

## The Art and Practice of Jicarilla Apache Micaceous Pottery Manufacturing

By Felipe V. Ortega

### Introduction

The Jicarilla Apaches entered New Mexico (according to our own understanding) somewhere between 1500 and 1600. We do know from archaeological and Post European Contact Historical data that the Jicarillas were already in New Mexico by the 1600's. There is one archaeological site in the Mora Valley that definitively shows the presence of Athabascan dwellers making a light weight utility vessel using micaceous clay. The conclusion from the archaeological community states that this group of dwellers were the band of Apaches that would later be called Jicarilla by the Spaniards.

The initial contact that the *tide* band of Apaches had with the Europeans was near the village of the *Tsiwile* People -- Taos Pueblo. Every spring the *tide* Apaches arrived in Taos from Kansas bearing buffalo robes, hides, etc. for trade. And again in fall the *tide* Apaches would return to Taos to trade with the pueblo peoples for corn, beans and squash. To this day the San Geronimo feast day at the end of September resembles a fair more so than a Pueblo feast day as they occur in the other Rio Grande pueblos. From the Taos and picuris peoples, this band of Apaches learned how to fashion clay vessels by using a coil and scraping method on a puki. At this time this band abandoned the plains style of pottery making which was paddle and anvil method for the much faster coil and scraping method of the Rio Grande Pueblos. Back to the story. The *tide* Apaches, however, continued making small drinking cups for drinking *golbai* or *tiswin*, as it is called in Spanish, and thus the Spaniards thought that this band of Apaches were making small chocolate drinking cups called *jicarillas*. Little did they know that these Apaches did not even know what chocolate was let alone that many years later this band of Apaches would be known world wide as Small Chocolate Drinking Cup Apaches. I personally like the ring to the name either in English or in Spanish.

The Jicarillas however did not use the same clay that Taos and Picuris were using instead they opted for a mica rich clay that was found in the mountains that the Jicarillas were inhabiting for the summers. This mica rich clay is called Micaceous clay and it actually can be found from California all the way to Georgia. There is a part of the history that still needs to be researched and that is the presence of vessels in the Ojo Caliente and Chama River valleys that contain a micaceous slip on the exterior and were primarily used as cook ware. The credit to the Jicarillas, though, was that they were able to make pottery using micaceous clay without having them blow up. This is my contention since the pueblos only used the micaceous clay as a slip for they must have found out that micaceous clay looked dry in the Sun but would blow up in the firing process as used by the pueblos. The Jicarillas fired the micaceous clay vessels in a different way that drove out all the moisture before firing.

By 1850 the United States Government had begun a policy of reduction (meaning trying to bring all the aboriginal nomadic peoples into permanent settlements thus being able to monitor their activities) against the Apaches in New Mexico.

Kit Carson was the most notorious Apache hunter in northern New Mexico and caused many of

our people to perish either at gun point or starvation. In 1870, the Jicarilla Apaches were transferred to Sierra Blanca in southern New Mexico along with the Mescaleros. But as the story goes we were given the north side of Sierra Blanca where many of our people died in that first winter forcing the few remaining Jicarilla Apaches to leave Sierra Blanca and take up residence both among the pueblo people who were their friends and also among the Spanish people. Thus the Jicarillas taught how to make Micaceous clay cooking vessels to both the pueblos and Spaniards in Northern New Mexico. The Jicarillas were permanently settled in a reservation in 1887 near Chama, New Mexico.

There was a decline in the production of Micaceous clay ware among the Jicarillas because the reservation lands did not contain the proper micaceous clay that the Jicarilla women were accustomed to use. Jesusita Martinez from the village of Petaca taught me the art of pottery making in 1969. She was consequently killed in the spring of 1970 thus ending my apprenticeship with her. However in that brief time I spent with Jesusita an entire legacy of tradition was given to me to keep alive and pass on, first of all to our people in the Jicarilla Apache nation and in keeping with a previous tradition with the friends we live with.

## Section One

"Mother Earth may I dig from your belly the clay with which you and I will fashion vessels for the use of our people for our food. We thank you that you have given to us abundantly and may we also give abundantly to all our brothers and sisters. || Jicarilla Apache prayer for digging clay

### A. *Micaceous Clay:*

This clay is a primary clay body which means that it is found at the same place where the clay was created. The telltale mark that announces the presence of micaceous clay is the abundance of quartz and feldspar. Mica in the clay body acts as a temper and also gives the clay body an insulating capacity. The chemical composition of the clay is primarily *illite, smectite, muscovite, sericite, kaolinite, and bentonite*. The clay vitrifies at a relatively low temperature of about 1300 degrees Fahrenheit. The clay is extremely plastic for being a primary clay and is rather hardy.

Some care should be taken in handling the finished pieces but again they will withstand certain abuse that other clay bodies would not tolerate.

Our clay is our Mother and thus we urge you to look into your heart and ask Our Mother the Earth to guide you through the process of clay making. Understand that when we dig the clay we ask her permission to dig from her belly for the clay so that we may co-create her children for her. This is an awesome responsibility you have undertaken for we consider it the same as birthing children. And since this is the case you should also make sure that you are not super-serious nor super-relaxed.

Birthing Children is at once sexual-spiritual so do not try to impose your desires on the child that is wanting to be birthed at your hands. You can have an unclear image in your mind but do not dictate your desires--this is not to be done with children and neither should it be done with your clay babies.

On that May day in 1969 Jesusita told her son in law to take up to the clay pits and help me dig clay. She provided a gunny sack, pick and shovel along with the proper offerings. Long time ago our ancestor women dug the clay with digging sticks but today we use pick and shovel. The clay can be found close to the surface but in the dead of summer it will be as hard as stone to extract, that is why the traditions states that clay should only be dug in Spring time (and with good reason). The clay will have organic matter and small stones both quartz and mica shale. The clay was originally cleaned immediately at the clay pit and only pure clay would be brought back to the camp site for later use. The traditional method for cleaning clay is to add one part clay and two parts water in a large container. With a small atole bowl they would extract a small bit of clayey water and swirl it in the bowl to settle the stones and the organic matter would rise to the top. The organic matter was removed by hand and the clay would be poured into a hole in the ground that would have been lined with deer skins. The stones and other heavy debris would remain in the bottom of the bowl and would be discarded next to the clay pit. The water would saturate the hide and would be absorbed by the ground leaving a most sensuous clay.

Today, we still clean clay by adding two parts water but we screen the clay through a window screen. (A finer screen would be great but from my experience it removes too much mica) We allow the clay to dry in the sun in cotton sheets (don't use polyester or you will find that it will further screen your clay right out of the drying hole.) After the clay can be lifted from the cloth without the clay sticking to it then you must knead the clay as one would dough and set it aside for at least a day to "age". More time does not seem to improve the quality.

### ***B. Choosing a Puki***

"Puki" is any vessel that you can use in order to place the clay upon such a vessel for easier clay building. puki (a Tewa Word) should have flaring out rims and should not curve inward. This allows you to remove the finished bowl from the Puki with greater ease. A rule of Puki is that the bigger the Puki the bigger the pot and the smaller the puki the smaller the pot.

After you have chosen a puki, you must then coat the inside with oil and then sprinkle mica (or sand) into the puki to make a thin coating to prevent the clay from sticking to the wall of the Puki.-- Now you are ready for building.

### ***C. Building the Pottery***

#### ***1. Making the Tortilla for the Base***

Gather enough clay to make a good size ball that would cover the bottom portion of the Puki to one inch in thickness. (e.g. a 4" diameter bowl would have a 1 1/2" base, and you would probably need a ball the size of a baseball.) Place the ball on a flat surface that has been covered with cloth or plastic or any other form of paper that would allow you to remove the tortilla from said surface. Pat the ball into a tortilla by using your entire palm and simultaneously rotating the ball to ensure proper thickness and roundness. Flatten the tortilla to about a quarter of an inch thick. Now place the tortilla onto the Puki that has been prepared with oil and mica. If the tortilla does not cover the entire Puki (not to worry) simply add coils an inch below the edge. Smooth that coil into the original wall only on the inside and it will even out the bowl. If the tortilla is too big, do NOT cut it but simply straighten out the wall and proceed with adding coils. To prevent major coil separation at the puki line, the tortilla should extend an inch above the puki.

#### ***2. Coiling the Walls***

Take enough clay so that you can grasp it in the palm of your hand to close it to make a fist. This is enough clay to make a coil the thickness of a magic marker. Rollout the clay on the table on either a cloth surface or hard plastic so that the table does not get messed up. Roll the clay with your entire palm, stroking back and forth with even pressure. IF YOUR TORTILLA did not extend one inch over the puki then place this first coil 1" below to edge of the tortilla you have placed in the puki (caution: do not put it on the edge for you will have major separation of a coil at the puki line). Smooth the coil out first with your hand and then a plastic scraper.

Next, take another coil in your right hand if you are right handed and in the left if you are left handed. (From here on I shall give the instruction for those who are right handed, and those who are left handed will need to make the opposite instruction.) Feed the coil with your right hand and place the coil on the top--inside the tortilla so that with your left thumb

you will slide half of the coil into the tortilla. This is accomplished better if you always have your left thumb at the top of the bowl at the 12 o'clock position (pretend you are working upon the surface of the face of a clock) and always turning the pot so that your hand does not dance around the pot.

Add every subsequent coil in the same fashion until you have reached the desired height of the pot. You can only build the wall up at one time equal to the width of the opening of the Puki you have chosen (if you have a 4" wide Puki then you can build 4" at a time. And if you want to build the pot higher you will have to let the bottom portion rest and stiffen up for about half an hour or so.) Now you are ready to start scraping and shaping the walls of your pot.

### *3. Scraping and Shaping the Walls*

**First:** . You will scrape the exterior wall before doing the inside. This is accomplished by holding your left hand on the inside of the bowl at the 3 o'clock position and make sure that the left hand is curved inward and not outward inside the bowl. Place a scraper (which can be made out of gourds, coconut shells, plastic or even tin cans) in your right hand holding the right thumb in the middle of the convex portion of the scraper and the fingers on the concave portion of the scraper--if you hold your right thumb on the edge of the scraper you will achieve nothing in scraping for it is too wimpy and thus I urge you to place your right thumb straight smack in the middle of the scraper. Scrape the exterior wall with even pressure going upward from the top of the Puki to the top of the last coil (if your coils separate that means that you did not use enough pressure to make them stick--so strike downward instead of upward on those coils that did not fuse.) Always strike the outside of the wall at the 3 o'clock position and strike with the straight side of the scraper. With the left hand on the interior move the pot either clock wise or counter clockwise (whichever is comfortable to you) and only move the pot a fraction of an inch.

**Second:** Once you have scraped the exterior wall and you cannot see the coils, proceed to scraping the interior. Place the scraper in your right hand with your fingers practically parallel to the straight side of the scraper, making sure that your fingers are on the concave portion of the scraper and the thumb is on the convex. Use the rounded portion of the scraper to shape the inside. Hold your left hand on the exterior wall at the 9 o'clock position with your smallest finger resting on the top of the Puki (this is called the rule of Pinky on the Puki) . The left hand should have the fingers open.as if you are holding a baseball glove. Now strike on the interior of the wall by using a fanning motion with your right hand gently touching the interior of the wall at about the 11 o'clock position and then with the majority of the force at the 9 o'clock position and easing up again a about the 8 o'clock position. Do not try to shape the pot at once with one motion--this requires many, many fanning motion strokes and eventually the pot starts to take shape. The shape of the pot is achieved by choosing a scraper that will create a definite shape. A round scraper will give you a bulbous jar and an oval scraper an oval jar and a moon shaped scraper a nice tall jar. So if you are not achieving the desired shape with a particular scraper, look again through your collection of scrapers to find the one that seems to be the most beneficial.

**Third:** If you want a rim on the pot, then this is the time to add at least two more coils to the top of your pot. But a word of caution: Do Not add more than two coils at a time to the top, for this will add too much weight to the existing wall and you will collapse the pot. And

in two coils you can achieve a wonderful rim. Since a rim has the curve going into the inside, then you will do the reverse process from above. Once you have added the two coils first scrape the INTERIOR with the flat side of the scraper by holding your left hand on the exterior and your right hand striking in the interior. Now take the scraper and place your fingers on the concave portion of the scraper, making sure that the fingers are parallel to the straight side of the scraper and the round part of the scraper faces the exterior of the pot. Cup your left hand on the inside and fan again on the outside striking toward your stomach in even strokes. This technique is not easily mastered but with practice you will make it work for you.

#### *4. Cutting the Top*

You are now ready to let the pot rest outdoors (in warm weather--or indoors in inclement weather) for about 15 minutes. This makes cutting the top easier. Bring the pot still in its puki back to your work space. Place the pot in its Puki on a turnstile. Place a metal cutting tool in your right hand with your index finger about a half inch from the tip .. Brace your right thigh against the table and your right FOREARM (not your elbow--check your anatomy) on your stomach or pelvis. Rotate the turnstile or the pot with your left hand all the while making sure that you are barely touching the pot with the tip of the metal tool to score it with a line to make sure that you are even. Then if your line meets, indent the tool further into the pot so that it extends beyond the wall and then you can trace around the line and cut the top off.

#### *5. Designing the Pot*

Now that the pot is finished you can etch a design into the wet clay with a bamboo skewer or stick or tool or whatever design you want to give it. But if you are to carve into the pot, let the pot rest for about 2 hours so that you will not take the pot out of round with too much pressure.

#### *6. Letting the Pot Become Leather Hard*

Place the pot in its Puki outside in a shady, breezy area.

If the sun is not too hot you can place the pot in the sun as long as you rotate it every few minutes. If the weather is inclement then, dry the pots indoors high up toward the ceiling where all the warm air is. Leave the pot to become leather hard until the top of the pot starts to change color from a dark brown to a light gold. Once the top of the pot has changed color, then you are ready to remove the Puki.

#### *7. Scraping the Wall with a Metal Scraper and Removing the Puki*

Before removing the pot from the Puki you want to take a metal scraper and shave off the excess clay so that all high spots on the wall are removed, using the straight side of the metal scraper. Hold the metal scraper at a perpendicular angle to the pot--this is shaving and not just simply apply make up. If you do this step diligently, you will save yourself an enormous amount of time sanding. When the pot has been removed from the Puki and the entire pot is leather hard than you can shave the bottom and the interior. On the bottom use the straight side of the metal scraper and in the interior the rounded portion. Bend the metal scraper to make a spoon-like tool. A spoon can also do the trick on the inside.

Remove the Puki by turning the pot upside down on a work table and pry the bowl off of the pot. You will notice that there is still an indentation called the Puki line. With a metal scraper in your right hand point the tip of the tool toward the bottom of the pot and bend the tool below the Puki line by placing your thumb on the tool at that particular point. This allows you to scrape only the excess from the pot without gouging too deeply. If you have a coil that shows at this point, do not add clay but scrape the coil away as if you were above the Puki line. Note that the bottom of the pot is rather soft and as such should not be placed upright but instead upside down. If the puki line is too indented and does not contain a coil separation line, you can at this time add a LITTLE bit of clay at a time to the Puki line. Remember to remove the mica and oil which covered the bottom of your pot with a sponge, water and a scraper. Oil doesn't allow anything to stick to the wall. Continue to dry the pot upside down again outdoors or indoors until the pot has changed color--inside and out. Now you can place the pot in direct sunlight to drive out the rest of the moisture.

To make sure that the pot is dry, you can then place the pot in a warm oven overnight or for a few hours (4).

#### *D. Sanding the Pot*

This clay is so hard when it dries that is virtually impossible to sand with sandpaper. So we use the old fashioned method of using sandstone for this purpose. Choose a sandstone that is about an inch to an inch and a half thick. Strike the exterior of the pot in a long, diagonal motion from top to bottom and then strike across the shoulder. The diagonal motion will keep your wall rounded while the long strokes lengthwise will remove most of the depressions. Remember that sanding a pot is the same as sanding a flat surface where you do not remove a depression by striking the depression but by sanding the entire surface. Note that the sandstone will not give you a smooth surface but will make lines on your pot. Later you will take MEDIUM sandpaper and remove those lines. Your concern at this time is removing the bumps on the wall and bringing the wall down to the lowest depression--THIS IS TEDIOUS WORK, AND A WELL SANDED POT IS WORTH ALL THE MONEY IN THE WORLD BECAUSE IT LOOKS CARED FOR AND FINISHED. Don't skimp on sanding. Persevere! A poorly sanded pot looks shitty when polished.

If your pot is a seed jar or a constricted neck jar and you cannot get your hand inside the bowl then you don't have to sand the inside (logic dictates). Otherwise, proceed to sand the interior.

Now take medium sandpaper and sand the entire bowl to remove the stone marks and prepare the pot for polishing.

#### *E. Polishing*

We are almost finished with the hard part of pottery making.

Polishing is accomplished by applying four layers of slip (a micaceous clay that is rich in mica and must be made to resemble a thick gravy or heavy cream) to the EXTERIOR of the bowl

ONLY at this time. (Later you will do the inside but not now.) Apply each layer of slip by using the sponge in the palm of your hand and smoothing the slip with a circular motion. If you have an etched design, you do not have to apply slip to the design and if you do, you will have to clean out the lines with every layer of slip. Do not apply the slip like paint on a wall, this leaves striations (lines). After you have applied one layer, you can immediately apply the second layer and so on. Now wring out your sponge so as to remove any excess slip that might be on the sponge. Then with the wrung out sponge, buff the pot for about 5 minutes or until the clay begins to dry and set.

Let the slip dry completely in direct sunlight or an oven.

Then take FINE sandpaper and lightly sand the slip. Be careful not to sand the slip off, you simply are trying to remove the roughness of the top part of the slip.

Again apply a very THIN coat of slip to the bowl and buff for a few minutes. Next apply a light coating of oil to the wall with a smooth cloth or other such material. Use a smooth polished agate (the best) or quartz stone to strike the exterior in a methodical, meticulous manner. Begin the polishing technique with extremely light pressure to go around the bowl, return and polish with more pressure. And then on the final go around on the pot use heavy pressure. If you strike too hard at the beginning the stone will leave a mark, and if you do not use enough pressure you will accomplish nothing. You will know if you are polishing the pot because it will begin to shine like glass. This is when you know that all the efforts into making the pot have been worth it.

Once you have polished the exterior of the pot, you must drive out the moisture you have put into the pot. So you must either let it dry in the sun for a few minutes or for about 5 minutes in the oven. Do not handle a polished pot with bare hands--use a soft cloth. Now you are ready to apply ONE and ONLY ONE coat of slip to interior of the pot and then buff the interior (if you have an open bowl it might do it some good to polish the interior. You will also have to apply one layer of slip at a time and dry it thoroughly. Proceed with buffing and polishing.)

Place the pot in direct sunlight or in an oven to dry completely.

#### *F. Pre-Firing Heating*

You cannot fire pots on a windy day; or a day that follows a hectic day. Do not fire during a rain storm or after a rain storm, snow storm, or hail storm. Make sure the ground is completely dry before you fire. So build a fire around the fire pit for about a day and a half using half a cord of juniper wood. You will not be able to sleep because you will be tending the fire. Don't use wood that has been struck by lightning for this too will cause your pots to crack and pop. Don't have too many onlookers for they might covet a pot and cause it to crack. Do not fire on the New Moon or Full Moon. Fire early in the morning but not too early and make sure the sun is bright but not too bright and by no means fire in the middle of the day nor the evening. If you see some clouds forming, even if they are small, stop firing immediately for fear that it might rain. ---- So if this is the case, we will wait forever to fire our pots. These were old proscriptions for firing pottery and if by now you haven't figured out that I do not follow these proscriptions then you have not seen me fire pots in Belgium and Pennsylvania in the middle of a rain and snow storm respectively. I have been able to fire

successfully in any type of weather and I have 99% success in firing. BUT I HAVE DISCOVERED ONE THING THAT WILL CAUSE POTS TO CRACK: **moisture in the wall**. So if you drive out the moisture, you reduce the likelihood that the pot will break. So my suggestion to you is that you follow the next set of instructions carefully, and I promise that the chances of losing a pot will be diminished.

Pre-firing heating means to drive out the moisture in either your home oven or in a kiln.

At home: Place the polished pots in the oven face up. Turn the heat up to warm (175 degrees or so). When the oven has reached that temperature you will hear the gas go off or in an electric oven it has an indicator light that the temperature has been reached.

Now turn the temperature setting up 25 degrees only(!) to 200 degrees. Wait for the oven to reach temperature and then raise the temperature setting another 25 degrees to 225, then to 250, to 275, to 300 and so on, till you reach 550 or the highest setting in your oven. Leave the pots at the highest temperature for 20 minutes. Turn the oven off and let the pots • cool overnight or faster by opening the oven door. The pots should have turned blackish in color this is normal. The pots will turn a reddish orange gold when fired.

In a kiln: Place the pots right side up and then turn the kiln on low and fire to cone 018 (in about 3 hours) or you can use the cone 0-twig method -- see me for details.

### *G. Firing the Pots*

1. Build a small fire outdoors on the ground (no need to dig a pit) and place a grate over the coals. Place your pots carefully on top of the grate upside down. You can stack these pots for they are not glazed and will not stick to each other. Add some more wood to the bottom below the grate and continue adding more and more wood until the pots are completely covered with soot.

2. Now take thin wood (1x2 works well) and place it around the pots on top of the grate or on the ground, one layer thick to cover the pots tepee fashion. The wood will ignite and the pot will be fired when the fire dies down in about 20 minutes. The soot on the pots will burn away and the pots will be a nice orange color. You can remove the pots from the fire with metal tools or leave them on the grate to cool slowly, but this is not necessary. In order to add the horse hair design, you will have to pull the pot out of the fire when they are still hot. If the horse hair does not leave a nice line, then it is too hot, and if the horse hair does not leave any marks, it means the pot has cooled down too much.

Or, you can fire this clay in a kiln at cone 010 or 09.

### *H. Purchasing Clay*

Clay can be purchased from:  
Felipe Ortega  
P.O. Box 682  
La Madera, NM 87539 (505)  
583-2345

Clay prices are quoted over the phone or by requesting a written quote. It is shipped the most economical way, and you pay for the shipping fees--an invoice shall be sent to you.

### *I. How to Get to La Madera*

Take 1-25 north to Santa Fe, take S1. Francis Drive exit and follow the signs to Espanola.

Go past three traffic lights in Espanola, the first is the road to La Mesilla and Sombrillo. The second traffic light is at Dandy Burger (which is on your left) and the third traffic light is at Tabacco Mart on your left (you can't miss this one because it is a bright garrish purple) then immediately get into the far left lane to turn left at a single solitary left turn blinking light and the sign on the right reads US 84/285. Stay on that road for 8 miles til you come to a US285 junction on the right that will take you to Ojo Caliente and points north. After 17.5 miles you will come to another junction to your right that is State Road 111 .. Turn left onto that road and go toward La Madera. Clock 5.2 miles on your odometer and the studio is on the left (after a Pink House which you can't miss either). The studio is right next to the road. Now you are at Owl Peak Pottery and studio. If you did not clock on your odometer, do not worry for right in the middle of the village is mile marker 5 after La Pasada Store which is the first recognizable commerce on the left as you enter the village. Then you will top a small hill and see a pink house on the left and my house is the very next house next to the road. My house is a real adobe (you can see the mud and bricks) with a large courtyard in the back. If you can't find the house, go back to the grocery store or Post Office and call. (Hint: The Post Office is long cement coated building on the right immediately across from both the pink house and my house.)