INTERAGENCY GRIZZLY BEAR COMITTEE CERTIFIED BEAR RESISTANT PRODUCTS

Background

In 1989, the Interagency Grizzly Bear Committee (IGBC) published minimum design and structural standards, inspection and testing methodology for BEAR RESISTANT CONTAINERS. To structure the testing methodology, the USFS Missoula Technical Development Center (MTDC) designed an impact-testing machine that closely simulates the pressure a bear can exert on a container. This information formed the basis for the courtesy inspections of commercially produced and personal use (built by an individual for personal use or by family and friends) containers designed to properly store food and other attractants in bear country.

The inspection and testing of containers for bear resistance and user compatibility is an ongoing process. We continue to refine test procedures as new products and materials are developed. Since 1989, our approach has been to utilize bears whenever possible to help establish engineering standards based on "bear testing" of containers. Once initial field tests are performed with bear(s) then MTDC seeks to duplicate pressures, strengths and leverages with engineering measurements and standards. MTDC has developed a penetrometer that is used to test the puncture strength of various containers and simulates the pressure from a grizzly bear canine or claw.

To receive the courtesy IGBC certification, **commercially available products intended for use on public lands where food storage is required** are initially evaluated at the Forest Service facility in Missoula, Montana or Cody, Wyoming. This evaluation includes inspection of materials and construction as well as an impact test and a penetrometer test as necessary. Some products require a live bear test at the Grizzly Bear and Wolf Discovery Center in West Yellowstone. Products that are certified by the USFS as "bear resistant" and approved for use on public lands where food storage is required receive a letter that verifies the specifications necessary to be considered bear resistant. Some products receive an individually numbered IGBC decal and a receipt of certification. However, more recently, most commercially available products do not require an individually numbered IGBC decal.

Commercially available products intended for use only on private lands and public lands where food storage is not required are visually inspected at the Grizzly Bear and Wolf Discovery Center in West Yellowstone, Montana and then tested by live bears at this facility. Products that pass the test are given a star rating of 1 to 3 based on the products performance with the live bears. Because food storage is not required on private lands and some public lands, products are rated primarily to give the purchaser a range of costs and quality of product.

A product must have a 4 star rating or higher to be used on public lands where food storage is required. The 4 and 5 star ratings are determined by authorized Forest Service inspectors and require that the product be considered low maintenance and user friendly. A 5 star product must meet requirements under the Americans with Disabilities Act. Not all products approved for use on public lands with food storage requirements are star rated. At this time, only large containers

such as food storage lockers and garbage containers receive a star rating. However, these smaller containers must survive at least 60 minutes with the captive bear test, pass other engineering tests, and be considered user friendly and low maintenance.

Courtesy inspection of **containers that are built for personal use only** can be completed in several Forest Service offices in western Montana, southeastern Idaho and western Wyoming. Individuals can construct their own containers based on designs provided by the USFS or other sources. These "personal use" containers that pass the courtesy inspection will each receive an individually numbered IGBC decal and inspection receipt. Contact your local Forest Service office in Montana, Wyoming, or Idaho for additional information or one of the contacts listed on the following page.

The document describing the testing process in detail is available on the IGBC website.

<u>Please Note</u>: IGBC certified containers are one of the methods available to meet food storage regulations on National Forests in the Yellowstone Grizzly Bear Ecosystem and Northern Continental Divide Grizzly Bear Ecosystem. When you are in Yellowstone, Grand Teton or Glacier National Parks, check their regulations for food storage requirements and methods. Electric fences are authorized in some ecosystems and under certain conditions. Contact your local Forest or Park office for more details on the use of electric fences.

Maintenance of Containers

It is very important to check your containers to make certain that latches continue to close tightly and are not broken or malfunctioning. Field use of containers can cause stresses and impacts that can damage latches, hinges, seams, etc.

Containers that are certified "bear resistant" need to have all the latches (catches, fasteners, etc.) operating properly to remain bear resistant. If a latch becomes loose or broken, contact the manufacturer for replacement parts or advice on repairing the damage.

It is also important to keep the containers clean and as free from odors as possible.

Approved Containers

There are numerous manufacturers marketing products that they claim are bear resistant. Their website may even say they have been tested by the U.S. Forest Service or the IGBC. However, they may not have passed the test. Make sure the product you are purchasing for use on public lands in grizzly bear country where food storage is required is on the following list. These are the only commercially available products approved for this use in the lower 48 states. Similarly, the only products that have passed the IGBC test for use on private lands are listed on the Living with Wildlife Foundation website www.lwwf.org.

Electric Fencing

There are two different fence systems that have been tested by Missoula Technical Development Center for use in keeping food and other attractants unavailable to bears. Those fence systems are listed in this document

NCDE 7-Strand Electric Fence

The 7-strand electric fence (MTDC Publication #9923-2321) has been used in the Northern Continental Divide Ecosystem (NCDE) since 1999 and is listed as an acceptable food storage method in the food storage order for the NCDE. This fence is not listed as an approved food storage device in the Greater Yellowstone Ecosystem (GYE). However, it can be used under special approval by the Forest Supervisor in most forests in the GYE. This fence has applicability in situations such as base outfitter camps with a permitted location on the National Forest or beehives on private land where the fence is typically in place for several days or weeks.

Portable Electric Fence

IGBC has now endorsed the portable electric fence standards as described in the MTDC Technical Note #0723-2305-MTDC entitled, "Specifications for portable electric fence systems as a potential alternative for food storage" as an effective method of "bear resistant storage" in grizzly bear ecosystems. The IGBC recommends going forth with the portable electric fence (as described in the Technical note) for storing food on USFS lands in the NCDE and GYE with food storage orders.

IGBC believes this is an adequate and appropriate, temporary food storage method and agrees to continue to evaluate and test the portable electric fence with annual updates to the Committee. IGBC encourages line officers to utilize this new method, as they deem appropriate and **to utilize it under written authorization of line officers to ensure proper use.**

This IGBC approval of portable electric fence as specified, does not alter or replace the 7-strand electric fence (MTDC Publication #9923-2321) that has been used in the Northern Continental Divide Ecosystem (NCDE) since 1999.

Contacts

For additional information or testing of products, contact:

Dexter Meadows, San Dimas Technical Development Center, 909-599-1267, dmeadows@fs.fed.us **Marti Willbee,** San Dimas Technical Development Center, 909-599-1267, mwillbee@fs.fed.us **Andy Trent**, Missoula Technical Development Center, 406-329-3912, atrent@fs.fed.us **Andy Pils**, Shoshone National Forest, Cody, WY. 307-578-5216, apils@fs.fed.us **Scott Jackson,** U.S. Forest Service, Missoula, MT. 406-329-3664, sjackson@fs.fed.us

"BEAR RESISTANT" PRODUCTS CERTIFIED BY THE INTERAGENCY GRIZZLY BEAR COMMITTEE FOR USE ON PUBLIC LANDS WHERE FOOD STORAGE IS REQUIRED

The following companies produce certain containers that have been approved and certified as "bear resistant" through the Interagency Grizzly Bear Committee's Testing Methodology. Some of the commercially produced containers that are determined to be "bear resistant" receive an individually numbered IGBC decal and inspection receipt. Large containers are given a star rating. A 4 star rating is the minimum rating required for use on public lands where food storage is required. A 5 star rating means the products meets the requirements of the Americans with Disabilities Act. Containers recommended for use on private lands and in areas where food storage is not required (3 star rating or less) can be found at <u>www.lwwf.org.</u>

This commercial product list and list of suppliers is for information only and does not imply any endorsement of one product or source over another. Products are generally arranged in the order in which they were tested and approved. Photos are not available for all products.

SMALL CONTAINERS

Garcia Machine

14097 Avenue 272 Visalia, CA 93292 559-732-3785 http://www.backpackerscache.com



Backpackers Cache Model 812 (new)



Older version

Riley Stove Company P.O. Box 8117 Townsond MT 50644

Townsend, MT 59644 406-266-5525

> Grain Storage Container Food Storage Container Insulated Cooler



Counter Assault 120 Industry Court, Kalispell, MT 59901-7991 Phone: 406-257-4740 or 800-695-3394 FAX: 406-257-6674 http://www.counterassault.com



The Bear Keg

BearVault 866-301-3442 <u>http://www.bearvault.com</u> *BV250 Solo, BV300, BV350 Solo, BV400, BV450 Solo, and BV500*



BV500



BV450 SOLO

The Bare Boxer Golf City Products 9614 Cozycraft Ave. Suite D Chatsworth, CA 91311 http://www.bareboxer.com/

Contender Model 101 and Champ Model 202



Bear Boxer 101 type lid on Garcia Backpacker Cache TM

Wind River Products

#4 Absaroka Court	Sand Creek Lane
Dubois, WY 82513	Alcova, WY 82620
307-455-2464	307-267-3879

Backpack Container/Small Pannier



World Safety Products 2270 South Service Road West Oakville, ON, L6L 5M9 888-847-7190 http://www.worldsafetyproducts.com Models 1690, 1661 and BR1600 with modified metal reinforced lid.

95, 65 and 30 gallon Overpack Plastic Drums





Vernon Matthews

14117 Meadow Ln. Lytle Creek, CA 92358 909-880-2146 Greif Bros Steel Drums Part #s: OH10-1R, OH8-1R 10 and 8 gal. Drums





Missoula Technical Development Center 5785 Highway 10 W Missoula, MT 59808 406-329-3900 <u>http://www.fs.fed.us/t-d/</u> username: t-d: password: t-d

Modifications to 50 Caliber Ammo Box

Three 7.5 inch long pieces of bar channel (1" with 1/2" legs) are riveted with 4 rivets each to the inside of the lid with 3/16" diameter and .375 inch (longer may be better) grip all steel pop rivets. The bar channel piece ends are ground at a beveled angle to allow the lid to fit on the box and the top edges of the sides of the box to slide into place in the rubber gasket on the lid. A ubolt is attached to each end of the box by drilling holes and bolting on the inside. A carabiner must be clipped through the built to be bear resistant. This modification supersedes the modification for a 50 caliber ammo box presented in USDA Forest Service, Bear Resistant Containers – Minimum Design and Structural Standards: Inspection and Testing Methodology - 1989, Interagency Grizzly Bear Committee. The modification presented in that publication did not have the bar channel riveted to the lid. The bar channel is necessary for the ammo can to be considered bear resistant.



Modifications to Military Medical Box

We have two modified versions of the box, and both have been tested and approved. One has a hinge and two latches; the other has no hinge and four latches. The rubber seal needs to remain in place. See Publ. # 9623-2325 MTDC.



UDAP Industries Inc. 1703 Waterline Road Butte, MT 59701 (406) 494-9292



"No Fed Bear" Canister



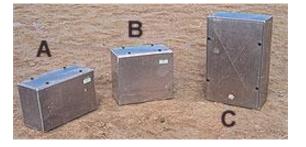
Aluminum Canister

Wes Mauz 2227 County Road 214 Silt, Colorado 81652 303-908-7383

PANNIERS and BOXES

LMI Welding, Inc.

PO Box 772 Cutbank, MT 59427 (Fax) 406-337-3023 406-337-3021 800-345-5623 http://www.lmiwelding.com Various aluminum panniers



Salem Tent and Awning

280 Wallace Road NW P.O. Box 5274 Salem, Oregon 97304 503-363-4788 800-892-8659 http://www.salemtent.com *Model HBR*

Wind River Products

#4 Absaroka Court Sand Creek Lane
Dubois, WY 82513 Alcova, WY 82620
307-455-2464 307-267-3879
Plastic Storage Pannier
Plastic Kitchen Pannier

Wyoming Outdoor Industries, Inc.

1231 13th Street Cody, WY 82414 800-725-6853 or 307-527-6449 (fax) 307-527-7508 http://www.wyomingoutdoor.com Aluminum Storage Pannier Regular and SlimLine

Aluminum Storage Pannier Regular and SlimLin Aluminum Kitchen Pannier

Wyoming Outdoor Industries products can also Be purchased at: **Sonaoma Mountain Pack Station** 244 N. Main Spanish Fork, UT 84660 801-794-2082







Buckstich Canvas and Leather 1107 Sheridan Avenue Cody, WY 82414 307-587-4426 800-268-442 http://www.buckstitchcanvas.com





Aluminum Kitchen Pannier Aluminum Storage Pannier

Kanz Outdoors LLC P.O. Box 280388 Northridge, CA 91328-0388 818-894-6589 - phone 818-698-6529 - fax hkanz@kanzoutdoors.com- email http://www.kanzoutdoors.com





Field Pantry P120

Robertson Enterprises P.O. Box 1711 Cody, WY 82414

307-587-2925 email: RE@tritel.net



Mountaineer Grain Pannier



Mountaineer Camp Kitchen



Mountaineer Mule Pannier



Mountaineer Storage /Cooler Pannier



Collapsible Aluminum Bear Box

Teton Welding

PO Box 976 66 Airport Road Choteau, MT 59422 406-466-2124

Metalworks of Montana

109 North California Missoula, MT 59801 406-728- 5070

Decarteret Pack Equipment

30547 Mehrten Drive Exeter, CA 93221 559-592-2878

Ben Notti/Marshall Ridenour

1029 Terrace View Drive Alberton, MT 59820 Aluminum Panniers

Aluminum Panniers

Aluminum Panniers

Aluminum Panniers

Koffler Boats, Inc. 90017 Green Hill Road Eugene, OR 97402 541-688-6093 http://www.kofflerboats.com 3 models of bear resistant boxes/panniers

Columbia Construction, Inc. 455 4th Ave. E.N. Columbia Falls, MT 59912 406-892-3856

Howling Wind Welding Steve Kirko

14 Vista Drive Riverton, WY 307-856-3143

Bob Skorz

230 Aspen Way Rock Springs, WY 82901 307-382-8475 *Plastic Kitchen Pannier*

Ziegel Engineering

2108 Lomina Ave Long Beach, CA 90815-3216 562-596-9481

Ziegel Aluminum Boxes WD5 and WD6

Padlock bolt through both latches required to be considered bear resistant.



Aluminum Panniers



Aluminum Storage Pannier





Jerry Kawasaki P.O. Box 38 Gallatin Gateway, MT 59730 406-763-4432 http://www.bearcountrycontainers.com Aluminum panniers model #'s SFO, HFO and HTL



HTL



SFO



HFO

Outfitters Pack Station 2070 W. Broadway Street Idaho Falls, ID 83402 800-657-2644 <u>http://www.outfitterspackstation.com</u> *Plastic Pannier*

Evans Feed and Livestock Supply 24148 Robertson Blvd. Chowchilla, CA 93610 559-665-7891 *Plastic Pannier/Bear Box*

Ron Terrill 13605 Sapphire Dr. Lolo, MT 59857 *Aluminum Kitchen Pannier*







Greenlee Mobile Storage Chest – Model 2448

Available at Home Depot in Billings Other models of Greenlee may pass the bear resistant test, this is the only model tested to date. Specifics on the model 2448 chest can be found at the following web site: http://www.mygreenlee.com/Products/main.shtml?p_search= 2448&greenlee_category_id=7&portalProcess_2= showGreenleeProductTemplate&upc_number=23273



Outfitters Supply, Inc – TrailMax Pack Panniers

Item # WPA500 7373 US Hwy 2 E Columbia Falls, MT 59912 (406) 892-4234 Office (406) 892-4234 Fax www.outfitterssupply.com





COOLERS and DRY BOXES

Bear Aware/Tee-N-Jay Mfg. 9145 Glenoaks Blvd. Sun Valley, CA 91352 818-504-3515 *Model #281816DRY – 28" Large Dry Box*



Colorado River and Trails Expeditions Inc. P.O. Box 57575 Salt Lake City, UT 84157 801-261-1789 800-253-7328 http://www.crateinc.com

Rafting Dry Box





To be considered bear resistant the box must have the attached SLIC pin or similar mechanism on all sides except the hinge side to provide easy access and assurance that user will replace the pins to maintain bear resistance. Bolts are not acceptable.



Yeti Coolers 512-394-9384 <u>http://www.yeticoolers.com</u> *Tundra series 45, 65, 85, 120,* 155 and 250 quart coolers





To be considered bear resistant both sides of the lid must be locked with a padlock as shown above. Engel USA 1555 Jupiter Park Dr. Unit 5 Jupiter, FL 33458 888-272-9838 561-743-7419 http://www.i-m-d.com/engel/Plastic%20Coolers%20-%20Main.htm

> Engel Cooler model # ENG65 65 Quart Plastic Cooler



To be considered bear resistant both sides of the lid must be locked with a padlock as shown previously for the Yeti Coolers.

Recretec Manufacturing, Inc.

29891 Hwy 34 SW Albany, OR 97321 (541) 757-7567 http://www.recretec.com/RecreTec/index.php

> Both the 13x16.5x40" dry box and the smaller captain's box are considered a bear resistant container, with addition of a reinforced angle and plates to the front panel.



Aluminum Dry Box

GARBAGE CONTAINERS AND FOOD STORAGE LOCKERS

Shoshone National Forest

808 Meadowlane Cody, WY 82414 307-527-6241 Steel Bear Box (4 star rating) Welded or bolted with or without stand. Drawings available upon request



Jamestown Advanced Products Corp 2855 Girts Road Jamestown, NY 14701 24 Cu FT Food Storage Locker (5 star rating) 2 Cu Yard Dumpster front load (4 star rating)





GARBAGE CONTAINERS and FOOD STORAGE LOCKERS

Haul-All Equipment Systems, ltd. 4115 18th Ave. North Lethbridge, Alberta Canada T1H5G1 888-428-5255 http://www.haulall.com/bear.htm **Dual Compartment Hid-A-Bag (5 star rating)** Haul-All Hyd-A-Way 6 cu yd dumpster (4 star rating)

NOTE: other products shown on Hall-All's website Have not yet been tested or approved for use on public lands





NOTE: The dumpster must have the added concrete counter weight bolted on the front of the dumpster and the dumpster and the Hid-A-Bag must have the new design for the latch with the guard below the latch as shown above to be considered bear resistant. The counter weight is not shown.

Capital Industries 5801 3rd Avenue South Seattle, WA 98108 206-762-8585 website: http://capitalind.com/containers/ email: sales@capitalind.com 2 Cubic Yard Rear Load Container(4 star rating)

(Bear testing for this dumpster model was conducted on a container owned by Allied Waste in Missoula, MT and purchased from Capital Industries.)



BearSaver 1390 South Milliken Ave. Ontario, CA 91761 800-851-3887 http://www.bearsaver.com/

Bear saver distributes a variety of trash and recycling containers, food storage lockers and commercial dumpsters that have been approved as bear resistant. The approved series are listed below. In most instances a single photo illustrates the approved series.

Approved products:

Food Storage Lockers: FS15, FS16, FS20. FS24 and FS30 (5 star ratings) Trash and Recycling container Series: HB-1 Mini, HB-2 Mini, HA, CE. (5 star rating) Trash and Recycling container Series: HB1, HB2, BE, BE2, RCE Residential. (4 star rating) Mini-Depot Triple Recycling Container (5 star rating) Commercial Dumpsters: 2 and 3 yard (5 star rating; but must be used without the casters to be consider ADA compliant and receive the 5 star rating); 4 yard dumpster. (4 star rating).

The following **BearSaver** products are approved provided that the latch mechanisms on the front and rear of the containers have the added guard below the latch as show below.



Latch Guard

Bear Saver Food Storage Lockers (FS series)

FS15, FS16 and FS20



FS24 and FS30



Bear Saver Trash Enclosures

HB2 Series

HB1 Series



BE2 Series



HA Series - 5 star



RCE Series





HB2 - Mini Series – 5 Star



HB1 Mini Series – 5 Star



BE Series



CE Series – 5 star

Last Modified August 27, 2010 GARBAGE CONTAINERS and FOOD STORAGE LOCKERS

BearSaver Recycling Containers and Dumpsters

Mini Depot Triple Recycling Container



2. 3 and 4 vard Dumpsters



San Dimas Technology and Development Center 444 East Bonita Avenue San Dimas, CA 91773-3198 909-599-1267

http://www.fs.fed.us/t-d/ username: t-d: password: t-d

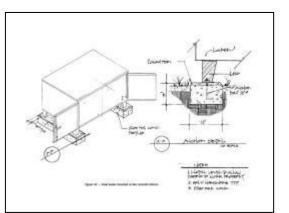
2-Cu Yd Bear Resistant Dumpster (4 star rating)

See Recreation Management Tech Tip # 0323 1302 – SDTDC – Guard must be added below latch to be considered bear resistant. Guard not shown in publication or the photo here.

30 cu ft Food Storage Locker (4 star rating)

See Bear Proof Food Storage Lockers 2nd addition Pub # 9723 1811 - SDTDC (San Dimas does not manufacture the dumpster or the food storage locker. Drawings available from SDTDC will facilitate having them fabricated.





Back Alley Metals 210 N. Broadway Red Lodge, MT 59068

406-425-0244 406-425-1533



Back Alley Bear Can

BearGuard Co. Ltd. P.O. Box 89 Tahoe City, CA 96145 530-581-2211 408-323-9006 sales@BearGuardInfo.com



BearGuard Enclosure Low Profile, Reversible Single Door

P.O. Box 1711 Cody, WY 82414 307-587-2925

Robertson Enterprises

email: RE@tritel.net

Ultratec Equipment Sales

P.O. Box 269 Dickinson, ND 58602 701-483-4800 877-805-1330 ultratec@ndsupernet.com



Food storage locker



Bear resistant dumpster cover



4 yd refuse container



2 compartment 32 gal refuse cabinet

ELECTRIC FENCES

See page 2 for specifics on use and approval of these fence systems

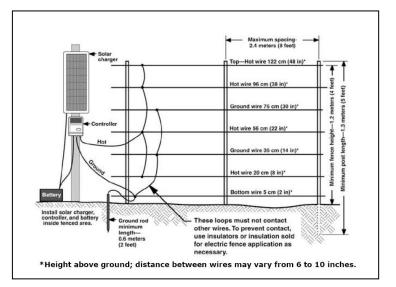
Missoula Technical Development Center

5785 Highway 10 W Missoula, MT 59808 406-329-3900 http://www.fs.fed.us/t-d/

username: t-d: password: t-d

Northern Continental Divide Electric Fence System Pub# 9923-2321 MTDC

System must be built using specifications in the publication. Currently no manufacturer is selling the complete system.



Missoula Technical Development Center

5785 Highway 10 W Missoula, MT 59808 406-329-3900

http://www.fs.fed.us/t-d/

username: t-d: password: t-d Portable Mesh Electric Fence System

Pub# 0723-2305 MTDC

System can by built using specifications in the publication. Also available as a complete system from Counter Assault – see below.

Counter Assault

120 Industry Court, Kalispell, MT 59901-7991 Phone: 406-257-4740 or 800-695-3394 FAX: 406-257-6674 website: <u>http://www.counterassault.com</u> *Pentagon*

(Portable Mesh Electric Fence built according to specifications in Pub# 0723-2305 MTDC)





UDAP Industries, Inc.

1703 Waterline Road Butte, MT 59701 Phone: 406-494-9292 or 866 BEAR 911 FAX: 406-494-9797 Email: <u>PepperPower@UDAP.com</u> Website: <u>http://www.PepperPower.com</u>

Bear Shock Fence

(Portable Bear Net Electric Fence built according to specifications in Pub# 0723-2305 MTDC)

SPECIALIZED PRODUCTS FOR HANGING FOOD

Williams Products, Inc.

2825 Rehberg Lane Billings, MT 59102 406-652-8930 800-522-8930 *Hi Stor*



NATPRO, Inc.

Box 1076 Lander, WY 82520 307-332-3068 *Game Hoist with Adjustable Gambrel:* (Product uses webbing and rollers, and is available nationally through Sportsman's Guide, Cabela's and Wal-mart)

http://www.rei.com

click on Camp/Hike under Health and Safety click on bear protection

Bear Bag Holds 60 feet of line for hanging bag in tree.



