# Building your own 18 Gallon Plastic Tub Cat Shelters















Make the doorway (Step A): Draw a 6 inch square opening about 6 inches up on the side of the bin where you want the doorway. Next, drill a 5/16 inch starter hole at one of the 4 corners of the 6" square. Use a handheld jig saw starting at the drilled hole and cut along your line, to cutout the doorway. If you do not have a jig saw, you can use a pair of straight metal snips to cut the opening.

Add weight for stability (Step B): Place a paving brick (8 X 16 X 1 ¾ inch) or similar heavy object in the bottom of the bin.

Create air space (Step C): You will need ten 30-egg sized egg cartons (regular dozen egg size cartons can be used as well) to create a wall of dead space for the bin. Lay egg cartons on the bottom of the bin (on top of the paving brick) and on all 4 sides of the bin. Cut cartons as needed to insure a close fit between cartons and around the bin. Use duct tape to secure the cartons together and to the bin if necessary. The idea is that the cartoons should be held securely in place within the bin and to each other. There should be no movement allowed once taped.

Cut egg carton from doorway (Step D): Trace the plastic opening with a felt pen and then using scissors cut through the egg carton to match the dimension of the bin opening.

Secure the egg carton to the plastic bin (Step E): Useducttape (or other weather proof tape) to tape the egg carton around the opening.

Install Reflectix to radiate heat back to the cat (Step F): Follow placement of the egg carton layer with a layer of reflective aluminum foil insulation (Reflectix ®). One 16" X 25' roll of Reflectix Insulation will provide enough material to insulate four 18-gallon bins. Cut a length of Reflectix long enough to encircle the inside of the egg cartoons. Place the Reflectix on edge within the bin and press it into the corners against the egg cartons, allowing for 1 - 3" overlap of the insulation to make a complete seal. It will stand above the top of the bin. Now use a felt marker to mark the 4 corners on the insulation (these lines should be vertical and run the full 16" height of the insulation). Remove the insulation and lay it flat. Use a pair of scissors to cut along each of the four









lines but only to a depth of 4 inches from the bottom and 4 inches from the top, this should leave 8" in the middle uncut. This will create flaps that can be folded down and taped. If needed, cut a rectangle of insulation to fit in the bottom and another to sit on the top. Secure with the tape. Fold and tape the bottom section of the insulation using metal insulating tape.

Mark the opening and cut it out (Step G): Press the insulation against the opening of the bin and outline it with a felt marker. Use a pair of scissors to cut the opening. Secure the insulation to the bin with duct tape again, overtop of the tape holding the egg cartoons in place.

Form the top of the insulating layer (Step H): Fold over the 4 sections of the insulation to form a lid or top to the Reflectix package. Tape these sections together with metal insulating tape. Be sure that you have left enough room to lay the final egg carton layer above the insulation so that you are able to secure the lid.

Add the egg carton layer on top (Step I): Lay more cartons across the top of your bin, cut any carton edges as needed to make a secure fit, and tape them together with duct tape. There should be enough room

left to lay the lid on top of the final layer of egg cartons for a secure fit.

Secure the plastic lid (Step J): Place the lid on the bin making sure the fit is snug. To secure the lid, you will need to drill holes through the edge of the lid and into the lip of the bin. Use a 5/32" drill bit and drill four sets of holes around the perimeter of the lid, placing two sets on each of the long sides of the bin. Be careful not to drill into the body of the bin. Use a Zip tie through each set of holes to fasten the lid to the bin. For extra waterproofing, you may cover with duct tape.

Insert straw into the bin (Step K): Use enough to fill about ½ the volume of the bin. The cat will enjoy snuggling down into the straw, and body heat will be radiated back to the cat from the Reflectix insulation.

#### **Material List**

- 1 18 gallon plastic storage bin Felt marking p
  1 8" X 16" X 1 3/4" paying brick Tape measure
- 10 30-egg sized egg cartons
- 1 16" X 25' Reflectix Insulation
- 1 roll of aluminum foil tape
- 1 roll of duct tape 4 - 4" long Zip Ties
- Felt marking pen Tape measure Pair of scissors Hand held electric drill 5/16" & 5/32" drill bit Jig saw

Sand paper (to smooth any rough edges)

### **Quick Shelter Tips**

Heating: Heating a shelter can prove to be a little more difficult than simply insulating the unit. If a source of electricity is available, you may consider a waterproof heating pad with chew resistant cord, or a porcelain light socket with a protective dome with a ceramic heating element - assuring enough overhead clearance to keep above the cat. It is important for the safety of the cat that the electricity source be a GFCI receptacle. If electricity is not available, microwaveable heating pads (such as Snuggle Safe brand) can be purchased and can provide 12 hours of warmth.

Insulating: Thought should be given to insulating a cat shelter. During the winter, cats become very vulnerable to the cold conditions. At the very least, straw (not hay) should be used and replaced every so often. Other options include polystyrene insulation, ShelterFoam or reflective insulation sheets such as mylar emergency blankets.

Watering: During the winter, problems arise from water freezing. Heated water bowls can be purchased if electricity is readily available. Other options include, Pet Solar Sippers or placing water bowls inside a styrofoam cooler (large enough to house the water bowl and a cat) and cutting a whole large enough for the cat to enter. Note that water and food should not be placed inside the cat's shelter. Water bowls can spill and food may attract unwanted predators. The feeding site should be a separate station.

Feeding: While cats need the higher protein supplied by canned cat food, during the winter months, wet food can freeze, so make sure there is also plenty of dry food. To prevent ants from infesting the dishes, place food bowls in a (plant) saucer of water or encircle the outside of the food bowl with petroleum jelly. Ideally, food and water would be placed under shelter. A clear plastic tub turned upside down, with cat sized square openings cut on each end, or a small children's umbrella staked in the ground are some options.

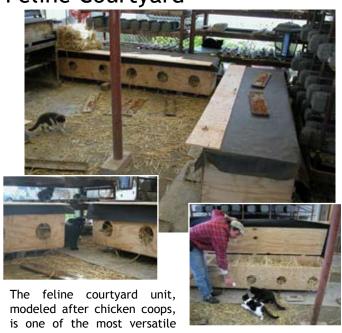
# What Can A Feral Cat Shelter Look Like?

## 18 Gallon Plastic Tub Cat Shelters



The plastic storage tub design can be built to house 1 or more cats, depending on the size of the tub, and the size of the cats. The 18 gallon tubs pictured above are suitable for one medium sized cat or two kittens. Space limitations per tub will depend on quantity/ thickness of insulation used. The tubs are waterproof and can be insulated with a variety of materials. They are lightweight and need to be anchored or weighed down with bricks or other dense material. A 30 gallon storage tub may serve 3 cats, or 4 if the cats are small, if they are friendly, and if the night is cold. A shelter is best heated when it is shared by a group of cats, so the decision on the size of the tub will depend on the number of ferals that will snuggle up together. In the above picture, shelters have been braced for additional stability. See other side for instructions on how to build one of these inexpensive shelters. Tubs should be filled with straw or for a better application; they may be insulated with polystyrene sheets or Reflectix ® foil insulation. Pros: Inexpensive, easy to build and transport. Cons: Lightweight nature of shelter provides less protection from predators than a wooden structure.

## Feline Courtyard



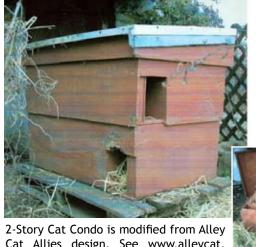
designs, allowing for a large multi-cat setting. This design allows for the builder to make the shelter as small or large as desired. It is a simple box design with holes for cat access and a hinged roof, allowing easy access to the interior. The inside can be left open for a communal cat approach, or can be segregated with removable dividers. While the shelters pictured are designed to sit outdoors, they sit under cover and are not waterproof. Simple modifications can be made for their application in unsheltered areas. Pros: Relatively easy to build. Designal lows for many modifications for size and maximizing space for cats. Cons: For unsheltered applications, roofing paper and shingles would be recommended.

#### Pre-Made Insulated Cat Shelter



The Feral Villa can be purchased and shipped ready to be assembled. This is a sturdy little cat shelter that is insulated complete with a shingled roof. The Feral Villa can be ordered at www.feralvilla.com The 2009 cost is \$59.95 plus shipping and delivery may take up to 3 weeks.

# 2-Story Cat Condo



Cat Allies design. See www.alleycat. org for building plans. This shelter has

withstood a decade of rain and snow, and has protected ferals from attack by free roaming dogs. Note the bite marks at the doorway. Inset picture shows inside of cat condo. Pros: Sturdy design, can house multiple cats, provides protection from predators. Cons: Building requires higher degree of skill. Supplies cost more than some other designs.

#### Is There Is A Need To Provide Shelter For Feral Cats?

"In cold weather, shelter is actually more important for stray & feral cats than food. Even though feral cats build thicker coats for winter, they can quickly succumb to hypothermia, particularly in rain & snow when their fur gets wet and doesn't insulate as well. Also, stray & feral cats are more prone to parasites, respiratory infections and minor illnesses. Combined with cold, wet weather, these relatively minor maladies can quickly prove fatal.

In emergency situations in Winter, if you do not have quick access to a shelter...a strong cardboard box or container preferably weather proofed with plastic, a trash can turned on its side, or a large plastic tub turned upside down with a door added etc, can provide a temporary solution until a more permanent shelter can be obtained. It's more important to do something to protect the cats from the cold and elements than to wait for "the right" shelter. Unless you operate a managed colony, don't underestimate the number of cats in your area...you may only see one or two, but there are probably more. Try to provide more shelter space than you imagine needing." - IndyFeral.Org

#### Consider Where A Feral Cat Shelter Be Located

"Locating the shelter is also an important topic. IndyFeral recommends using neutral and earth tones to blend with the environment. Shelters should be located away from areas of vehicle & foot traffic. Locating it in a wooded area or in the margin of a wooded area is ideal, as this provides cover from the elements and makes the shelter less obvious. In more developed areas, locate the shelter behind buildings or someplace where it will not be disturbed. Cats will shun shelter if they are disturbed there regularly. Orient the shelter to block the entrances from receiving direct wind and rain/snow. It may also be helpful to place sturdy building materials adjacent to the entrance to provide additional wind protection. Make sure that if you place anything over or around the shelter that it is anchored firmly and will not blow or fall over in front of the entrance." - IndyFeral.org

### What Should My Feral Cat Shelter Look Like?

Feral cat shelter designs are as different as the people who build them, and as varied as the site demands. Consider that you can also pack an unused garden shed, a walled off section of a garage, or that space under your covered porch with loosened bales of straw to make a cozy zone for the cats. Keeping the sheltered space out of the wind is a key factor to keeping cats warm. The various insulated woodenshelters and sometimes additional interior walls shown on this page are sturdy, warm and offer protection from elements and predators. They take more time and money to build than the plastic tubs. They are, however, more durable than any of the plastic tubs displayed.

# Garden Shed as Shelter



This metal shed, was easily transformed into a communal cat shelter. Note that the builder installed

> a smaller cat door for cat access, which also blocks out larger predators. The metal storage shed is a city innovation where feral caretakers need to be discrete. The shed is lined with polystyrene sheets for insulation. With doors closed, unless the small cat door was visible, a passerby would not consider the unit to anything but a storage unit. The shed is filled with cat carriers (doors removed) and each carrier is lined with cardboard, and filled with straw, providing a cozy retreat for a colony of cats. Insert pictures show options for individual cat units, using pet carriers, covered litter pans and even cardboard boxes. Pros: Shed is easily re-purposed and modified. Houses many cats and provides excellent shelter with options for heating. Cons: Requires larger space and availability of a shed

## Lattice Wrapped Porch



A simple idea for shelter anywhere a porch is available, is to close off the protected area under

the porch with lattice or other material. The lattice covered porch was set up as a cat refuge against free roaming dogs. To enclose the porch, rectangular wooden frames (made of 2 X 4s) are first attached to each side of the porch. The cat door openings are then framed. The gate is framed and hinged and the lattice is applied to the perimeter of the porch. The lattice trimmed gate on the far side of the porch gives the caretaker access to plastic storage tub cat shelters that are sitting under the porch. Pros: Easy to install, provides protection from predators and its intended purpose is not noticeable. Cons: Moderate skill level required to frame and apply lattice.

## A-Frame Cat Shelter



This cat house has a cute look for a small city backyard and is both insulated and heated. Inset picture shows how this unit is heated using a light dome with porcelain socket (dome protects cat from direct contact) and a ceramic heating element. A waterproof heating blanket would be an excellent option as well. Pros: Sturdy design, provides protection from predators, large A-frame roof allows for heat lamp. Cons: Building requires high degree of skill.

# 2-Story Insulated Wooden Shelter



This 2-Story insulated wood shelter offers 2 levels to accommodate more cats. The interior is easily accessed via a lift off roof. The picture on the right shows the use of the polystyrene insulation that has been sandwiched between the interior and exterior wood paneling. Note the base and side openings on right picture and the use of straw as nesting material. Pros: Sturdy design, can house multiple cats, provides protection from predators. Cons: Building requires higher degree of skill.

# Insulated Shelter with Hinged Roof



This insulated cat house has a great design feature in that the shingled roof is hinged to allow easy access to the interior for maintenance. Pros: Sturdy design, large enough to house multiple cats, provides protection from predators. Cons: Building requires some degree of skill. Supplies cost are medium compared to other designs.