

Schedule for Tanning Demonstration
Harness or Saddle Leather

Held at _____ on _____

Use one hide and 2 sheep or goat skins for one barrel -
If a flint dry hide is used in these, put in to soak two days earlier
(The percentages are based on weight of skins or hides)

Date

- _____ Put in to soak in clear water
- _____ Trim, clean off flesh and fat - weigh and split down back and put
in barrel in enough water to cover hides in which 2% of weight of
hide of hydrated lime has been well stirred. Plunge twice during day
- _____ Add 2% lime and plunge twice
- _____ Plunge twice during day
- _____ Add 2% lime and plunge twice
- _____ Add 2% lime and plunge twice
- _____ Scrape the hair off well, remove any flesh and fat left, and put in
pickle bath consisting of 5% muriatic acid and 15% salt and leave
over night - stir twice during day
- _____ Remove from pickle and put in chrome bath consisting of 5% sodium
bichromate, 3% muriatic acid and 5% salt - plunge frequently during
first 30 minutes
- _____ Hang up to drain for 2 hours and then put in bath consisting of 12%
sodium hyposulfite or sodium thiosulfate and 3% salt. Let remain 30
minutes - add 6% muriatic acid in 3 portions about one hour apart
and stir after each addition - plunge occasionally
- _____ Hang up to drain for 2 hours and put in bath containing $\frac{1}{2}$ % cooking
soda
- _____ Stretch on a frame and oil with neat's-foot oil or a 50/50 mixture
of neat's-foot oil and tallow when water stops dripping
- _____ Nothing
- _____ Remove from frame and work
- _____ Make some harness

Warm weather

Schedule for Tanning Demonstration
Harness or Saddle Leather

-3-

One Hide

Date

- Put in clear water to soak
- Cut off legs, ears, and tail - remove fat and flesh - weigh-
split down back - put in lime bath of 2% lime - plunge twice
during day
- Add 2% lime - plunge twice
- Plunge twice
- Add 2% lime - Plunge twice
- Add 2% lime - Plunge twice
- Plunge twice during day
- Dehair - put in pickle - 5% muriatic acid - 15% salt - plunge
occasionally
- Put in chrome bath of 5% sodium bichromate, 5% salt and 3%
muriatic acid - plunge frequently during first 30 minutes
- Hang up to drain for 2 hours, then put in hypo bath - 12% sodium
hyposulfite, 3% salt - leave for 30 minutes - then add 6% muriatic
acid in 3 portions 1 hour apart - plunge frequently

No. 3

- Put in clear water to soak.
- Cut off ears, tail, split down back and put in bath of 2% lime
Plunge twice during the day.
- Plunge twice.
- Add 2% lime. Plunge twice during the day.
- Add 2% lime. Plunge twice during the day.
- Dehair, put in 5% muratic acid--15% salt. Plunge often.
- Put in Chrome bath of 5% Sodium bichromate 5% salt and 3%
muratic acid. Plunge often the first 30 minutes.
- Hang up to drain 2 hours. put in Hypo bath of 12% Sodium
hyposulphite and 3% salt and leave 30 minutes, then add 6%
muratic acid in three portions one hour apart. Plunge often
after each addition of acid.
- Hang up to drain for 2 hours and put in 1/2% baking soda.
- Stretch and oil with neat's foot oil or a 50/50 mixture of
neat's foot oil and tallow when water stops dripping.

6/5/40/k

SADDLE SOAP FOR HARNESS LEATHER

1 lb. Tallow
1 lb. Soap flakes (not washing powders)
1 qt. Neats' foot oil
1 gallon water

Directions: Melt tallow and mix with neats' foot oil. Dissolve soap flakes in the water. Pour soap mixture into oil mixture stirring constantly. Stir occasionally while cooling. Apply two coats to hide after oiling.

CHEMICALS REQUIRED FOR TANNING DEMONSTRATION

15 lbs. Sodium Bichromate
35 lbs. Sodium Thiosulphate (hyposulfite)
40 lbs. Muriatic Acid
100 lbs. Salt
6 lbs. Alum
3 gallons Neats' Foot Oil or 1 gallon Neats' Foot Oil and $7\frac{1}{2}$ pounds rendered tallow
1 sack Hydrated Lime (fresh)
4 boxes Soap flakes
2 dozen Eggs

These chemicals can be obtained from Durr Drug Company, Montgomery, Alabama or from your wholesale drug company. The cost is approximately \$18.00 and will suffice for 350 to 400 pounds of hides.

It is possible that the muriatic acid can be obtained locally cheaper than from the above firms when freight charges are considered.

COOPERATIVE WORK IN
AGRICULTURE AND HOME ECONOMICS

Tanning Schedule for Glove Leather, Rugs and Furs

Rugs, Robes, and Furs

This schedule is for two sheep or goat skins or their equivalent in weight of small furs.

Today: If skins are dry wash in soapy water, rinse, drain and trim before weighing. Soak in 2% muriatic acid and 15% salt for 24 hours. Then add 6% salt and 5% alum to solution and soak another 24 hours.

If skins are salted do not use salt in the first soaking.

If skins are fresh, wash thoroughly with soap and water then rinse. Clean off flesh and fat and put into solution of 5% alum and 6% salt in smallest amount of water to cover hides. Let remain 48 hours.

Lay out flat and allow to dry slightly. Then rub on flesh side a paste made of one pound alum and one pound of salt dissolved in one gallon of water, then whip in one pound flour, then whip in one-fourth pound egg yolk and one-fourth pound Neat's foot oil. Then fold with flesh sides together.

Today: Apply paste and refold.

Tomorrow: Apply paste and refold.

Today: Let dry hard. Scrape off surplus tanning material, wash and stretch. Leave until nearly dry.

Remove from frame and work until pliable.

Glove Leather

Two goats or sheep. If salt hides, soak in clear water 24 hours. Then cut off tails and shanks. Remove fat and flesh, weigh, put in lime bath with 2% lime. Plunge twice daily.

The next day add 2% lime. The next day plunge. The next day add 2% lime. The next day plunge.

Dehair, remove any flesh and fat remaining and pickle in bath of 5% muriatic acid - 15% salt. Should remain in bath until skin is white and flesh -like.

Lay out flat and allow to dry slightly. Then rub on flesh side a paste made of 1 pound alum and 1 pound of salt dissolved in 1 gallon of water, then whip 1 pound flour in, then whip in 1/4 pound egg yolk and 1/4 pound Neat's Foot Oil. Then fold with flesh sides together.

Apply paste and refold.

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Let dry hard, wash and stretch.

Remove from frame and work until pliable.

It is best to lay all hides out flat immediately after skinning and salt them. After they are cured this way they will keep for months and tan easier than dry hides.

Keep all hides out of direct sunlight.

Water Proofing Boots and Shoes

Heat 1 pint of tallow. Hold a 6-inch square of inner-tube with pliers and apply match to lower end so rubber meets and drifts into tallow. Stir well and apply warm.

Making Sole Leather

Good sole leather is of course made from the very heaviest hides. The middle or back is best.

Sole leather is "filled" to make it stiff and durable by melting equal parts of tallow, paraffin, wax and neat's foot oil together and immerse the sole leather in this after the hide is tanned.

Saddle Soap for Harness Leather

1 lb. Tallow
1 lb. Soap flakes (not washing powders)
1 qt. Neat's foot oil
1 gallon water

Directions: Melt tallow and mix with neat's foot oil. Dissolve soap flakes in the water. Pour soap mixture into oil mixture stirring constantly. Stir occasionally while cooking. Apply two coats to hide after oiling.

ALUMINUM SULPHATE TAN

If the skin is dry, relax it by soaking it in water until it is soft. Any hard spots should be worked over the beam and the skin again soaked until no hard spots remain. Then salt the skin well and let it lay for 2 or 3 days.

Before actually tanning the skin, it is first necessary to pickle it. Prepare the pickle bath as follows:

Water - 10 gallons
Salt - 2 pounds
Sulphuric acid (commercial grade) 5 ounces
by weight, or about $2\frac{1}{2}$
ounces by measure)

Leave the skins in the pickle bath from 3 to 7 days, depending on the thickness of the skin. If tanning skins which are very fatty or greasy, you can add an extra couple of ounces of sulphuric acid to the pickle bath on the last day.

When the skins are white all the way through, they are pickled.

Now wash them out thoroughly in a couple of gallons of water, in which you have dissolved a half pound of soda. Then wash them thoroughly in clear water.

The skins are now ready to be tanned. Prepare the aluminum sulphate tanning solution as follows:

Dissolve $2\frac{1}{2}$ lbs. of salt in 10 gallons of water.
Then in another container, dissolve 1 pound of aluminum sulphate, (Tanol) in hot water.
Then pour about half of the aluminum sulphate mixture into the salt water and stir it up thoroughly.

Plunge the skins up and down in this tanning solution and leave them there overnight. On the second day, add the rest of the aluminum sulphate solution to the tanning mixture and again stir the mixture well, plunging the hides up and down several times.

Leave the furs in the tanning solution anywhere from 5 to 20 days. Ordinarily a fox skin would be thoroughly tanning in 5 days, a squirrel, muskrat, raccoon, etc., in 8 to 10 days, and a heavy horse or cow hide, for instance, would require up to 20 days.

When thoroughly tanned, take the skins out and wash them several times in plain water. Then stretch them out to dry and when about half dry, take them down for oiling.

The oiling and finishing should be carried out as described under the above instructions for Krome-Tanning Furs. This will tan goat or sheep or its equivalent of small furs. This formula will make excellent glove or art leather. Materials can be secured from J. M. Elwood Supply Co., Omaha, Nebraska.

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