

**Population Estimate:** 470 (post season 1996)

**Population Objective:** 500

**Most Recent Hunting Regulations:** 20 licenses 3/4 curl ram

**Current WGFD Managers:** Larry Roop, Mac Black

**JCR Responsibility:** Larry Roop

**Other Contacts:** Shawn Stewart (MDFWP-Red Lodge), Dave Henry (USFS), Jim Oudin (WGFD-ret.)

**Previous Studies:** Steve Martin (1981)

Honess and Frost (1942)

Buechner (1960)

Martin & Stewart (1980)

**Problems:**

**Habitat** -1988 fires - lost some sheep - long term might be good relative to habitat concerns

**Domestic Sheep** - Potential for contact in Line Creek and Bennet Creek (Beartooths)

**Predation** - Predation - in future - wolves?, grizzlies?, mountain lions?

**Genetics** -

**Disease** -

**Migration** - Movement into Montana

**Herbivore Competition** - Some overlap with mountain goats - problem? Competition with cattle in and around the Sunlight Wildlife Habitat Management Area.

**Recreation/Development Encroachment** - Encroachment - K-Z, Crandall, Upper Clark's Fork Valley

**Poor/Inconsistent Classification Data** - Adequate classification data?

**Hunting Related** - Could be "double hunting" - Montana

**Other** -

**Trout Peak (Area 2) (BHS202)****Revision Date: 10/10/97****Population Estimate:** 580 (post season 1996)**Population Objective:** 750**Most Recent Hunting Regulations:** 32 licenses 3/4 curl ram**Current WGFD Managers:** Larry Roop, Mac Black, Craig Sax**JCR Responsibility:** Larry Roop**Other Contacts:** Bernie Spanogle, Dave Henry (USFS), Kevin Hurley (WGFD)**Previous Studies:** Kevin Hurley (1985)**Problems:**

**Habitat** - Off-wilderness needs - Jim Mountain prescribed burn  
Fire would be beneficial in wilderness also

**Domestic Sheep** -

**Predation** -

**Genetics** -

**Disease** - Disease - scabies (1/4 - 1/3 of sheep?)

**Migration** -

**Herbivore Competition** -

**Recreation/Development Encroachment** - N. Fork Highway - potential mitigation, conservation easements, habitat work

Houses, loss of winter range - Logan Mt., Wapiti, Chalk Mt.

**Poor/Inconsistent Classification Data** -

**Hunting Related** -

**Other** -

**Population Estimate:** 1000 (post season 1996)

**Population Objective:** 1000

**Most Recent Hunting Regulations:** 44 licenses 3/4 curl ram

**Current WGFD Managers:** Larry Roop, Craig Sax, Tim Fagan

**JCR Responsibility:** Larry Roop

**Other Contacts:** Dave Henry, Bernie Spanogle (USFS), Kevin Hurley, Scott Smith, Doug McWhirter (WGFD)

**Previous Studies:** Hurley (1985)  
Smith (1988)  
McWhirter (1993)

**Problems:**

- Habitat** - Private land issues - winter range - reliance on improved meadows, valley, ranch, Fenced in holdings in USFS - Land exchange
- CRM - Upper South Fork - USFS initiated
- Weed problems on winter range - "toadflax"
- Tremendous habitat opportunities - limber pine/juniper, S. Fork side - some on N. Fork, but limited.
- Conifer encroachment
- Domestic Sheep** - Potential for domestic sheep on private lands - easement potential?
- Predation** - Predation - wolves - Upper South Fork
- Genetics** -
- Disease** - Disease - scabies
- Migration** -
- Herbivore Competition** - Elk numbers?? South Fork
  - Livestock issues - Ishawooa Hills
- Recreation/Development Encroachment** - Winter range encroachment - Recreation (ice climbing, photographers, wildlife viewers)
  - Worth The Watching - Lots of interest- High profile
- Poor/Inconsistent Classification Data** -
- Hunting Related** -
- Other** - Prospects for trapping - up to 80 sheep

**Population Estimate:** 670 (post season 1996)

**Population Objective:** 900

**Most Recent Hunting Regulations:** 32 licenses any ram

**Current WGFD Managers:** Doug Brimeyer, Bill Long, Cole Thompson, Pat Hnilicka, Tim Fagan, Kevin Hurley

**JCR Responsibility:** Kevin Hurley

**Other Contacts:** Dave Henry (USFS), Garvice Roby (WGFD-ret.)

**Previous Studies:** Hurley (1985)  
Buechner (1960)

**Problems:**

**Habitat** - Wilderness - limited habitat improvement opportunities

Harsh winter conditions - most winter high - limited options

Only habitat opportunities - South Fork

Inholding of private lands also limit potential for improvement

Heavy reliance on Deer Creek/Hawkeye Ranches for wintering-

Acquisitions/easements?

Weeds - toadflax (Area 4)

**Domestic Sheep** -

**Predation** -

**Genetics** -

**Disease** - Winter areas - large number and scattered - Is a plus, re: disease transmission

**Migration** -

**Herbivore Competition** -

**Recreation/Development Encroachment** - Recreational - some problems - limited

**Poor/Inconsistent Classification Data** - Data collection - good last 5 years

**Hunting Related** - Harvest strategies - have changed - any ram

Special closure on Jackson side - problem on Buffalo Plateau

**Other** - Die-off - Spring 1995, wet, heavy snows

Reluctant to trap Area 4 - but some consideration

**Population Estimate:** 1339 (post season 1996)

Three components: Area 5, Badlands (Area 22), Owl Creek Mountains/ Wind River Indian Reservation (OCM/WRIR)

**Population Objective:** 1360

**Most Recent Hunting Regulations:** Area 5-60 licenses any ram, Area 22-4 licenses 3/4 curl ram, OCM/WRIR-8 licenses any ram

**Current WGFD Managers:** ColeThompson, Pat Hnilicka, Tim Fuchs, Jerry Longobardi, Kevin Hurley, Tim Fagan

**JCR Responsibility:** Kevin Hurley

**Other Contacts:** USFWS - Dave Skates, Jeff Kimber, USFS - Joe Hicks, Mark Hinschberger, Dave Henry  
BLM - Sue Oberlie, Tim Stephens, Marian Atkins, Kathy Firchow (formerly USFWS)

**Previous Studies:** Hurley/Firchow (1994)  
Smith (1981)

**Transplant History:**

1970 Transplant - 23 sheep released at Castle Creek -WGFD (1976), Oudin (1996), Hurley (1996)

1973 Transplant - 17 sheep released at the Dennison Place - WGFD (1976), Hurley (1996)

1995 Transplant - 43 sheep released in Wind River Canyon - USFWS (1996), Hurley (1996)

Total - 83 sheep released into herd unit

**Problems: Hunt Area 5**

**Habitat** - Habitat opportunity - on and off USFS - on Inberg-Roy WHMA

**Domestic Sheep** - Livestock - 6 "vacant" domestic sheep allotment - USFS looking to fill these?

**Predation** - Predation - future? - wolves/ no escape cover (Dennison)

Little escape cover on Black Mountain, better escape cover higher

**Genetics** -

**Disease** - Disease - minor, scabies

**Migration** - Reservation - Unoccupied habitat - 40 mile migration lost - from Wind River Canyon to Owl Creek Mtns

**Herbivore Competition** - Wild horses on sheep winter range (WRIR)

**Recreation/Development Encroachment** -

**Poor/Inconsistent Classification Data** -

**Hunting Related** -

**Other** - Unoccupied habitat - 50's-60's - thousands of domestic sheep, slowly coming back in these areas, reintroduction potential

**Problems: Hunt Area 22 (Badlands)**

**Habitat** - Habitat improvement potential high - Wiggins Fork to Badlands  
Private meadows

**Domestic Sheep** -

**Predation** -

**Genetics** -

**(Francis Peak Continued)**

**Disease** - Small "farm" operations - goats?

Recreational goat use - pack animals

**Migration** - Movement between HA 5 and HA 22

**Herbivore Competition** - Elk competition - segregate?

Livestock - indirect conflicts - too much use in some places created elk movement and subsequent competition with sheep

**Recreation/Development Encroachment** -

**Poor/Inconsistent Classification Data** -

**Hunting Related** -

**Other** - I&E use - high potential

**Problems: Wind River Canyon**

**Habitat** - Burn in canyon a plus

**Domestic Sheep** -

**Predation** -

**Genetics** -

**Disease** -

**Migration** -

**Herbivore Competition** -

**Recreation/Development Encroachment** -

**Poor/Inconsistent Classification Data** -

**Hunting Related** -

**Other** - Ultimately include in Francis Peak herd?

Other sites located for transplant

# BIGHORN SHEEP HERD UNIT REVIEW

**Targhee (Area 6) (BHS106)**

**Revision Date: 10/10/97**

**Estimated Population:** 115 (post season 1996)

**Population Objective:** 125

**Most Recent Hunting Regulations:** 4 licenses, 3/4 curl ram

**Current WGFD Managers:** Doug Brimeyer, Steve Kilpatrick, Doug Crawford

**JCR Responsibility:** Doug Brimeyer

**Other Contacts:** Mary Oshner (USFS), Garvice Roby (WGFD-Ret.), Steve Cain (NPS)

**Previous Studies:** Steve Cain (NPS Reports)  
N. Fitzsimmons & S. Buskirk (1992)  
Mike Whitfield (1984)

**Problems:**

**Habitat** - Limited winter range, lack of fire

**Domestic Sheep** - Buffer zone only 3 miles (enough?)

**Predation** -

**Genetics** - Isolated population

**Disease** -

**Migration** -

**Herbivore Competition** -

**Recreation/Development Encroachment** -

**Poor/Inconsistent Classification Data** -

**Hunting Related** - Variable harvest due to land status (Grand Teton National Park)

**Other** - High natural mortalities (GTNP)

**Population Estimate:** 550 (post season 1996)

**Population Objective:** 500

**Most Recent Hunting Regulations:** 20 licenses any sheep

**Current WGFD Managers:** Doug Brimeyer, Gary Fralick, Doug Crawford, Dallas Jenkins

**JCR Responsibility:** Doug Brimeyer

**Other Contacts:** Adrian Villaruz (USFS), Garvice Roby (WGFD-Ret.)

**Previous Studies:**

Honess and Frost (1942)

Les McCann (1956)

Buechner (1960)

**Transplant History:**

1934 Transplant - 20 sheep trapped in Flat Creek, released in Bighorn Mountains - Hurley (1996)

1980 Transplant - 14 sheep released at Stinking Springs - Roby (1980)

these sheep were destined for Darby Mtn., but weather conditions precluded their release there, so they were turned out at Stinking Springs

- 11 sheep were released on Flat Creek

Total - 25 sheep released into herd unit

**Problems:**

**Habitat** - Habitat conditions (Willow Creek), lack of fire

**Domestic Sheep** - Yes, potential for contact on south end of herd unit

**Predation** -

**Genetics** - Scattered, isolated populations

**Disease** - Scabies at Camp Creek

**Migration** -

**Herbivore Competition** - Elk competition

**Recreation/Development Encroachment** - Snow machine disturbance

Encroachment on winter range - Stinking Springs

**Poor/Inconsistent Classification Data** -

**Hunting Related** -

**Other** - Recent overwinter mortality



**Whiskey Mountain (Area 8, 9, 10, 23) (BHS609) RevisionDate:10/10/97**

**Population Estimate:** 850-950 (post season 1996)

**Population Objective:** 1350

**Most Recent Hunting Regulations:** Area 8-4 licenses any ram, Area 9-8 licenses 3/4 curl ram, Area 10-16 licenses 3/4 curl ram, Area 23-8 licenses any ram

**Current WGF D Managers:** Pat Hnilicka, Cole Thompson, Bob Yates, Doug McWhirter, Duke Early, Dan Stroud

**JCR Responsibility:** Pat Hnilicka

**Other Contacts:** Mark Hinschberger, Barb Franklin (USFS), Sue Oberlie (BLM)

**Previous Studies:** Thorne et al. (1976)  
Thorne et al. (1984)  
Ryder et al. (1992)  
Ryder et al. (1994)  
Corruthers GIS Study (date?)  
Hnilicka et al. (1997)

**Transplant History:**

1,894 sheep have been trapped on Whiskey Mountain winter ranges for relocation elsewhere(1949-1995)  
1,878 sheep were released at their respective destinations  
99.2% survival for all sheep relocation efforts spanning a 46 year period

1,489 were released in Wyoming, 389 were released in other states - Hurley (1996)

**Problems:**

**Habitat** - Forage quality?

Mineral quality?

Heavy forage use on portions of winter range (90%+ on some preferred sites)

Very limited winter range in Upper Green River

Some resident (year-round) use by sheep on Torrey Rim and Torrey Creek

**Domestic Sheep** - Domestic on Pinedale side, particularly Baldy Lake & North Fork Allotments

**Predation** -

**Genetics** -

**Disease** - Chronic Disease? Pasturella trehelosi present as of 3/97 in 5 of 9 ewes tested

**Migration** -

**Herbivore Competition** - Elk Competition

**Recreation/Development Encroachment** - Recreation - dogs/people

**Poor/Inconsistent Classification Data** -

**Hunting Related** -

**Other** - Poor lamb production (6th year), resulting in declining population

Tenuous access across Wind River Indian Reservation to portions of winter range (Red Creek)

**Temple Peak (Area 11) (BHS610)****Revision Date: 10/10/97**

**Population Estimate:** 33 (excluding WRIR) (post season 1996)

**Population Objective:** 250

**Most Recent Hunting Regulations:** CLOSED

**Current WGFD Managers:** Tom Ryder, Bob Trebelcock, Chuck Clarke, Doug McWhirter, Tom Christiansen, Allan Round, Dan Stroud, Dennis Almquist

**JCR Responsibility:** Tom Ryder

**Other Contacts:** Bob Lanka, John Emmerich (WGFD), Ken Persson (WGFD-ret.), Jack Welch (BLM-ret.), Barb Franklin (USFS)

**Previous Studies:** Smith (1981)  
Deibert (1994)  
Firchow (1995)  
Ryder and Lanka (1997)

**Transplant History:**

1964 Transplant - 21 sheep released in Sinks Canyon - Ryder & Lanka (1996)  
1965 Transplant - 20 sheep released in Sinks Canyon - Ryder & Lanka (1996)  
1966 Transplant - 18 sheep released in Sinks Canyon - Ryder & Lanka (1996)  
1971 Transplant - 13 sheep released in Cherry Creek - Ryder & Lanka (1996)  
1973 Transplant - 39 sheep released in Cherry Creek - Ryder & Lanka (1996)  
1987 Transplant - 77 sheep released in Sinks Canyon & N. Fk. Popo Agie - Ryder & Lanka (1996)  
1988 Transplant - 47 sheep released in S. Fk. Little Wind River - Firchow (1995)  
1993 Transplant - 42 sheep released in S. Fk. Little Wind River - Firchow (1995)

Total - 277 sheep released into herd unit (including WRIR) - summarized in Hurley (1996)

**Problems:**

**Habitat** - Lack of Fire

**Domestic Sheep** - Past exposure to domestics on winter range

Real potential of co-mingling on summer range west of Continental Divide

**Predation** -

**Genetics** -

**Disease** -

**Migration** - Interrupted migration corridors - conifers

**Herbivore Competition** -

**Recreation/Development Encroachment** - Recreation - (Sinks Canyon/N. Fork/Cherry Crk)

**Poor/Inconsistent Classification Data** - Data difficult to obtain - inconsistent

**Hunting Related** -

**Other** -

**Population Estimate:** 0 (post season 1996)

**Population Objective:** 400

**Most Recent Hunting Regulations:** CLOSED

**Current WGFD Managers:** Tom Ryder, Brad Gibb

**JCR Responsibility:** Tom Ryder

**Other Contacts:** Sue Oberlie (BLM)

**Previous Studies:** Jack Welch (date?)  
L. Kinter (1992)

**Transplant History:**

1944 Transplant - 7 desert bighorns were released at Sweetwater Rocks - Hurley (1996)

1949 Transplant - 7 sheep released at Sweetwater Rocks - WGFD (1950), Kinter et al. (1992)

1950 Transplant - 13 sheep released at Sweetwater Rocks - WGFD (1950), Kinter et al. (1992)

**Problems:**

**Habitat** - Forage - quantity adequate - quality lacking

Water needed

Mostly BLM - some private meadows

**Domestic Sheep** -

**Predation** -

**Genetics** -

**Disease** -

**Migration** -

**Herbivore Competition** -

**Recreation/Development Encroachment** -

**Poor/Inconsistent Classification Data** -

**Hunting Related** -

**Other** - May be more suited to Calif. bighorns?

Landowners - didn't want release, future plans?

Keep on list

**Ferris/Seminole Mountains (Area 17) (BHS615) Revision Date: 10/10/97**

**Population Estimate:** 21 (post season 1996)

**Population Objective:** 300

**Most Recent Hunting Regulations:** CLOSED

**Current WGFD Managers:** Greg Hiatt, Chuck Clarke, Tom Ryder, Travis Cundy

**JCR Responsibility:** Greg Hiatt

**Other Contacts:** Mary Read (BLM),

**Prior Studies:**

Greg Hyatt - (1978)

L. Kinter, G. Stout - (1992)

**Transplant History:**

1958 Transplant - 7 sheep released at Morgan Creek - Hiatt (1978), Kinter et al. (1992)

1959 Transplant - 13 sheep released at Morgan Creek - Hiatt (1978), Kinter et al. (1992)

1967 Transplant - 18 sheep released at Morgan Creek - Hiatt (1978), Kinter et al. (1992)

1978 Transplant - 37 sheep released at Morgan Creek - Hiatt (1978), Kinter et al. (1992)

1980 Transplant - 61 sheep released at Morgan Creek - Hiatt (1980), Kinter et al. (1992)

1985 Transplant - 100 sheep released into Ferris Mtns. - Kinter et al. (1992)

Total - 236 sheep released into herd unit - Summarized in Hurley (1996)

**Problems:**

**Habitat** - Water limiting? (FNAWS - funded guzzler on Ferris Mts - \$2000)

Conifers - fragmentation of avail. sheep habitat

Low elevation

**Domestic Sheep** - Domestic livestock? Sheep?

**Predation** -

**Genetics** -

**Disease** -

**Migration** -

**Herbivore Competition** - Forage competition w/cattle

**Recreation/Development Encroachment** -

**Poor/Inconsistent Classification Data** -

**Hunting Related** -

**Other** -

**Douglas Creek (Area 18) (BHS516)****Revision Date: 10/10/97**

**Population Estimate:** 125 (post season 1996)

**Population Objective:** 350

**Most Recent Hunting Regulations:** 8 licenses, 3/4 curl ram

**Current WGFD Managers:** Steve Loose, Biff Burton, Rick Straw

**JCR Responsibility:** Steve Loose

**Other Contacts:** Larry Apple, Mary Read, Tom Rinkes (BLM), Bill Haley, Rich Guenzel, Gary Brown,  
Joe Bohne, Bill Rudd, Tim Thomas (WGFD)

**Previous Studies:** John Cook (1990)

**Transplant History:**

1970 Transplant - 41 sheep released in Savage Run Wilderness and at A Bar A Ranch - WGFD (1970)  
- Haas (1979)  
- Cook (1990)  
- Hurley (1996)

Total - 41 sheep released into herd unit

**Problems:**

**Habitat** - Conifer encroachment

Spring/summer nutrition/forage quality poor

Heavy use on browse

**Domestic Sheep** - Snowy's - domestic sheep

**Predation** -

**Genetics** -

**Disease** - Chlamydia

**Migration** - Lack of altitudinal migration

**Herbivore Competition** - Cattle grazing, possible competition with elk

**Recreation/Development Encroachment** -

**Poor/Inconsistent Classification Data** - somewhat variable, done incidental to other surveys

**Hunting Related** -

**Other** -

**Population Estimate:** 200 (post season 1996)

**Population Objective:** 500

**Most Recent Hunting Regulations:** 4 licenses, 3/4 curl ram

**Current WGFD Managers:** Mark Zornes, Roger Bredehoff, Rich Guenzel, Rick Straw

**JCR Responsibility:** Mark Zornes

**Other Contacts:** Tim Byers (USFS), Larry Apple, Mary Read (BLM), Joe Bohne (WGFD)

**Previous Studies:** Hengel (unpub)

**Transplant History:**

1964 Transplant - 40 sheep released in North Fork Little Laramie and Pole Draw - WGFD (1964)

- Hengel et al. (1992)

1965 Transplant - 36 sheep released in LaBonte Canyon and N. Fk. Little Laramie River - WGFD (1965)

- Hengel (1992)

1966 Transplant - 21 sheep released in LaBonte Canyon - WGFD (1966), Hengel (1992)

1973 Transplant - 27 sheep released in Duck Creek - WGFD (1973), Hengel (1992)

1982 Transplant - 27 sheep released at Laramie Peak - Rothwell (1982), Hengel (1992)

1989 Transplant - 20 sheep released at Marshall - Bohne (1990), Hengel (1992)

Total - 171 sheep released into herd unit - All transplants summarized by Hurley (1996)

**Problems:**

**Habitat** - Conifer encroachment, lack of fire - particularly around Laramie Peak/Black Mountain/Albany Peak

Water?

Moonshine Peak - 1996 (N. of Tunnel Rd)

'80's - Burn east of Split Rock

Forage quality - late summer?

**Domestic Sheep** -

**Predation** - High lion population - potential for impacts to sheep

**Genetics** - Perhaps - Isolated herds - genetics over time - small herds - some interchange occurs

**Disease** -

**Migration** -

**Herbivore Competition** - Livestock use (cattle) - riparian areas - Duck Creek

**Recreation/Development Encroachment** -

**Poor/Inconsistent Classification Data** -

**Hunting Related** -

**Other** -

**Encampment (Area 21) (BHS 519)****Revision Date: 10/10/97****Population Estimate:** 50 (post season 1996)**Population Objective:** 200**Most Recent Hunting Regulations:** CLOSED**Current WGFD Managers:** Steve Loose, Biff Burton, Rick Straw**JCR Responsibility:** Steve Loose**Other Contacts:** Gary Brown, Joe Bohne, Bill Rudd, Tin Thomas (WGFD), Tom Rinkes, Larry Apple (BLM)**Previous Studies:** Haas (1979)  
Arnett (1990)  
Cook (1990)**Transplant History:**

1976 Transplant - 52 sheep released in Encampment River Canyon - Haas (1979), Cook (1990)

1977 Transplant - 17 sheep released in Encampment River Canyon - Haas (1979), Cook (1990)

1989 Transplant - 19 sheep released in Encampment River Canyon - Cook (1990)

1992 - 1 adult ram was released on Soldier Creek. This ram came from near Alcova and was last seen on Hallick Ridge just south of I-80.

Total - 89 sheep released into herd unit - All transplants summarized in Hurley (1996)

**Problems:****Habitat** - Conifer encroachment

Late summer nutrition/forage quality poor

Heavy use on browse

**Domestic Sheep** - Snowy's - domestic sheep, More domestics in Sierra Madres-higher potential for contact**Predation** -**Genetics** -**Disease** - Chlamydia**Migration** - Lack of altitudinal migration**Herbivore Competition** - Cattle grazing on both sides of the Encampment River Canyon - also large elk numbers which graze on sheep habitat (spring /summer/fall and winter range)**Recreation/Development Encroachment** -**Poor/Inconsistent Classification Data** - Classified incidental to other surveys**Hunting Related** -**Other** -

**Darby Mountain (Area 24) (BHS121)****Revision Date: 10/10/97**

**Population Estimate:** 156 (post season 1996)

**Population Objective:** 150

**Most Recent Hunting Regulations:** 4 licenses 3/4 curl ram (CLOSED for 1998)

**Current WGFD Managers:** Brad Hovinga, Gary Fralick, Dan Stroud

**JCR Responsibility:** Gary Fralick

**Other Contacts:** Bernie Holz (WGFD), Chuck Thornton (WGFD-ret.), R. Borrego (USFS)

**Previous Studies:** S. Smith, Moody, Fralick/Stroud (JCR's)

**Transplant History:**

1981 Transplant - 35 sheep released on Mt. Darby - Johnson (1981), Hurley (1996)

1987 Transplant - 25 sheep released on Fish Creek Mtn. - Wollrab (1987), Hurley (1996)

Total - 60 sheep released into herd unit

**Problems:**

**Habitat** - Conifer encroachment, burn plans to treat avalanche chutes

**Domestic Sheep** - Yes, domestics have been observed running with bighorn ewe/lamb groups

**Predation** -

**Genetics** -

**Disease** -

**Migration** - Interrupted migration corridors, conifer encroachment

**Herbivore Competition** -

**Recreation/Development Encroachment** -

**Poor/Inconsistent Classification Data** - Data is difficult to obtain, inconsistent

**Hunting Related** -

**Other** -



**Shell Canyon, Middle Fork Powder, Devils Canyon**

**Population Estimate:** 35 (post season 1996)

**Current WGFD Managers:** - Tom Easterly, Bill Robertson, Bert Jellison

**Other Contacts:** Ann Blankenship (USFS)

**Previous Studies:** Kevin Coates (1990) - Bighorn Canyon  
Lee Hughes - GIS (current - unpub)  
Amber Long - (1980) Middle Fork of Powder  
Trish Sweanor (1996) - NBS Evaluation of Bighorn Canyon

**Transplant History:**

1934 Transplant - 20 sheep released into Paintrock Canyon  
1959 Transplant - 4 sheep released in Paintrock Canyon - Stelter (1983)  
1963 Transplant - 21 sheep released in Middle Crazy Woman Creek - WGFD (1962)  
1964 Transplant - 18 sheep released in Middle Crazy Woman Creek - WGFD (1963)  
1965 Transplant - 27 sheep released in Paintrock Canyon - Stelter (1983)  
1966 Transplant - 18 sheep released in Paintrock Canyon - Stelter (1983)  
1973 Transplant - 39 sheep released in Porcupine Creek - WGFD (1973) Coates et al. 1990  
1974 Transplant - 60 sheep released in Middle Fork Powder River - Long (1980)  
1976 Transplant - 48 sheep released in Middle Fork Powder River - Long (1980)  
1978 Transplant - 19 sheep released in Middle Fork Powder River - Long (1980)  
1980 Transplant - 11 sheep released in Middle Fork Powder River - Long (1980)  
1992 Transplant - 48 sheep released in Shell Canyon - Easterly (1996)  
1993 Transplant - 28 sheep released in Shell Canyon - Easterly (1996)  
1994 Transplant - 35 sheep released in Shell Canyon - Easterly (1996)

Total - 396 sheep released into herd unit - All transplants summarized in Hurley (1996)

**Problems:**

**Habitat** - Conifer encroachment  
**Domestic Sheep** - domestic sheep/disease (not documented) throughout  
Bighorns  
**Predation** - Mortality high - predation in Shell Canyon  
**Genetics** -  
**Disease** -  
**Migration** -  
**Herbivore Competition** -  
**Recreation/Development Encroachment** - Mortality high - roads  
**Poor/Inconsistent Classification Data** -  
**Hunting Related** -  
**Other** - 13 different transplant projects over 60 years - none successful