandfathered use that predates the Wilderness Act."

³The Taylor Ranch site has been occupied by human beings for thousands of years. Archeological evidence indicates that Aboriginal peoples resided nearby while hunting bighorn sheep and fishing in Big Creek. The mounds and pits here are the remains of Indian house pits half a mile downstream from the ranch and six miles downstream,⁴ near the confluence with the Middle Fork, Salmon River, are impressive petroglyphs.

⁶The first recorded white person to visit the vicinity was Dave Lewis, a Civil War veteran, and packer and scout for the military during the Sheepeater Indian campaign in central Idaho territory. ⁶Lewis traveled the length of Big Creek for the military in 1878, and a year later was packing ammunition for a mounted company of soldiers when they were ambushed by **1 Idaho wilderness**

UI

2 FCRNR wilderness and location of Taylor Ranch

3 Aboriginal house pits 0.5 miles downstream from Taylor Ranch

4 Petroglyphs

5 Dave Lewis with dogs in front of sod-roofed cabin

6 Old pack train

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Sheepeater Indians three miles upstream from the Taylor Ranch site. 'The rock-lined ambush pit used by the Indians during this battle is still visible. One soldier was killed in this battle and is buried at Soldier's Bar 2.5 miles downstream from the ranch. ⁸Dave Lewis obviously made note of the attractive site near Pioneer Creek, because 40 years later he would return to homestead the site and play a major role in the region.

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^{*}The first white residents at the Taylor Ranch site were Elix and Billy Bull, who staked a placer claim on Pioneer Creek and built a sod-roofed cabin in the fall of 1900. They left after two years for better prospects at Thunder Mountain.

¹⁰In 1910, John and Mary Conyer moved from the old Caswell homestead six miles upstream into the cabin at the Taylor Ranch site. The Conyers ran cattle, established a hay pasture, built fences, and constructed a new cabin which is now the Taylor Ranch field laboratory. They left in 1918 and Dave Lewis moved onto the site.

¹¹In 1918, Dave Lewis was in his early 70s, and in addition to drawing a military pension, he made a living hunting cougars for bounty, guiding big game hunters, trapping, and possibly a little prospecting. ¹²Dave had received national publicity for his cougar hunting prowess and he was probably the first big game outfitter in the region. He would meet his clients at Warren, the nearest railroad head 100 trail miles from his homestead at Pioneer Creek.

¹³At 70, Dave Lewis was still a tough frontiersman. Shortly after establishing residence at Pioneer Creek, some 7 Talus slope near Taylor Ranch site

8 Old shot of Taylor Ranch site

9 Old cabin

10 Old photo of ranch lab

11 Dave Lewis, blacksmith shop and old Bull cabin

12 Dave Lewis with hunter and mountain goat

13 Dave Lewis with woman and dog

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horse thieves headed up Pioneer Creek with his entire string of horses, leaving Dave to pursue on foot. They were surprised when he met them at the top of the pass, peeling one of the thieves out of his saddle with his 44-40 carbine, later complaining he would have nailed both if he had had his big gun.

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¹⁴As a well-known big game guide, Dave Lewis introduced many prominent people to the wild, central Idaho region, including Idaho Governor H.C. Baldridge. While nearly 90 years old, Dave hosted a delegation of people who were evaluating whether the central Idaho tract should remain in a natural state for the benefit of outdoor enthusiasts and the wildlife inhabiting the area. ¹⁵Governor Baldridge expressed his first impressions of the Big Creek country while addressing the governor's committee on the proposed Idaho Primitive Area in December, 1930. Referring to his party's trip to the Dave Lewis ranch, Governor Baldridge stated, "It was the wildest country I've ever seen Few, if any, areas in the United States offer the opportunities of this section for hunting and fishing " ¹⁶The area comprises something over a million acres with perhaps 25 farms in the whole territory. The reference by Governor Baldridge to the 25 farms underscores the fact that the area is wilder today than in that earlier era when many homesteads were located throughout the Salmon River country.

¹⁷In 1933, Jess Taylor made a pack trip into Big Creek, became acquainted with Dave Lewis, and in the fall of 1934, Jess purchased the Lewis ranch for \$1,200. Interestingly, the deed transfer was delayed because Dave Lewis's legal 14 Dave Lewis with Gov. Baldridge and forest ranger

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15 Big Creek drainage and mountains

16 Abandoned homestead

17 Pack string crossing Big Creek

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administrator, Walter Estep, when returning from the ranch after witnessing the sale,¹⁸ was killed 2.5 miles upstream of the ranch by Frank Lobauer, at what is now known as Lobauer Basin. Rumors had it that Estep had been too attentive of Lobauer's wife.

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¹⁹Dave Lewis died at the ripe age of 93 in 1935, after catching pneumonia from a spring storm on the 34-mile ride from the ranch to Big Creek. Today, the 9,300 foot Dave Lewis Peak at the head of Pioneer Creek, and a tributary stream of Rush Creek, both bear his name.

²⁰Although legally owning the homestead, Jess Taylor didn't return to pursue his dream of making the homestead into a guest ranch until 1948. But then, with his new bride, Dorothy, Jess meant business and even flew a 500-pound Monarch stove to Soldiers Bar and packed it on a horse the 2.5 miles to the ranch. ²¹A slip-scraper had been packed by mule from Big Creek in 1935 and with it Jess and Dorothy converted a timbered, brushy flat into an air strip during 1948, and the first plane landed in 1949. ²²Several buildings were constructed during the next few years. One client writing about the Taylors stated, "I watched them turn that land into a home in the wild. The cabins they built speak well of Jess's skills as a man and rugged individual. The only thing he couldn't change were the rattlesnakes!"

²³The mid-'50s to early '60s were prime years for the Taylors' outfitting business. The fall salmon season and big game hunting were concluded prior to their departure for the 18 Along Big Creek trail

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19 Winter scene - Big Creek

20 Jess Taylor with scythe

21 Early landing strip with planes

22 Taylor cabin

23 Jess Taylor with salmon

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²⁴During the 1930s and early '40s, mail was brought by dog sled down Big Creek as far as Cabin Creek, but dog sleds were replaced by air service in the 1950s. For a while the Taylors hiked the seven miles weekly to Cabin Creek for mail until Jess successfully lobbied for mail service by plane to Taylor Ranch in the late 1950s.

²⁵The beginning of wilderness research at Taylor Ranch was in 1964 when Maurice Hornocker, then a graduate student at the University of British Columbia, made arrangements to use Taylor Ranch as winter headquarters for the first ever major study of mountain lions. ²⁶Between 1964 and 1967, Maurice and his local professional houndsman, Wilber Wiles, captured numerous of the big cats drawn to the Big Creek basin by wintering big game herds. ²⁷They even kept captive mountain lions in a pen constructed at Taylor Ranch. Hornocker's research drew national attention and was the subject of a National Geographic film documentary in 1973. But the most important result of Hornocker's research was to change the status of mountain lions in Idaho from that of bounty animal to big game species.

²⁸In the mid-1960s, the Taylors listed the ranch for sale and put their outfitting business on lease. It was then that Maurice Hornocker convinced both the University of Idaho and Jess Taylor of the potential value of the 65-acre ranch as a wilderness research field station. Consequently, the university purchased the ranch in 1969 for \$100,000. 24 Plane landing on airstrip

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25 Maurice Hornocker with cougar

26 Wilber Wiles lowering cougar from tree

27 Captive lions

28 Duplex and lab in background

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It was anticipated that if the university invested several years of operating funds, the field station would become selfsufficient, funded by research grants.²⁹That funding vision has not been realized, butresearch projects have been developed by faculty with their own funding to take advantage of the new wilderness field station. Mountain lion research continued with the first radio telemetry study of cougars. ³⁰Bighorn sheep ecology and other ungulate studies were initiated. ³¹The archeological and historic resources along the length of Big Creek and its major tributaries were documented. ³²Over 30 research projects have been conducted from Taylor Ranch. Significant among them, besides the long-term mountain lion research, has been the work of Greg and Pat Hayward with Professor Oz Garton on boreal owls which provided the first record of boreal owls nesting in Idaho and established them as important ecological indicators of high-elevation forests.

³³During the early '80s, Gary Koehler investigated the ecology of bobcats. During the three years of this study, Koehler and his crew covered immense distances capturing and tracking the radio instrumented bobcats, a distance estimated as the equivalent to traveling to San Francisco and back from Taylor Ranch.

³⁴The Central Idaho Wilderness Act of 1980 established the River-of-No-Return Wilderness of 2.2 million acres surrounding Taylor Ranch and the Big Creek drainage. With the added protection of wilderness classification, and a growing research program, the university made additional commitments. ³⁵In 1982, Jim and Holly Akenson were hired as year-round Taylor Ranch co-managers. Mules and a string of horses were 29 Howard Quigley, Tony Wright, and hounds

- **30 Bighorn sheep**
- 31 Indian house pit excavations

32 Greg Hayward with owl

33 Gary Koehler with bobcat

34 Taylor Ranch and Big Creek drainage

35 Holly Akenson rolling airstrip with mules

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acquired and a National Weather Service recording station was established at the ranch. ³⁶In 1986, an undergraduate student internship was initiated, providing summer opportunities for students to participate in research projects while providing the ranch with much needed assistance. Student interns have helped put up hay and firewood, performed ranch maintenance and trailwork, and learned back-country skills while collecting data on noxious weed invasions, range condition, and bighorn sheep ecology.

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³⁷By this time, the Taylor Ranch field station was attracting national attention. A documentary of research activities at the field station was aired on many public broadcasting stations around the country and the magazine Idaho, The University featured stories on Taylor Ranch. ³⁸During late winter 1987, ABC filmed Dr. Maurice Hornocker and his staff catching a lion near the ranch. Subsequently, this research was featured on "Good Morning America." By the late 1980s summers at the ranch had become very busy with research projects and the intern program. ³⁹Dr. Jim Peek established vegetation plots and transects to monitor vegetation successional changes following removal of domestic livestock grazing and changes in wild ungulate populations the past several decades. Other research, led by Dr. Wayne Minshall of Idaho State University, assessed ecological responses of streams to major wildfires in 1988. ⁴⁰A solar-powered automated meteorological and atmospheric monitoring station was established in cooperation with the Idaho National Engineering ⁴¹International visitors were hosted including Laboratory. delegations interested in wilderness research from South Africa and the Soviet Union. ⁴²In 1990, Dr. Jeff Yeo hosted two

36 Haying with mules

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37 Magazine cover

38 People debarking plane

39 Jim and Pat Peek sampling vegetation

40 Meteorological station

41 Soviet scientists and UI faculty

42 Students sampling

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sections of 12 students, each from San Francisco State University's Wildland Studies Program, utilizing them in vegetation and wolf habitat studies; many additional students were turned away because of wilderness and housing limitations.

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⁴³Initial budgets for operation and maintenance of the Taylor Ranch Wilderness Field Station averaged \$10,000 per year, and slowly climbed to about \$14,000 by 1986. With no research budget, most research was recruited by urging faculty with funding to use the vast wilderness laboratory that was accessible from the ranch. It seemed obvious that a stronger focus on science and more scientific facilities and funding were needed if we were going to achieve our dream of a nationally significant research program to match opportunities in the surrounding wilderness. ⁴⁴A major change was the addition of a building moved from the former Lanham Guest Ranch, seven miles upstream at Cabin Creek. The Lanham Guest Ranch was purchased by the Forest Service in 1974 as part of their effort to buy wilderness inholdings. ⁴⁵The plan was to destroy the cabins on-site to restore wilderness naturalness, but strong sentiments opposing destruction of the attractive buildings had prevented action the past fifteen years, during which time the cabins stood locked and empty. ⁴⁶In 1986, Dean Hendee and college staff, investigated the feasibility of moving one of the buildings to Taylor Ranch. The Forest Service was interested. The initial idea was to dismantle the cabin log by log and float them downstream to Taylor Ranch. Unfortunately, the logs were connected by steel pins and thus entire wall sections would have to be kept together.

43 Aerial view of Taylor Ranch

44 Lanham Ranch cabins

45 Lanham Ranch cabin with horses tied to fence

46 Lanham guest cabin

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⁴⁷The Forest Service and the university then approached the Idaho National Guard to see if they could move the cabin in a training and community service exercise. After inspection by General Manning of the Idaho National Guard and Idaho Governor Andrus, the project was approved and the Forest Service completed and approved an environmental analysis and plan. ⁴⁸During a three-week period in summer 1990, the cabin was disassembled, hauled by mules to the Cabin Creek air strip, and then air lifted to the meadow at Taylor Ranch where it was reconstructed. ⁴⁹The goal was to minimize use of mechanized equipment although some use of power tools to cut spikes and forklift to handle some wall sections was necessary. ⁵⁰Everyone connected with the airlift was concerned about the temporary impact on wilderness solitude and wildlife during the airlift operation. Between June 20 and July 11 there were 58 helicopter or fixed-wing landings associated with the project. ⁵¹When a bull moose trotted from the old Lanham Ranch site at Cabin Creek just as a Forest Service and university team approached for a final inspection, it seemed like a good omen. ⁵²Today, the Cabin Creek site is restored and the new Wilderness Education and Research Laboratory provides classroom, laboratory, kitchen and sleeping quarters in the meadow at Taylor Ranch.

⁵⁵The Taylor Ranch Wilderness Field Station will continue to be a staging area as much as possible for research and education conducted in the surrounding wilderness. Future research and teaching will focus on environmental monitoring and assessment, ⁵⁴response of wilderness ecosystems to natural events such as wildfires, ⁵⁵baseline studies of species and ecosystems, ⁵⁶and comparative studies with managed landscapes. 47 Dismantling of Lanham cabin

48 Mules hauling logs to airstrip at Cabin Creek

49 Fork lift lifting wall section

50 Ray Guse riding with helicopter in background

51 Historic cabin at Cabin Creek after project

52 New lab

53 Current picture of Taylor Ranch

54 Wildfire 55 Juvenile owls

56 Clearcuts

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⁵⁷We want to respect the spirit of wilderness at the field station and we struggle with issues and questions such as: the use of aircraft to support research and teaching activities? ⁵⁸Is it proper to use a chainsaw on the inholding property to cut a winter's wood supply? ⁵⁹And is solar power preferable to a hydro system powered by one of the streams crossing the property to power laboratory equipment and computers? ⁶⁰Even on a private inholding, we need to strike a balance between the spirit of the wilderness and the use of modern scientific techniques to discover her secrets. But where do we draw the line, and still provide support that will attract good scientists and allow them to do competitive work at an affordable cost? ⁶¹We are proud of the impressive list of studies that have been staged out of Taylor Ranch. But it's only a collection of studies, opportunistically implemented by faculty who were interested and had funding. It's not yet a research program. A research program requires base funding and there is a great need for such funding to support wilderness research programs at Taylor Ranch and elsewhere.

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⁶²We need a national wilderness research program. A new wilderness research program, such as the McIntyre-Stennis program that funds forestry research in the nation's land-grant universities by allocating money to states according to their timber inventory and harvest. A new wilderness research program might allocate wilderness research funds to states according to their acreage of classified wilderness. ⁶³We need a wilderness research funding system so that facilities like the Taylor Ranch Wilderness Field Station, and the scientists who go there to study, can achieve their potential for discovering the scientific secrets that wilderness holds. 57 Plane taking off from Taylor Ranch

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58 Hauling firewood with mules

59 Big Creek and met station

60 Taylor Ranch

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61 Greg Hayward climbing tree

62 Panorama of wilderness

63 Dean Hendee and Soviet scientists

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"The history of Taylor Ranch mirrors the evolution of society's view of wilderness. In the early part of this century, Dave Lewis homesteaded the site that is now Taylor Ranch. He supported himself in part by killing mountain lions for bounties subsidized by the federal government. ⁶⁵In the middle of this century at Taylor Ranch, Maurice Hornocker initiated the first major study of mountain lions, funded by private organizations, which put an end to the federally-subsidized bounties paid for killing mountain lions in Idaho. "Now, in the last part of this century, funded by federal, state, and private organizations, we are starting to focus on more than just single species, to focus on whole communities and landscapes; to focus on the wilderness resource. Hopefully, we are on the road to expanded use of wilderness for science and education, to fulfill the dreams of the original authors of the Wilderness System; to meet the goals of the Wilderness Act, and to help make wilderness worth the cost of setting it aside by discovering her secrets.

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64 Dave Lewis, stretched skins, etc.

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65 Marked cougar

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66 Winter scene - Big Creek