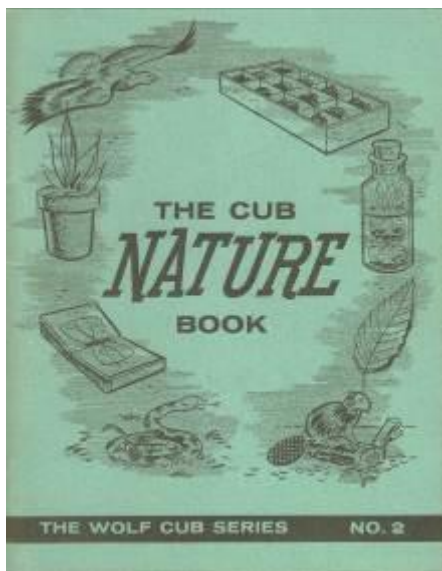


## The Cub Nature Book

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### The Wolf Cub Series No. 2

#### NATURE IS FUN

Exploring nature is an exciting, adventurous journey into the wide world of plants, animals, birds, rocks, stars – all the things around us everyday.

You'll find lots of interesting things to do and make in this book. You'll find they will help you in your Cub work too.

Good Hunting.

**Published by  
The Canadian General Council  
of The Boy Scouts Association**

## The Cub Nature Book

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Downloaded from:  
“The Dump” at Scoutscan.com  
<http://www.thedump.scoutscan.com/>



### Editor's Note:

The reader is reminded that these texts have been written a long time ago. Consequently, they may use some terms or express sentiments which were current at the time, regardless of what we may think of them at the beginning of the 21<sup>st</sup> century. For reasons of historical accuracy they have been preserved in their original form.

If you find them offensive, we ask you to please delete this file from your system.

This and other traditional Scouting texts may be downloaded from The Dump.

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Bird Watcher's Gimmicks  
Leaf Collection  
Leaf Printing  
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Things To Do All Year  
Plant Collecting  
Stars  
The Beaver  
Food Chain  
Lightning Do's and Don'ts  
Landscaper

# GET SET

## for collecting

THE AMOUNT OF EQUIPMENT YOU  
NEED DOESN'T HAVE TO BE EITHER  
EXCESSIVE OR EXTENSIVE BUT  
THESE ARE A FEW ITEMS THAT HELP.

EVERY CAMPER SHOULD  
OWN A COMPASS



YOU'LL FIND THAT  
A MAGNIFYING GLASS  
WILL PAY FOR ITSELF

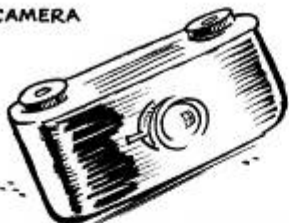


A TELESCOPE IS  
HANDY FOR  
DISTANCES OR...

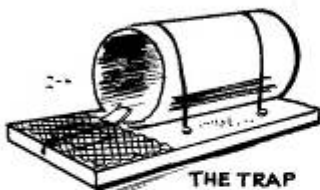


YOU CAN BUY  
CHEAP FOLD UP  
BINOCULARS

A CAMERA



DIPNET



THE TRAP



INSECT DRYING BOARD

FOR CASTS



PLASTER & PLASTICINE

A TROWEL



FOR PLANT COLLECTING

A DISPLAY CASE



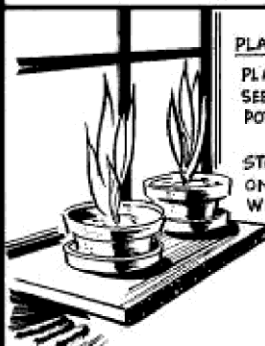
PAINTS, BRUSHES, PENS





**G**REEN PLANTS ARE THE MOST EARTH TO THE HUMAN RACE. ALL OUR FOOD COMES DIRECTLY OR INDIRECTLY FROM PLANTS

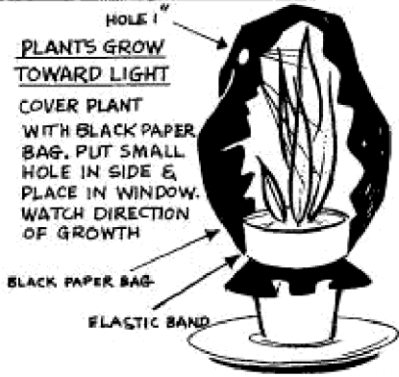
EYP2R1xENTS WoUCAH  
A'AKE WITH PLAUTSI

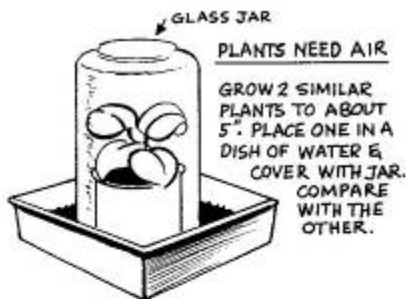


PLANTS NEED WATER  
PLANT CORN OR BEAN SEEDS IN 2 SEPERATE POTS. RAISE UNTIL STOP WATERING- ONE PLANT. WATCH WHAT HAPPENS



NEED LIGHT  
PLACE A PLAHT IN A DARK CLOSET FOR 1WEEK TO SEE THE RESULT





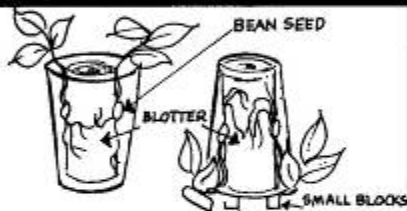
GLASS JAR  
PLANTS NEED AIR

GROW 2 SIMILAR PLANTS TO ABOUT 5". PLACE ONE IN A DISH OF WATER & COVER WITH JAR. COMPARE WITH THE OTHER.



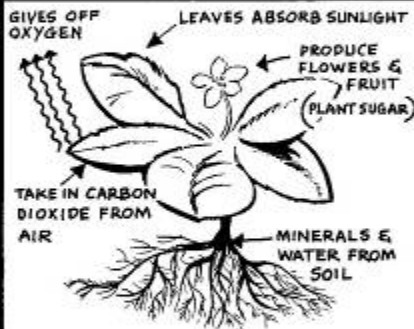
PLANTS GIVE OFF MOISTURE

TIE A PLASTIC BAG OVER A PLANT & FASTEN TIGHTLY AROUND STEM. MOISTURE WILL FORM IN BAG.



PLANT ROOTS GROW DOWN

PLACE ROLLED BLOTTER IN GLASS. PUT BEAN SEEDS AS SHOWN. KEEP BLOTTER WET. PLANT WILL GROW OUT OF GLASS. THEN TURN UPSIDE DOWN... WATCH!



GIVES OFF OXYGEN  
LEAVES ABSORB SUNLIGHT  
PRODUCE FLOWERS & FRUIT (PLANT SUGAR)  
TAKE IN CARBON DIOXIDE FROM AIR  
MINERALS & WATER FROM SOIL

SEED DISPERSAL

WIND

TUMBLEWEED

DANDELION

MILK WEED

WATER

FLOATING SEEDS SUCH AS RAGWEED & DOCK

ANIMALS

BURDOCK

PITCHFORK BUR

COCKLEBUR

PIGWEED

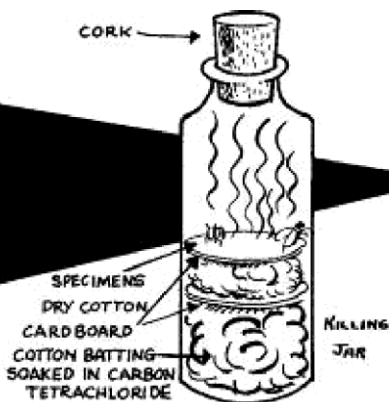
EXPLOSION

BALSAM

WITCH HAZEL

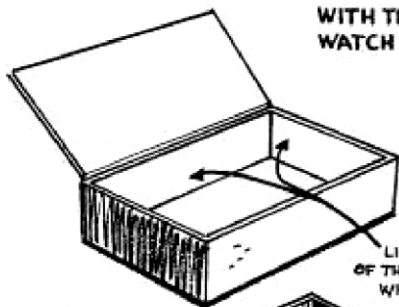
TOUCH-ME-NOT

# collecting and mounting



COLLECT THE SPECIMENS CAREFULLY  
AND PRESERVE THEM WELL  
WITH THE SIMPLEST INSECTS AND  
WATCH YOUR COLLECTION GROW

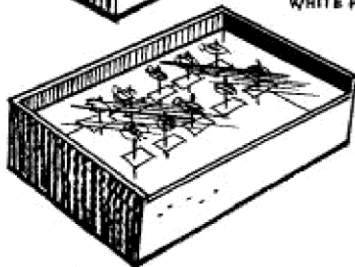
## A SPECIMEN BOX



LINE THE INSIDE  
OF THE BOX WITH  
WHITE PAPER



PUT 2 LAYERS OF CORRUGATED  
CARDBOARD IN BOTTOM OF  
BOX, GLUED SO THAT THE CORR-  
UGATIONS RUN AT RIGHT  
ANGLES

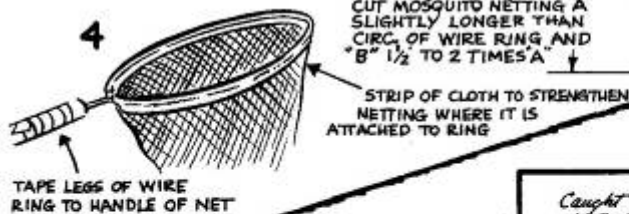
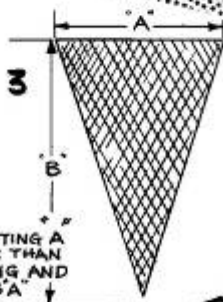
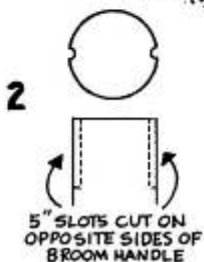


MOUNT & LABEL YOUR SPEC-  
IMENS IN THE BOX ALLOWING  
ENOUGH SPACE BETWEEN EACH.

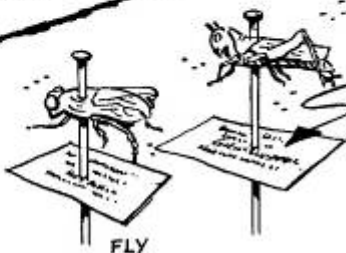
ADD SUPPORT & SLIP A PANE  
IS.



HERE ARE A FEW MORE IDEAS AND HELPS TO COLLECTING. TRY ALWAYS TO MAKE YOUR OWN. IT'S CHEAPER IN THE LONG-RUN.



PINNING-  
INSECTS



Caught in meadow  
at "Bells Corners"  
June 12, 1960  
**GRASSHOPPER**  
By Cub **BILL COULTER**

SAMPLE CARD



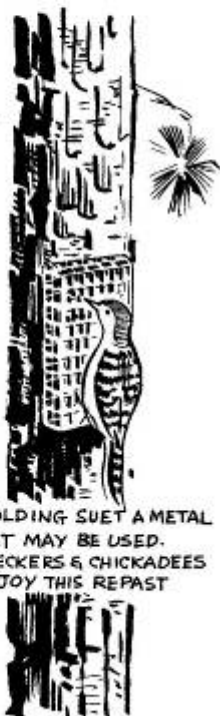
YOU CAN MAKE A SIMPLE  
SHELF TYPE FEEDER EASILY  
USE OLD CRATING



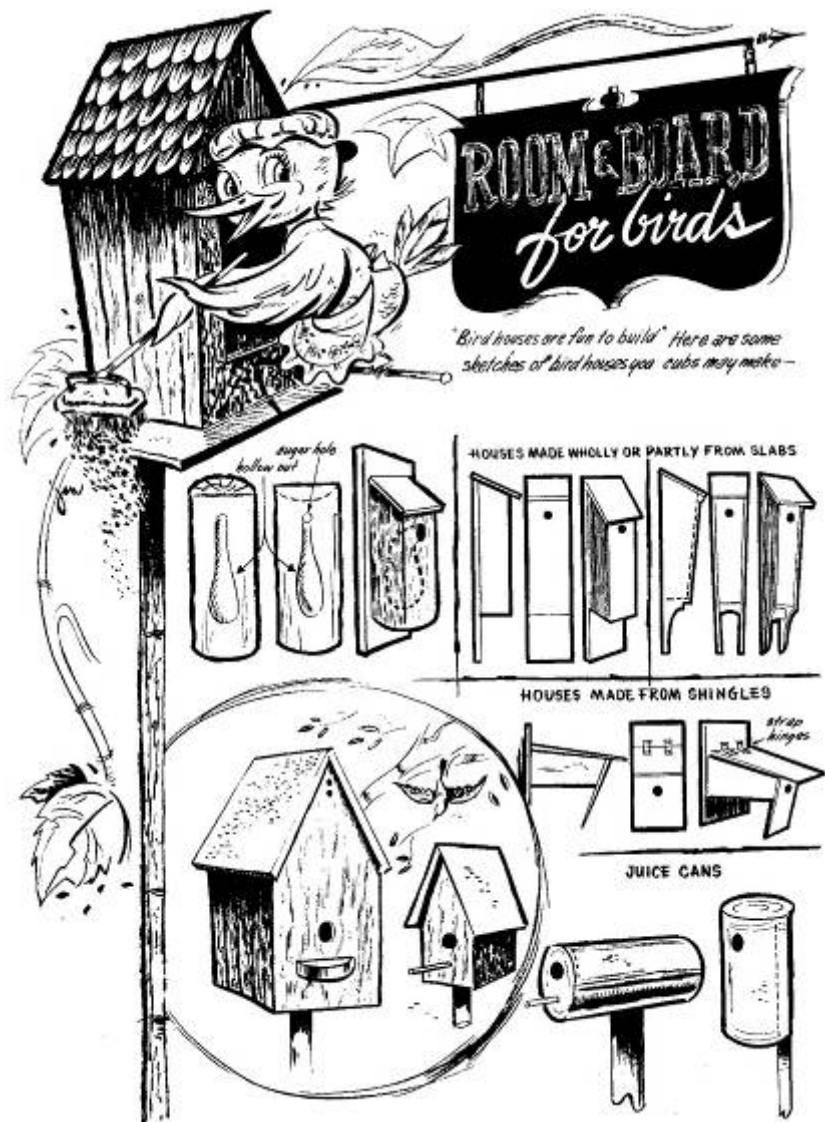
DRILL A SMALL PIECE OF  
LOG WITH HOLES & FILL  
WITH SUET



A HANDY FEEDER  
IS HALF A COCONUT  
SHELL. KEEP IT FAR  
OUT ON THE LIMB  
SO CATS AND  
SQUIRRELS CANT  
REACH IT



FOR HOLDING SUET A METAL  
BASKET MAY BE USED.  
WOODPECKERS & CHICKADEES  
ENJOY THIS REPAST





# WILDLIFE Homes

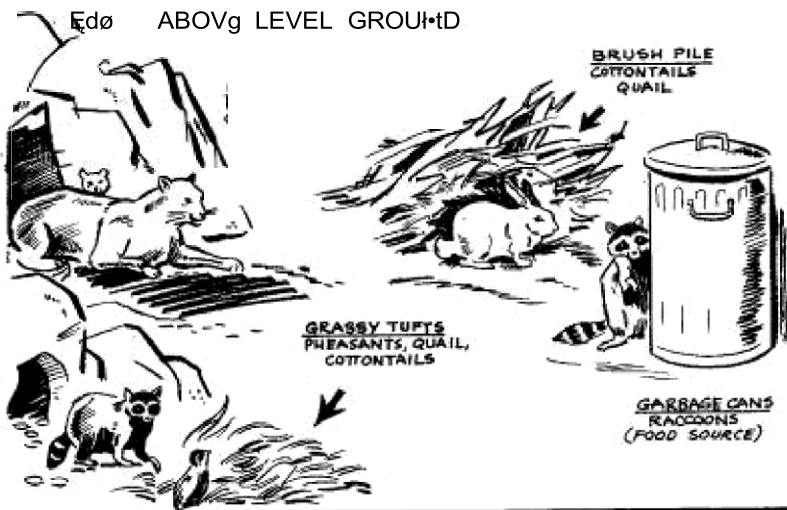
IT MAY BE A "HOLE IN THE GROUND" TO YOU BUT TO A FOX IT COULD BE HOME SWEET HOME. BE IT A NEST, DEN OR BURROW IT PROVIDES SHELTER FROM ENEMIES & ELEMENTS AND COMFORT

---

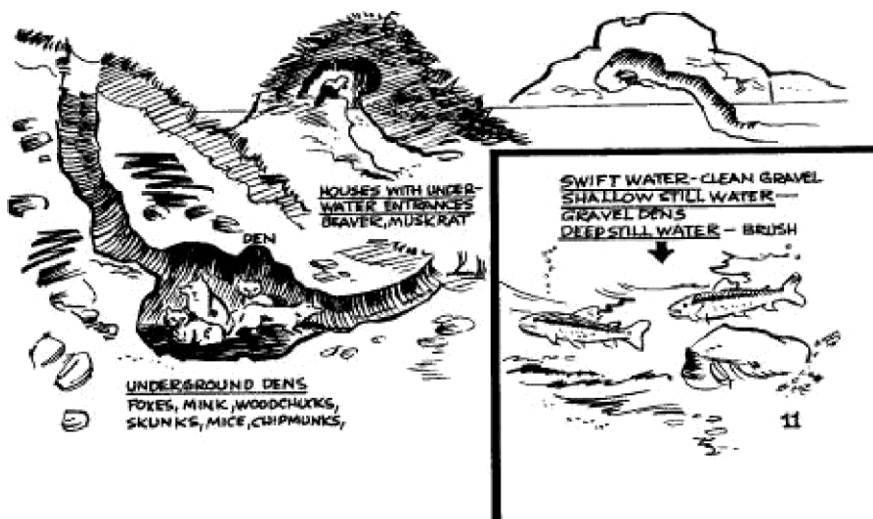
## NATURAL HOMES



# The Cub Nature Book



## NEAR OR ON LEVEL - GROUP

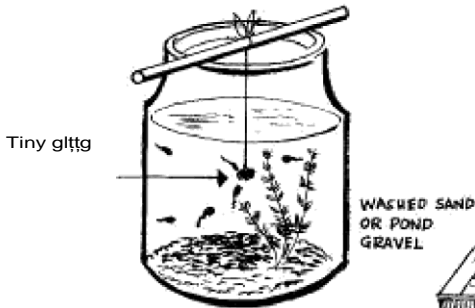


# HOMES for PESTS

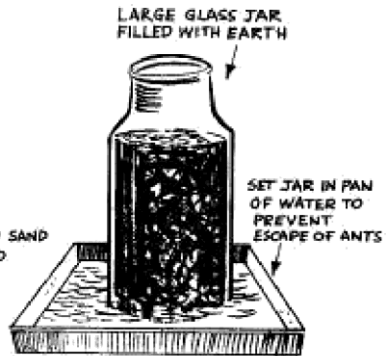
T Øÿ HAUNT CAŞTUREØRw  
IH9ECT5 \$ TRIED TQ KEEP THE?n;W>lk  
HERÉ S A FÖW StJ6GESTIOfrs HOW TO DO IT.



**E**ARTHWORM TERRARIUM:  
SET A TIN CAN IN A QUART  
JAR WITH WITH SOIL TO  
MARK. COVER REST WITH  
SAND. SURROUND JAR  
WITH BLACK PAPER REMOVE  
TO CATCH WORMS AT WORK



CATCH TADPOLES IN THE SPRING  
PLACE IN A BIG JAR & FEED  
WITH CRUSHED ANT EGGS LIVER  
RAW BEEF, ETC.



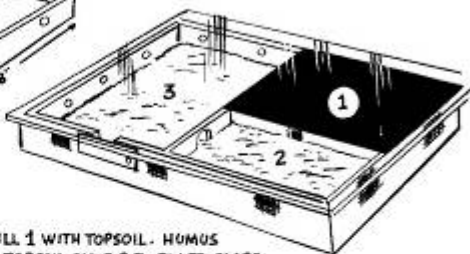
°a ENv4U 'TvacA nAy  
GE\* \* ß QtfØl.fcaEP;v\* nn

PLAIN WINDOW GLASS  
13'x9'

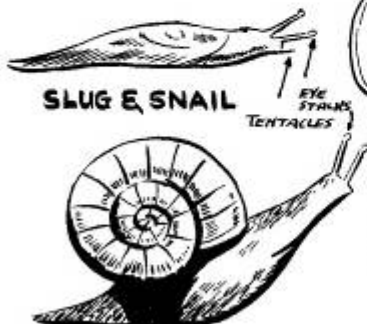


BORE  $\frac{1}{2}$  HOLES WHERE SHOWN, FOR VENTILATION TACK SCREENING OVER EACH  
USE A FLAT PIECE OF 12'x8" WOOD FOR BASE. NAIL ON 1'x $\frac{1}{2}$  STRIPS FOR SIDES AND PARTITIONS

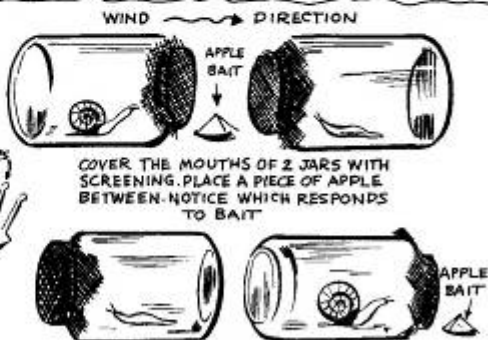
**A** GLASS-COVERED ANT HOUSE WILL GIVE YOU MONTHS OF INTERESTING STUDY. SCOOP UP THE WHOLE ANT COLONY IF POSSIBLE IN ORDER TO GET THE QUEEN



FILL 1 WITH TOPSOIL. HUMUS  
2, TOPSOIL ON 2 & 3. PLACE GLASS.  
PUT SHEET OF BLACK PAPER ON 1  
SO YOU CAN PEEK. PUT ANTS THROUGH DOOR.  
FEED DAMP SUGAR



A SLUG EXHURES SLIME FROM ITS BODY WHICH LUBRICATES ITS PATH SO IT CAN SLIDE SMOOTHLY ALONG.



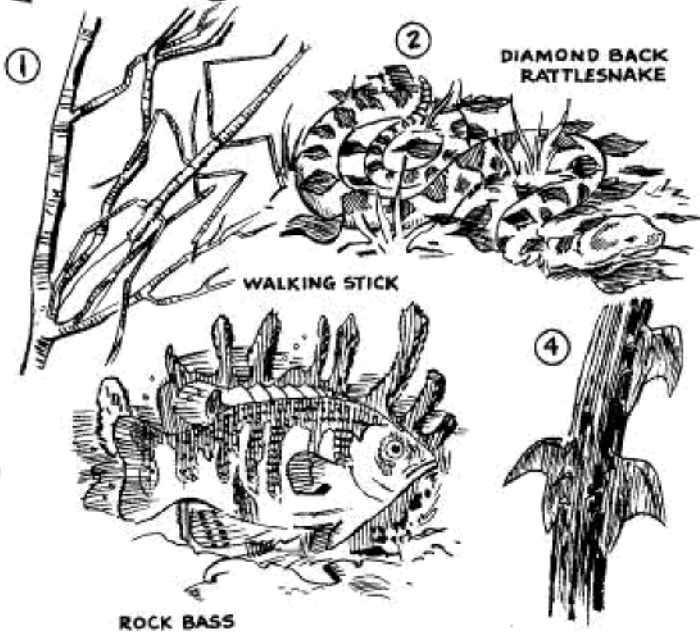
COVER THE MOUTHS OF 2 JARS WITH SCREENING. PLACE A PIECE OF APPLE BETWEEN. NOTICE WHICH RESPONDS TO BAIT

NOW FACE YOUR JARS IN OPPOSITE DIRECTIONS & SEE IF EITHER CATCHES ODOR OF BAIT

# CAMOUFLAGE

## PROTECTIVE COLOURATION

OTHER NATURE USES THE « way or PROZ-  
IMING HER CHILDREN- BELOW ARE A FEW EXAM-  
PLS. BUT THERE ARE MANY MORE. SOME  
ANIMALS CHANGE COLOUR WITH THE SEASONS-



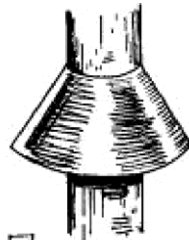
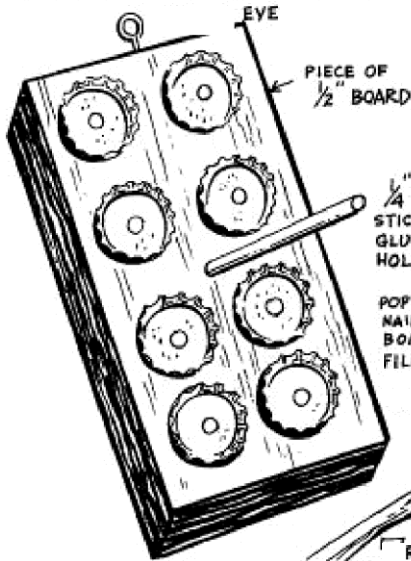




# BIRb YATtMEÅS GIMM

**N**OSEY? WELL WATCHING BIRDS  
tft•N/ ALL FOETM BIRCE•GfzAB A PAI &  
OF EIELP GLASSES AHD FRET GOIH6

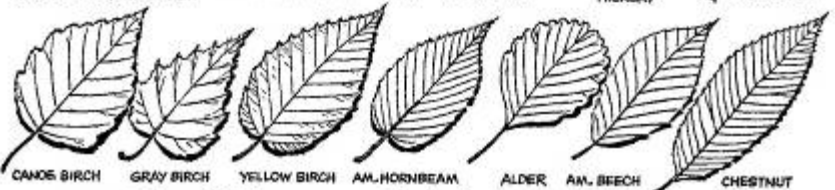
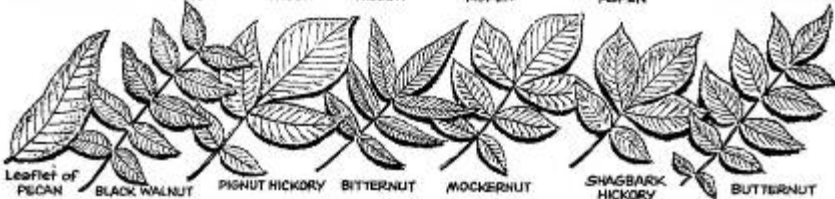
**ATTRACT THEM BY USING FEEDERS**



**T**O PROTECT YOUR BIRDS  
USE A TREE GUARD SIX  
FEET ABOVE GROUND



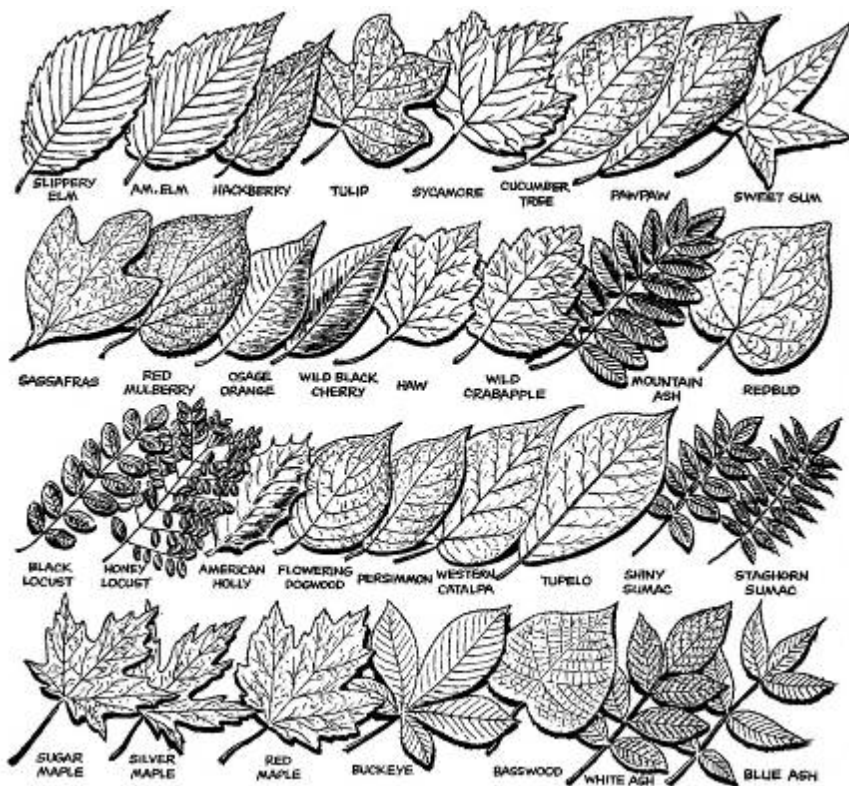
# LEAF COLLECTION



## The Cub Nature Book

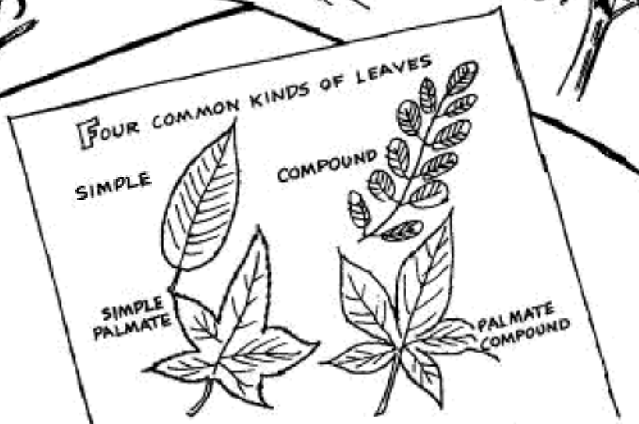
---

Being able to identify the trees that are native to the area of your hike makes for a much more interesting trip. Trees are more than just trees. Each specie has a character all its own. When you're able to recognize them individually you'll enjoy your hike a thousand times more.





ø45.gE y0t7R OWN CCELBCTION ø†  
LÉAVES g EHOId PR† MT 9Ofn£ DF  
**THE MORE COMMON ONES**



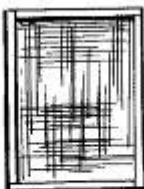
### INK PRINTING



WITH A RUBBER ROLLER, ROLL OUT A SMALL DAB OF PRINTERS INK ON A GLASS PLATE, INK UNDERSIDE OF LEAF, PLACE LEAF, INKED SIDE DOWN, ON WHITE PAPER COVER WITH PIECE OF NEWSPAPER & RUN ROLLER OVER IT.

---

### SPATTER PRINTING



NAIL A PIECE OF WIRE SCREENING TO A WOODEN FRAME



PLACE FRAME OVER A LEAF LYING PINNED ON A PIECE OF WHITE PAPER



TAKE AN OLD TOOTHBRUSH OR OTHER STIFF BRUSH & PRINT COLOUR OVER SCREEN, HEAVIEST COLOUR AROUND LEAF, LIFT LEAF OFF WHEN DRY

---

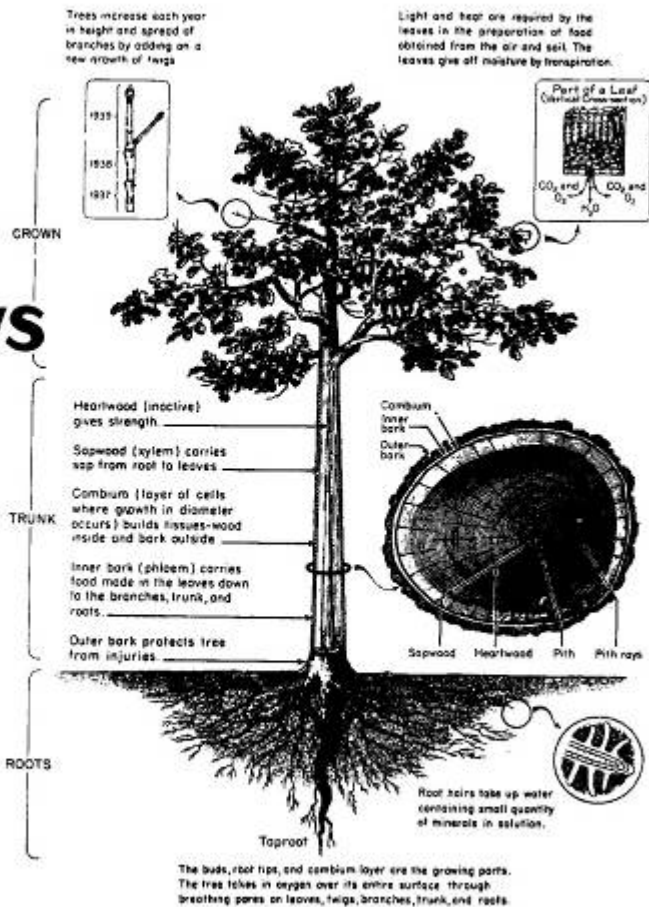
### RUB PRINTING



WITH A BIT OF COTTON, RUB THE LEAF WITH GRAPHITE OR COLOURED CHALK. LAY IT ON A SMOOTH SURFACE. PLACE A PIECE OF WHITE OR COLOURED PAPER OVER IT. RUB PAPER WITH A ROLLER OR ANOTHER WAD OF COTTON. LIFT OFF PAPER, SPRAY PRINT SIDE WITH FIXATIVE.

---

# HOW A TREE GROWS





### Growing Plants in Chemical Solution

Water-culture or the soilless growth of plants has become an interesting development in agriculture, and we offer on this page a few suggestions for you to try as an experiment.

**UTENSILS:** Glass jar, granite pan, glazed or varnished flower-pot, cup, spoon and strainer for measuring and mixing.

**INGREDIENTS:** Many formulas are available; we offer a simple one mixed with ingredients found in most households: Dissolve 1 level teaspoonful Epsom Salts, two level teaspoons Baking Powder, one level teaspoon Saltpeter, and one teaspoon household ammonia in one gallon of water. In Spring and Summer season, as hours of sunlight increase, add more ammonia to solution, up to four teaspoons.

**GERMINATION:** Fill granite pan with 4 inches clean sand which has been sterilized in boiling water for at least 15 minutes. Gravel or clinders may be used instead of sand, and must also be sterilized. Sow seeds, and cover with  $\frac{1}{4}$  to  $\frac{1}{2}$  inch sand. Keep moist with solution diluted to quarter strength by adding 2 parts water. Cover with glass, keeping in light, warm place until seedlings sprout and are ready for transplanting, when they may be loosened from sand and solution without injury by flooding with clean water.

**WATER-CULTURE:** Cover jar with paper, to exclude sunlight. Cut slot in cork to support seedling. Fill jar with solution to depth required by root-system. Keep solution replenished.

**DRIP METHOD:** Plant seedling in sterilized sand in glazed pot. An inverted saucer will prevent sand spilling out of drain-hole in bottom of pot. At a higher level, on shelf or rack prepared for the purpose, place jar of solution with siphon-tube (rubber hose or glass) in end of which wad of cloth controls drip. The pot should be placed on stand under which is pan to catch drainage. This drainage may be used over again. A continuous drip-flow should be maintained.

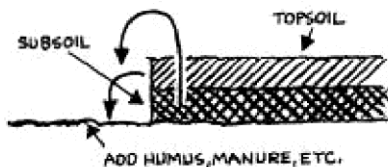
**FLUSH METHOD:** Illustrated in lower right-hand corner of page. Seedling planted as above, and pot prepared with inverted saucer, but placed in pan or drain-basin instead of on stand. Plant is sprayed with solution, which drains into pan, and RETURNS by capillary action. Keep sufficiently saturated to show solution in pan or basin at all times.

**WIRE TRAY METHOD:** Paint or varnish wire tray, equipped with supporting hooks as illustrated. Tank should be water-tight, inside coated with asphaltum or similar waterproofing. Place seedlings or bulbs in tray, supported by excelsior or peat moss. Fill tank with solution to reach root-system. Place tray in tank, and maintain level of solution.



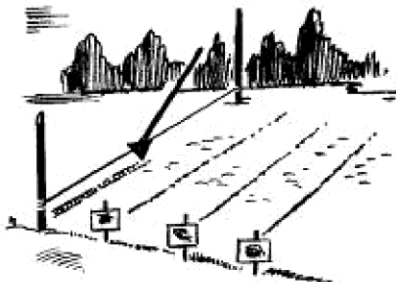
WER, TRY TO GET YOUR OWN VEGETABLES  
THERE'S NO SECRET JUST A FEW SIMPLE STEPS TO  
GET OUT YOUR MAT AND GET GOING!

#### GET THE SOIL READY



TRY DOUBLE DIGGING. START AT ONE END OF BED. DIG 2 SPADES FULLS DEEP. THROW HUMUS IN THEN TOPSOIL FIRST & SUBSOIL NEXT. CONTINUE ALONG BED.

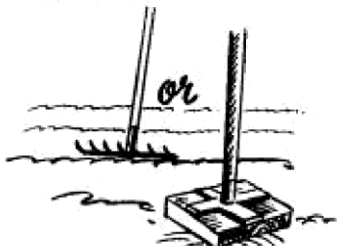
#### MARK AND PLANT ROWS



RAKE SOIL SMOOTH. USING STAKES & CORD TO MARK ROWS. OPEN EARTH FOR SEEDS WITH HOE

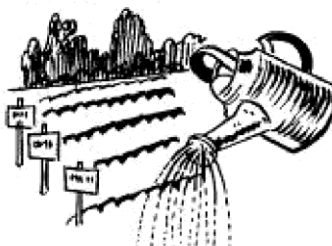


TAMP FIRM



AFTER THE SEEDS HAVE BEEN  
PLANTED TAMP FIRMLY TO  
QUEEN EGGS COFFIN SCEL LIMA

WATER-FERTILIZE



THEN WATER USING WATER-  
SOLUBLE FERTILIZER. FOLLOW  
DIRECTIONS ON CAN

THE **TOOLS** YOU NEED



## The Cub Nature Book

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### CHART OF SEASONAL ACTIVITIES

	SPRING	SUMMER	FALL	WINTER	ANY TIME— ALL YEAR
<b>Trees</b>	Watch buds swell and burst. Look for tree blossoms.	Study leaves, fruit and seeds. Make leaf prints and casts.	Which trees lose their leaves? Which leaves turn bright colors? Read tree's life story in a stump.	Study winter twigs, tree silhouettes. Study woods and their uses. Consider Christmas greens and conservation.	Keep an all-year record of one tree—when blossoms, leaves and fruit appear. Conservation. Value of trees.
<b>Other Plants</b>	Visit gardens, greenhouses and nurseries. Make seed experiments. Study Spring flowers. Plant gardens.	Look for ferns, mushrooms, mosses and lichens. Notice summer flowers and their adaptations. Make blueprints.	See how seeds are dispersed. Make a "weed" collection or display.	Raise plants indoors. Visit stores to see how plants are used. Pot winter cassettes.	Make terraria. Note uses of plants to man. Emphasize need for conservation.
<b>Birds</b>	Put up birdhouses. Watch for arrival of summer visitants. Celebrate Arbor and Bird Day.	Watch nesting birds. Make bird baths. Take bird walks.	Study migration, game laws and the economic importance of birds.	Collect abandoned nests. Put up feeding tables.	Keep a year-round list of birds to determine which are residents, and which are summer or winter visitants.

## The Cub Nature Book

---

<b>Insects</b>	Build cages for insects. Make collecting nets, mounting boards, etc.	Watch insects in field and in cages. Observe life cycle. Collect insects.	How do insects make music?	Collect cocoons.	Consider the economic importance and inter-relationships of insects and plants.
<b>Other Animals</b>	Raise guinea pigs, rabbits, rats and mice. Collect pollywogs.	Maintain aquaria and terraria with animals. Go fishing. Hold a pet show.	Learn about game laws and hibernation.	Build cages for pets. Make plaster casts. Visit stockyards, veterinarian, SPCA, taxidermist, shoe store, museum.	Hold pet show and raise pets. Visit zoos, museums. Make terraria and aquaria. Play tracking games.
<b>Stars</b>	Make star charts.	Learn summer constellations. Make a sun dial. Plot phases of moon.	Make models to show solar system.	Learn winter constellations.	Dramatize stories of stars.
<b>Rocks and Minerals</b>	Collect.	Visit a quarry. Mount your collection.	Make models of local geological formations.	Visit museums, jeweler, contractor. Study building stone.	Collect and identify rocks and minerals.
<b>Weather</b>	Study kites in air currents, wind, and cloud forms.	Learn what causes thunder and lightning.	What is frost?	What can you learn of snow, ice and glaciers? Make weather vanes.	Study cloud forms. Establish an amateur weather bureau.
<b>Hikes and Trips</b>	Take a "Signs of Spring" hike. Collect pollywogs. Go on bird walks.	Emphasize field trips to woods, hills, and parks. Go on collecting trips.	Go on cook-outs. Study Indian lore. Tracking and trailing games.	Go on winter hikes. Visit museums, factories, stores, neighborhood parks, etc.	Try to cover all locations in all seasons to see seasonal changes.
<b>Museums</b>	Emphasize living animals and plants in field and in cages and indoor gardens.		Make chart showing seed dispersal. Exhibit fall flowers. Make maps and surveys.	Study winter twigs, winter stars, and winter birds.	Keep exhibits changing to fit season.

---

# PLANT collecting

HERE ARE A FEW ILLUSTRATED.  
BUT THERE ARE THOUSANDS MORE!



WILD MUSTARD



SHEPHERD'S PURSE



BINDWEED



KNAPWEED



PRICKLY LETTUCE

## MOUNT 'EM

WHEN YOU HAVE MADE A FAIR  
COLLECTION TRY MOUNTING  
SOME OF THEM UNDER GLASS  
HERE'S HOW...



SELECT YOUR PLANT & PLACE  
BETWEEN 2 SHEETS OF WAX-  
PAPER. PRESS IN BOOK.



WHEN READY (AT LEAST 2 WEEKS)  
TRACE OUTLINE ON COLOURED  
CARD & GLUE EACH SECTION



FRAME MOUNT GLASS

MAKE OR BUY FRAME & COVER  
WITH GLASS. PRINT VARIETY.



MAKE AN  
OATMEAL BOX CONSTELLATION!



OR USE OLD SLIDES

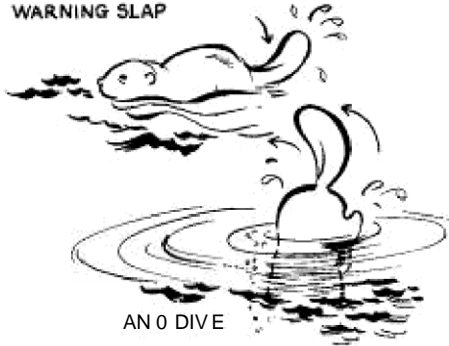
OLD UNDERDEVELOPED 35 M.M. SLIDES MAKE EXCELLENT BASE FOR CHARTING OUT CONSTELLATIONS. PIN PRICK SAME AS ABOVE AND PROTECT ON SCREEN. MARK NAME AT TOP OF FACE SIDE.





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WARNING SLAP



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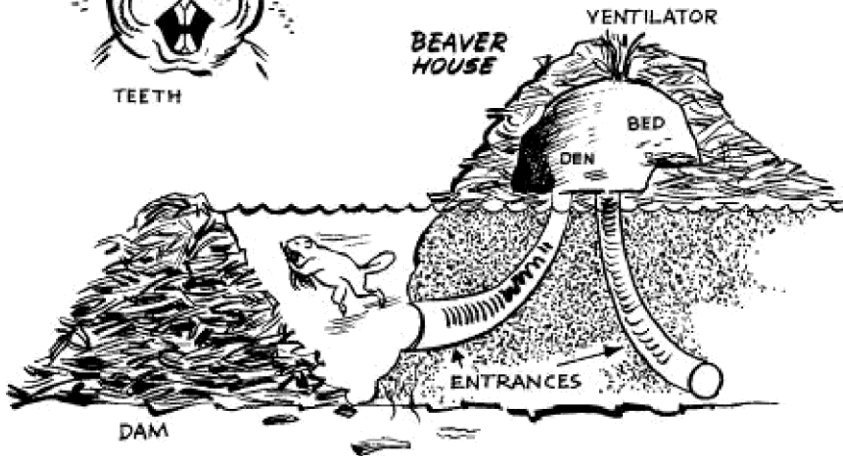


HOW POINT BLANKETS  
GOT THEIR NAME

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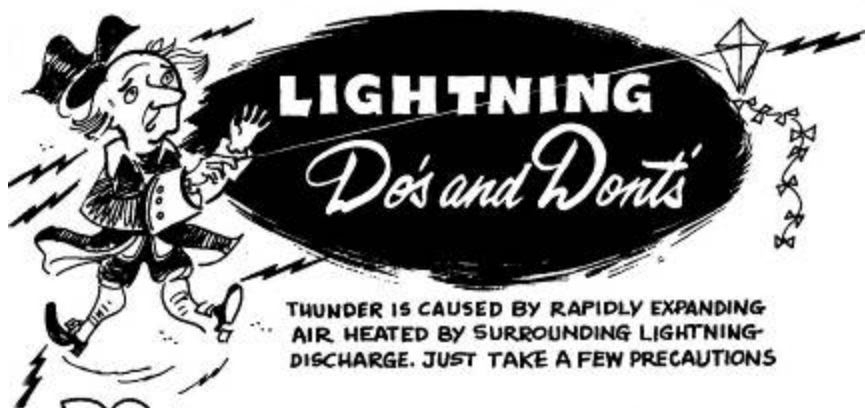


# FOOD CHAIN

IN THE ILLUSTRATION BELOW YOU CAN SEE A SMALL SEGMENT OF NATURE'S FOOD CHAIN.







THUNDER IS CAUSED BY RAPIDLY EXPANDING AIR HEATED BY SURROUNDING LIGHTNING-DISCHARGE. JUST TAKE A FEW PRECAUTIONS

**DO:**

FIND SHELTER DURING A THUNDERSTORM. A LARGE METAL OR METAL FRAME BUILDING IS BEST



• GET INSIDE AN AUTOMOBILE

• OR FIND REFUGE IN A METAL BUILDING



IF YOU'RE CAUGHT UNEXPECTEDLY FIND A CAVE OR DEPRESSION OR...



IF THERE IS NOTHING ELSE LIE FLAT ON THE GROUND. BETTER TO BE SOAKED THAN SCORCHED

**DONT:**

• GET INTO SMALL SHELTERS THAT ARE ISOLATED • STAND UNDER ISOLATED TREES • STAND NEAR WIRE FENCES OR OVERHEAD WIRES • STAY ON HILLTOPS OR WIDE OPEN PLACES • SWIM OR STAY IN A SMALL BOAT IN OPEN WATER • RIDE A BIKE IN THE OPEN

# LANDSCAPER

YOU MAY NOT END UP A BOTANIST  
BUT YOU'LL BE HELPING DAD A LOT  
& LEARNING AT THE SAME TIME



BUILD A 4 COMPARTMENT  
BOX. TRY DIFFERENT KINDS  
OF PLANT FOOD IN SOIL  
TO SEE WHICH IS BEST.

MAKE BEDS, BORDERS,  
WALKS, ETC. NEATER BY  
KEEPING THEM TRIMMED.  
USE SPADE OR EDGER.



TRY BRICKS FOR EDGING  
YOUR GARDEN. PAINT THEM  
WHITE IF YOU LIKE.



USE AN OLD GARBAGE TIN  
LID FOR BIRD BATH. PAINT  
DEEP GREEN, EDGE WITH  
STONES & PLANT AROUND IT.