# Alligator & Crocodile Skin Preparation for Tanning

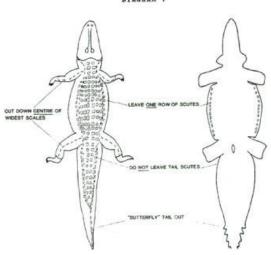
This page is not a basic guide on how to skin an alligator, but we can offer a summary of skinning steps, tips on how to best care for alligator skins, and explain why careful skinning and scraping is important.

The proper care of alligator skins begins as soon as the animal is harvested. Here are some helpful tips:

- Skinning should take place as soon after the harvest as practical.
- Avoid direct sun or heat on the carcass or skin whenever possible.
- Keep skin away from blood, entrails, or other contact with dirty surfaces where more bacteria could get into the skin.
- Always skin carefully avoiding the creation of holes or cuts in the belly pattern.
- Scrape excess meat and fat from the underside of the skin with blunt knives, paint scrapers, beveled pipes or other dull tools.
- Removing meat and fat from the skin is very important because of the time necessary to store
  and ship alligator skins for tanning. This often takes several months and excess meat helps
  bacteria multiply leading to "red heat" or "slipping" skins.
- If excess fat is not removed it can prevent salt from properly penetrating the skin. Also, if the fat heats up, it can penetrate the skin and leave grease spots on the finished leather.
- The purpose of curing alligator skins is to remove moisture from the skin so it can be better preserved before tanning.
  - A fine grain mixing salt works best and should be applied generously (1/2 to 1 inch thick) and rubbed into all parts of the skin.
    - Salt should be rubbed thoroughly into the skin, making sure enough salt gets into the creases, flaps, tail and similar places where bacteria can get a start. Salt helps slow bacterial growth.
    - Tightly roll the skins and stack in a well-ventilated place where they can drain. After three to five days in a cool or shaded place, the skins should be re-salted for best curing. DO NOT use rock salt and DO NOT freeze skins (freezer burned skins will not tan properly).

## **Getting Started**

Start with a good place to skin an alligator and have the right tools to do the job. Obviously, you need a steady table at a comfortable height, a good light, a knife and a sharpener, a scraper, and salt. You also need to develop your own skinning routine. The best skinners say this comes with practice and experience, but learn to skin an alligator the same way each time instead of changing from one way to another. That way you begin to develop your own system. You will develop a feel for each spot in the skin, and by doing it the same way each time, your moves and knife strokes almost become second nature. A standardized method of skinning, curing, and handling alligator skins increases the value of the product and improves buyer confidence in a uniform lot of skins. Diagram 1 shows the standard opening cuts when skinning an alligator and the belly patterns of the skin.



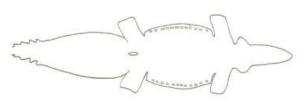
## **Skinning Process**

- Outline the body where skinning will start.
- The cut along the sides is made between the first and second row of scutes on the back.
- A straight cut is made from the back along the top of each leg (through the largest scales).
- Cut completely around each foot at the wrist or ankle.
- The outline cut on the tail is below the top row of tail scutes.
- When cuts reach the single row of tail scutes midway along tail, cut through base to end of tail (butterflying the end of the tail).
- Skin tail completely along the sides.
- Begin skinning body section with front legs and adjacent side skin.
- Slowly cut skin away from front legs and side of body.
- Some pulling can be done on the upper leg portions.
- Skin hind legs and adjacent side skin the same as the front legs.
- The sides should be completely skinned and only the belly portion should be left un-skinned at this point.
- After sides and legs are skinned, turn alligator on its side and make outline cuts along the lower jawbone.
- Cut is made along the outer edge of the lower jaw skin.
- By pulling on the jaw muscle, the flesh can be tightened, allowing for easier skinning.
- After skin is cut from lower jaw and neck, the alligator is ready to be skinned down the belly.
- Skinning the underside of the alligator can be accomplished by both pulling and cutting.
- Pulling is easier on small alligators, with careful cutting required otherwise.
- Cut carefully around anal opening (vent) so this area won't tear if pulled.
- Both pull and cut skin from the remaining tail section.
- Meat and fat remaining on the skin must be removed.
- Scrape with dull objects (pipes, scrapers, spoons, etc.) taking care not to cut or tear skin.
- Once scraped, skin should be relatively free of flesh and white in appearance.
- Skin should be washed in clean, fresh water to remove blood and other fluids.

The shaded area between the neck and vent in Diagram 2 is the part of the belly skin that is graded. Holes or cuts in this part of the skin make it difficult or impossible to cut full belly patterns for purses, briefcases, or larger leather articles. Enough holes or cuts in the flanks can even make cutting shoe vamps or smaller leather-goods difficult. The one row of scutes along the sides of the alligator are untouched in order for the tanner to have extra skin to tack to boards when the skin is stretched and dried during the tanning process.

process. Special care should be taken not to cut or put holes in the belly pattern of the skin (particularly around the legs and flanks where the thin skin is easy to nick with a knife).





## Fleshing Your Skin

Fleshing is a very critical operation. It is imperative that most of the red meat and all of the fat on the skin be removed prior to salting and storage. Poor fleshing is the primary cause of poor curing, bacterial growth and the destruction of the skin's proteins resulting in a less than perfect skin being returned to you from the tanner. Fleshing may be accomplished by scraping the flesh side of the skin with a blunt object such as a paint scraper, beveled pipe, or some other dull tool.

At our skinning facility in South Louisiana we remove this flesh with pressure washers utilizing a rotating nozzle and a working pressure between 1,000-1,500 PSI depending on the size of the skin. Great care must be taken when using this method as irrevocable damage can be done to the skin by too much pressure or holding the gun in one place too long.

A very critical aspect of this method of fleshing is the angle of attack. We drape skins over a saw horse with a piece of plywood used as a backboard. In this manner the water's angle of attack is maybe 15 degrees. If the skin is placed on the ground and the water is shot directly down on the skin, at almost 90 degrees, it will inflict damage to the skin.

Again, we cannot stress enough the importance of good fleshing, but we also caution that great damage can be done to the skin during this operation.

Once the skin is fleshed, it should drain for a short time and then be salted, covering the entire skin with say 1/8 of an inch of salt; taking great care to insure the salt is rubbed into all folds and into the skin. The appendages should then be folded in and the skin rolled and stored in the shade for a 2-3 day period while the skin "takes salt". You will notice the skin begins to weep water almost immediately as the salt draws moisture out of the skin. Once the weeping has stopped it is advisable to shake all of the old salt out of the skin and re-salt the skin once again for storage, preferably in a cool dry place until which time it is forwarded to us.

#### What to do if you notice the "Red Heat" or "Slippage"

If any "red heat" or "slipping skins" is noticed in a trapper's .lot, the contaminated skins should be separated from the rest of the hides and treated in a solution of water, bleach, tide and borax. This "slip dip" is made by mixing a half gallon of bleach in 25 gallons of water and adding half a regular size box (about one pound) of Tide and Borax. The salt in an affected skin should be discarded. (Red heat in particular can spread from one skin to the next). Skins should then be submerged in the dip about 15 minutes. Drain the skin and liberally re-salt. Re-roll the skin and if possible, store dipped hides separately from other skins.