

WILD RYE
bohawehani****

Many members of the *Elymus* genus are used for food and tools. These grasses are common and abundant throughout INEEL.



GUM WEED
sanaka bada****

Grindelia squarrosa is used for medicine. This flower is common in disturbed areas throughout INEEL.



SAGEBRUSH
be ho ve**
saw wah be*

The genus *Artemisia* is used for tools and medicine. This genus is common and abundant throughout INEEL.



WOOD'S ROSE
tsiemb, tsiabe***

Rosa woodsii is used for multiple purposes. It is used as food, for smoking, for medicine, and in rituals. This rose is common and abundant along the Big Lost River and at Big Southern Butte.



COYOTE TOBACCO
buhibahu***

Nicotiana attenuata is used for smoking and medicine. It is uncommon but can be found along the Big Lost River.



WILLOW
seheebi***

The *Salix* genus is used for medicine. These small trees are common in moist areas throughout INEEL.



GOOSEBERRY
washibo go'mbi***

Many members of the *Ribes* genus are used for food. These shrubs are common and grow scattered throughout INEEL.



SUNFLOWER
'ake***

Some members of the genus *Helianthus* are used for food and medicine. These flowers are common along INEEL roadsides.



THISTLE
doyaba'ke***

Some members of the genus *Cirsium* are gathered for food. They are commonly found scattered throughout INEEL.



PLANTAIN
bia'sonip**
ba ba sh ea cah*

Some members of the genus *Plantago* are used for food and medicine. They are uncommon on INEEL.



LILY
sogo, sigobi***

Several members of the *Calochortus* genus are gathered for food. They are commonly found on the buttes of INEEL.



JUNIPER
waapi***

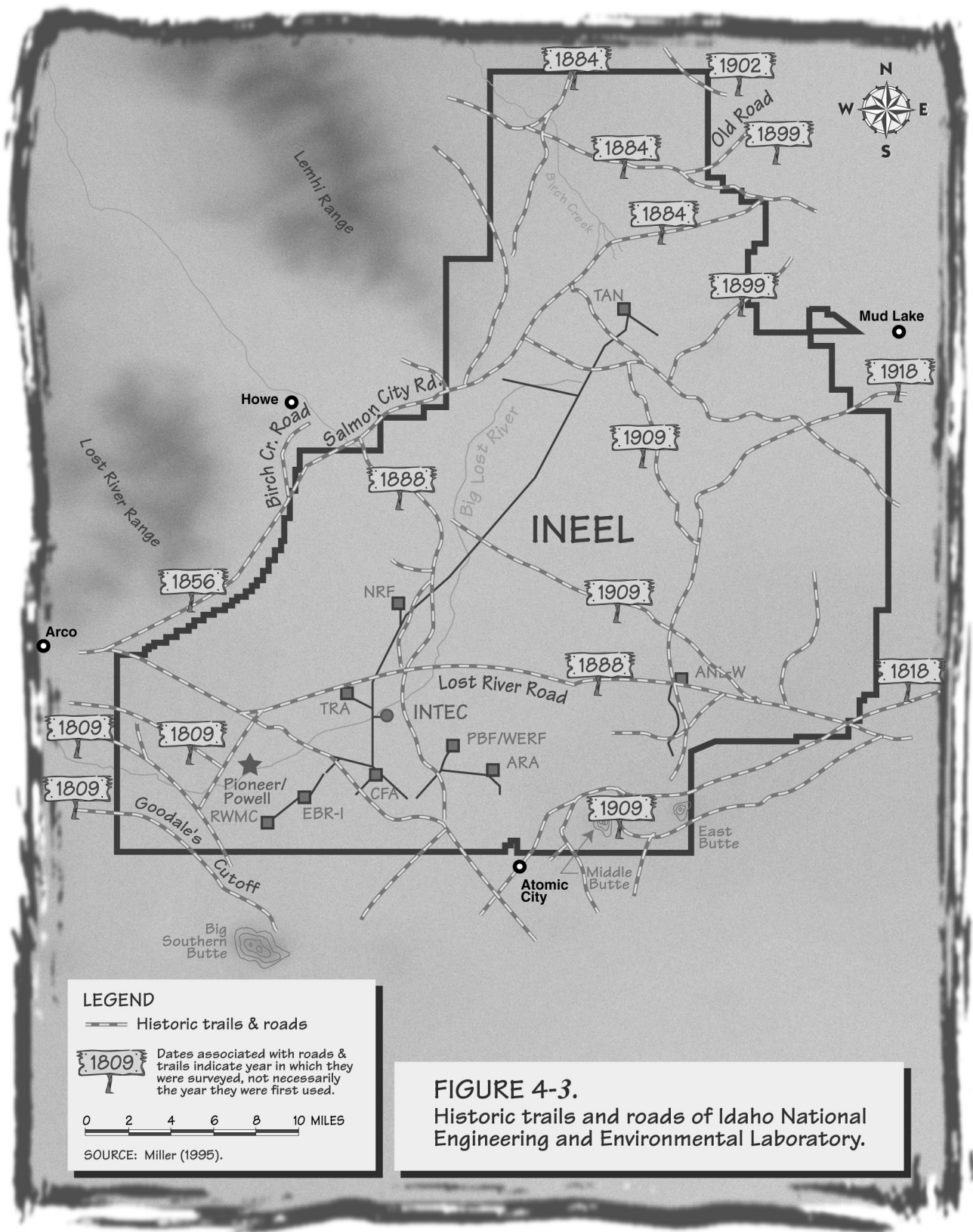
The genus *Juniperus* is used for food, tools, and medicine. It is common on parts of the INEEL.



LEGEND

- * = Bannock plant name
- ** = Shoshone plant name
- *** = plant name shared by both cultures

FIGURE 4-2. (2 of 2)
Plants used by the Shoshone-Bannock located on or near INEEL.



Historic trails on INEEL became important stage and freight routes in the late 1800s to support mining boomtowns in central Idaho. Enterprising freight companies also established several new trails across INEEL. Freshwater springs at Big Southern Butte were an important stop for stage and freight lines. The completion of the Oregon short line railroad between Blackfoot and Arco in 1901 eventually made stage and freight lines obsolete (Miller 1995).

The INEEL includes historic sites associated with attempts to homestead and farm along the Big Lost River around the turn of the century. The Cary Land Act of 1894 and the Desert Reclamation Act of 1902 provided land and federal funding to develop irrigation systems in an effort to encourage homesteading. The Big Lost River Irrigation Project included a tract of land in the south-central portion of INEEL. However, the irrigation system was not able to deliver sufficient water and many of the small homesteads failed (Miller 1995).

Two historic sites near INTEC are representative of this period. One site contains a dugout shelter and a variety of domestic artifacts, and the other is a small historic dump that may be associated with the dugout shelter. Both these sites are potentially eligible for listing in the National Register of Historic Places. A third historic resource near INTEC is an isolated artifact and is considered ineligible for the National Register of Historic Places (Pace 1998).

The desert environment of INEEL saw little activity after the homestead period until World War II, when the U.S. Navy used what is now the Central Facilities Area to test-fire naval guns. INEEL lands were also used as a bombing range by the U.S. Army Air Corps during the war (Miller 1995).

In 1949, the National Reactor Testing Station, later to become INEEL, was established by the Federal government. INEEL has played a vital role in the development of nuclear power, with 52 “first of a kind” reactors constructed since 1949. Several INEEL historic sites help to document the early development of nuclear power and include the Experimental Breeder Reactor-I located near the Radioactive Waste Management Complex; the Materials Test Reactor located at the Test Reactor Area; S1W (Submarine, 1st

Generation, Westinghouse), A1W (Aircraft, 1st Generation, Westinghouse), and S5G (Submarine, 5th Generation, General Electric) prototype reactor plants at the Naval Reactors Facility; and many other support facilities (Miller 1995).

INTEC, originally named the Idaho Chemical Processing Plant, was one of the first four facilities constructed at INEEL in the 1950s. INTEC played a key role in the early development of processes and facilities for managing nuclear fuels and wastes. Among the “first in the world” accomplishments at INTEC *are* the reprocessing of highly enriched pure uranium on a production scale and solidification (calcination) of liquid HLW on both plant and production scales. Historic sites important to U.S. nuclear development at INTEC include 38 buildings potentially eligible for listing in the National Register of Historic Places. These eligibility determinations have been reviewed by the State Historic Preservation Office (Braun 1998). Table 4-7 lists INTEC buildings and structures identified as potentially eligible for listing on the National Register of Historic Places.

Six INTEC structures proposed for demolition or modification have undergone State Historic Preservation Office reviews, and all were determined to be eligible for listing in the National Register of Historic Places. These structures include the Waste Calciner Facility (CPP-633), the two monitoring stations (CPP-709 and CPP-734), the Radium-Lanthanum Process Off-Gas Blower Room (CPP-631), the Underwater Fuel Receiving and Storage Building (CPP-603), and the CPP-603 Basin Sludge Tank Control House (CPP-648). Memoranda of Agreement with the State Historic Preservation Office are in place to ensure that any adverse impacts from alteration or demolition of these facilities are mitigated (Braun 1998).

The historic archaeological record at INEEL is important to descendants of pioneers who settled in the Eastern Snake River Plain, as well as to current and former DOE and INEEL employees and their families who played a role in the development of nuclear science and technology. The role of INEEL lands and facilities in national, regional, and local history continues to influence the cultural environment in eastern Idaho communities.

Affected Environment

Table 4-7. INTEC buildings and structures potentially eligible for listing in the National Register of Historic Places.

	Building	Year built
CPP 601	Fuel Processing Building	1953
CPP 602	Laboratory and Office Building	1953
CPP 603	Fuel Receiving and Storage Building	1951
CPP 604	Waste Treatment Building	1953
CPP 605	Blower Building	1953
CPP 606	Service Building (Power House)	1953
CPP 608	Storage/Butler Building	1953
CPP 611	Pumphouse Deep Well Pump #1	1953
CPP 612	Pumphouse Deep Well Pump #2	1953
CPP 613	Substation #10	1953
CPP 616	Sewage Treatment Plant/Compressor	1953
CPP 617	Storage/Butler Building	1950s
CPP 619	Waste Control House	1955
CPP 620	Chemical Engineering Laboratory/High Bay Facility	1968
CPP 621	Chemical Storage Pumphouse	1955
CPP 627	Remote Analytical Facility/Hot Chemical Laboratory	1955
CPP 628	Waste Storage Control House	1953
CPP 630	Safety and Spectrometry	1956
CPP 631	Inactive/L-Cell Off-Gas Blower Room	1957
CPP 633	Waste Calcining Facility	1960
CPP 634	Waste Storage Pipe Manifold Building (WM-185)	1958
CPP 635	Waste Storage Pipe Manifold Building (WM-187/188)	1960
CPP 636	Waste Storage Pipe Manifold Building (WM-189/190)	1965
CPP 637	Process Improvement Facility/Office/Laboratories	1959
CPP 638	Waste Station (WM-180) Shielded Tank Transfer Building	1968
CPP 639	Waste Calcining Facility Blower Building	1962
CPP 640	Headend Process Plant	1961
CPP 641	Westside Waste Holdup Tank Pumphouse	1961
CPP 642	Hot Waste Pumphouse and Pit	1958
CPP 646	Instrumentation Building-Bin Set 2	1966
CPP 651	Unirradiated Fuels Storage Facility ^a	1975
CPP 659	New Waste Calcining Facility and Substation #50 ^a	1978
CPP 666	Fluorinel Dissolution and Fuel Storage Facility; Fluorinel Dissolution Process Facility; Fuel Storage Area ^a	1978
CPP 684	Remote Analytical Laboratory ^a	1985
CPP 691	Fuel Processing Restoration Building ^a	1993

a. These buildings need to be reassessed with the State Historic Preservation Office.

4.4.6 NATIVE AMERICAN AND EUROAMERICAN INTERACTIONS

The influence of Euroamerican culture and loss of aboriginal territory and reservation land severely impacted the aboriginal subsistence cultures of the Shoshone and Bannock peoples. The Shoshone and Bannock cultures were initially affected by European colonization of the Americas through the introduction of the horse and subsequent migration of Euroamerican settlers into aboriginal territory. The horse brought profound changes to the Shoshone and Bannock cultures, including increased Plains Indian cultural influences. Settlers began establishing homesteads in the valleys of southeastern Idaho in the 1860s, increasing the conflicts with aboriginal people and providing the impetus for treaty-making by the Federal government (Murphy and Murphy 1986). The Fort Bridger Treaty of 1868 and associated Executive Orders designated the Fort Hall Reservation for mixed bands of Shoshone and Bannock people. A separate reservation established for the Lemhi Shoshone was closed in 1907, and the Indians were forced to migrate across the area now occupied by INEEL to Fort Hall. The Federal government attempted to convert the traditional semi-nomadic subsistence lifestyle of the Shoshone and Bannock to one based on farming. These efforts were hampered by a lack of water, and early 20th century irrigation projects provided little relief, as they mainly benefited non-Indians (Murphy and Murphy 1986).

The original Fort Hall Reservation, consisting of 1,800,000 acres, has been reduced to approximately 544,000 acres through a series of cessions to accommodate the Union Pacific Railroad and the growing city of Pocatello. Other developments, including the flooding of portions of the Snake River Bottoms by the construction of the American Falls Reservoir, have also reduced the Shoshone-Bannock land base (Murphy and Murphy 1986).

The creation of INEEL also had an impact on the Shoshone-Bannock subsistence culture. Land withdrawals initiated by the U.S. Navy during World War II and continued by the Atomic Energy Commission during the Cold War all but eliminated Tribal access to traditional and sacred

areas until recent years. In addition, development of facilities at INEEL over the past 50 years has impacted cultural resources of importance to the Tribes, including traditional and sacred areas as well as artifacts.

4.4.7 CONTEMPORARY CULTURAL PRACTICES AND RESOURCE MANAGEMENT

The efforts of the Shoshone-Bannock Tribes to maintain and revitalize their traditional culture are dependent on having continuing access to aboriginal lands, including some areas on INEEL. DOE accommodates Tribal member access to areas on INEEL for subsistence and religious uses. Tribal members continue to hunt big game, gather plant materials, and practice religious ceremonies in traditional areas that are accessible on public lands adjacent to INEEL. In this respect, INEEL continues to serve as a travel corridor for aboriginal people as it has for centuries, although traditional routes have changed due to INEEL access restrictions. DOE recognizes the unique interest the Shoshone-Bannock Tribes have in the management of INEEL resources and continues to consult with the Tribes in a government-to-government relationship.

The maintenance of pristine environmental conditions, including native plant communities and habitats, natural topography, and undisturbed vistas, is critical to continued viability of the Shoshone-Bannock culture. Contamination from past and ongoing operations at INEEL has the potential to affect plants, animals, and other resources that tribal members continue to use. Excavation and construction associated with environmental restoration and waste management activities also have the potential to disturb archaeological resources as well as plant communities and habitats. Possible impacts associated with hazardous and radioactive waste shipments from INEEL through the Fort Hall Reservation are also a concern to the Tribes. The Shoshone-Bannock Tribes will continue to monitor these potential impacts because INEEL and surrounding lands will continue to play a key role in maintaining the Shoshone-Bannock cultural identity.