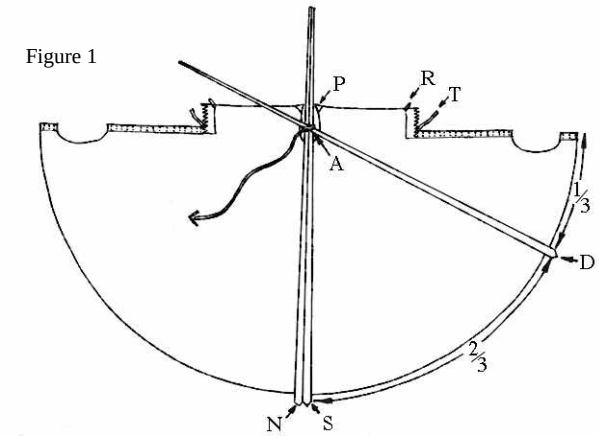
# Jaia Tipi's Instruction Book

# SETTING UP YOUR TIPI

**The Site:** Choose a site that is flat, level and at least the diameter of your lodge (i.e. 6m + for a 6m tipi). It should be raised from the surrounding area or at least be surrounded by a ditch to prevent water seepage. Raised ground allows the earth to totally drain and dry avoiding dampness. A sunny spot for winter, shady for summer is perfect.

**The Tripod:** The tripod is the foundation of the whole tipi and it is very important to be as precise as possible... a few inches error can skew the whole tipi. The tipi is traditionally set up with the door facing East (rising sun) although practically it is best to have the door facing *away* from the prevailing wind (and towards the best view). The notation used describes the door to be facing East. Select the three straightest, sturdiest poles. Spread the cover *(Figure 1)* and lay the poles as shown.

Figure 1




A= Apex; point where poles cross
D= Door Pole (Easterly Pole)
S= South Pole
N= North Pole
P= Smoke Flap Pocket
R= Smoke Flap Rope
T= Smoke Flap Tie

The North Pole (N) and the South Pole (S) are laid together along the middle line of the cover. The Door Pole (D) is now laid across them, crossing at point A, which is exactly on a line running up the center of the lacing pin holes (marked on your canvas). As shown, D should lie 1/3 of the way between the edge of the canvas and the center line, and all the poles N, S and D should extend 10cm beyond the cover edge (this raises the cover off the ground, allowing air flow, and preventing contact between the canvas and the earth. Even in winter this is helpful to draw the smoke upward and does not make the tipi cold).

Figure 2

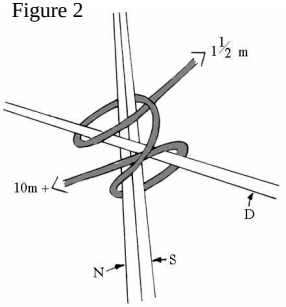
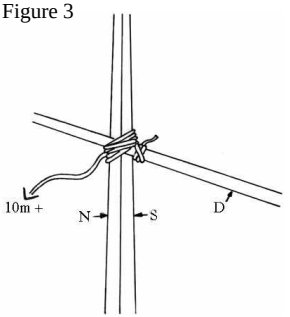


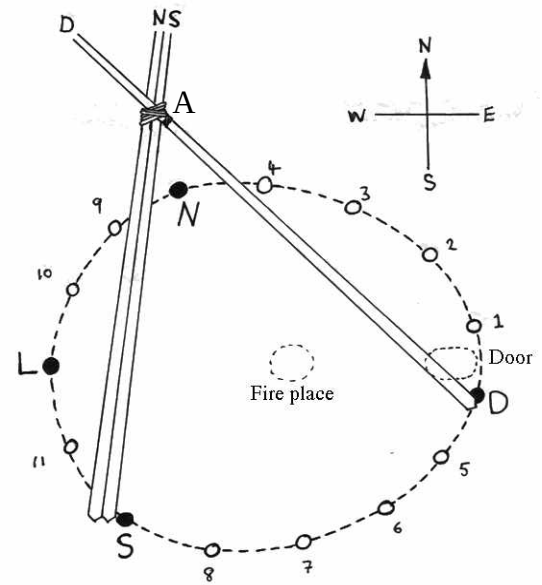

Figure 3




**Tying the Poles:** Using the end of the main rope tie the 3 tripod poles as shown in *Figure 2*, using a 'Clove Hitch' - (a handy trick here is to bind the poles together with a length of cut tyre-tube, then tie the ropes on top). Wind the short end of rope round and round two or three times, and secure with another 'Clove Hitch' around pole D (*Figure 3*).
*Note:* Nylon rope will not grip.

Make sure there is no slack in the knots.

Figure 4




**Setting the Tripod:** Carry the 3 poles to the tipi site, maintaining their relevant positions. Place the butt of the door pole just to the right of where you want the door (for notation purposes this is to be called 'East'). Place the N and S poles at Point S - to the South (*Figure 4*). Note: the tipi floor is *slightly* egg-shape. This is because the front slopes more than the back, i.e. D to A is longer than N or S to A.

**To Raise the Tripod:** It is easier with two people ~ one is possible for a 5m tipi and smaller. One person stands and lifts point A, whilst the other stands at Point S with their feet on the butts of N and S poles and pulls on the free end of the rope tying the tripod. As A becomes out of reach, the first person walks their hands along N and S until both are standing at S and the poles are standing upright. Now, with one holding the S pole, the other walks the N pole around to position N (*Figure 4*). The distances between N, S, D and A are asymetric. The distances from A - N, S and D should be correctly determined by measuring on the cover (*Figure 1),* for a *rough* guide, take the 'size' of the tipi e.g. 5m . The distance from N or S to D is *approximately* 90% of the tipi size i.e. 5m becomes 4.5m and N to S is *approximately* 80% of the tipi size i.e. 4m.

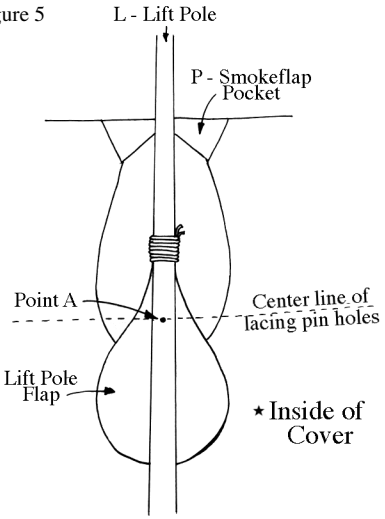
**Laying the Rest of the Poles:** Set your next sturdiest pole aside. This will become L, the lifting pole. Also set aside your two skiniest, shortest, most bent poles - these will be the smokeflap poles. By now you should have the tripod set, with at least 10m of rope hanging from the center. Referring to *Figure 4**, the poles now lay into the apex in the sequence shown. #1 should be another stout pole (North side of the door). Place the butt of each pole in position, with the pole upright, then gently lay each pole into the crutch of the apex, keeping a foot pressed onto the butt. Poles #1 - 8 should all lay in a V formed by the N and S poles. The distance between #1 and D is smaller than the rest, as this forms the doorway ~ about 1m. Poles #1 - 4 lie one on top of the other resting against the S pole. *Pole #4 may need to be held initially, until it is locked in by Pole #5.* Poles #5 - 8 lay on top of each other against the N pole. Now go around to the back of the tipi. There will be a gap, again between the N and S poles, with poles #1 - 4 on the right and #5 - 8 on the left. This is where poles #9, 10 and 11 go. Do not place a pole in position L (*Figure 4*).

****Note:** on smaller tipis there are less poles... e.g. only 3 between N, S and D.*

**Tying the Poles:** Take the free end of the rope out through the door gap. Now walk round the tipi clockwise (with chants in your heart) four times, keeping the rope taught, flicking it up tight around the apex in four neat coils, then bring it back in through the doorway and stake it down in front of the fire place, just forward of centre. This rope becomes your anchor rope.

**Lifting the Cover:** Place the lifting pole that you set aside earlier on the cover, in the same position as the N and S poles earlier. Make sure the pole lies on the *inside* of the cover (the smoke flap pockets open to the outside, the extensions to the bottom of the smokeflaps are also on the outside). Also ensure that the bass of the L pole is protuding beyond the bottom hem of the cover about **15cm.** Now bind the lift pole flap to the pole where it lays as in *Figure 5* (another tip is to again use inner tubing to strap the cover on, followed by rope). The cover **must not** slip (to this end a tack may be hammered through the lifting strap into the pole). Tie a smokeflap cord to each of the loops at the bottom of the flaps ~ (R in *Figure 1*). Now fold each side of the canvas over and over towards the lift pole, lying the two rolls of canvas along the lift pole. Now by either tying the canvas to the pole, or with two or more people gripping it tightly, lift the whole pole and cover and raise it into the last knot in the apex between poles #10 and 11, bringing the butt to position L in *Figure 4*.

Figure 5

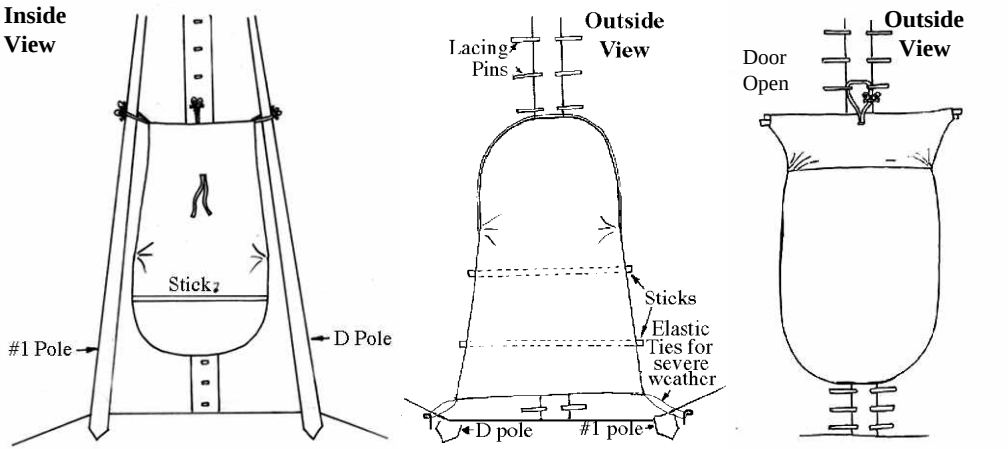



**Fitting the Cover:** Unfold the cover around the poles with the two edges meeting between #1 pole and the D pole. With larger tipis you will now need a ladder, stool or someones shoulders to reach up and tie the two canvas ties at the top of the lacing holes together.. You may have to 'billow' and pull the canvas to get the sides to meet *(T in Figure 1)*. Now insert the lacing pins (chopsticks are ideal). On one side of the cover the holes are wider apart than the other. From the *outside*, each pin goes through the *wide*side first then through the narrow side, back through the narrow and back to the outside through the wideside (gobbledegook??). Start with the top pin and work down.

**Adjusting the Poles:** A moment of truth is approaching. If the cover is too tight at the bottom, and more than 20cm off the ground with wrinkles above, the poles should be brought **inwards.** *Note:* you cannot move the *tripod* poles in or out. If the cover is too close to the ground and slack at the bottom, the poles need to be taken **out.** To adjust the poles, first position the door next to the door pole, and #1 pole on the other side. Then take each pole in turn (except the tripod poles), lift it slightly (twisting as you lift) and pull gently in and up **or** out and down. Begin with a fraction of movement on each pole, working round the whole tipi. Practise makes perfect. Each cover has its own character, and it *may* take a lot of head-scratching, and even reversing the whole procedure and starting a-fresh (sometimes several times). Soon one becomes a master and it will go up first time... the more precise one is the more chance of perfection. Do not try to get the cover super-tight at this stage, just even all around. Note that the tripods' poles do not move very much or very easily. One solution is to dig a wee hole on the inside if they need to come in or push them out onto a thin slab of wood to move them out. Place the smokeflap poles into their pockets (P in *Figure 1*) and rest them gently on the back of the tipi ~ taught but not tight. Now peg the cover down... start at the door and work backward, both sides at once. Now go inside and push the poles out and

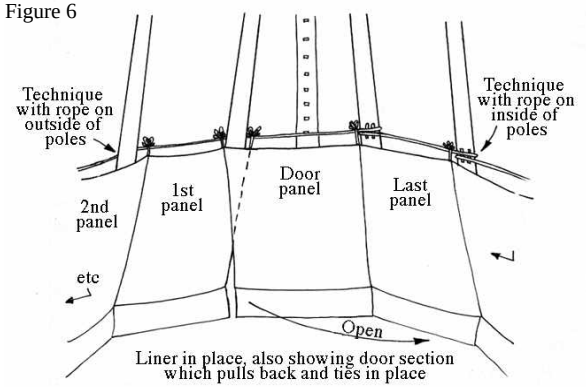
down tight against the canvas, twisting as you do. Note: when you take the cover down next mark the poles (tripod and lift pole) where they are tied and where they protude at the bottom of the cover and letter them accordingly. Normally the pegging will pull the cover tight and the poles should not need adjusting. The smoke flaps should fit neatly around the apex ~ you will see if it is too high or too low. If it is wrinkled at the top then the canvas has slipped down the lift pole, or the poles are too fat at the apex (or the poles just need bringing in). In summer you may wish to open the bottom of the door ~ simply undo the bottom pins and tuck behind pole #1 and D. You may also wish to roll the cover up ~ unpeg a section of the cover and start rolling! ~ it will support itself in an arch.

**Fixing the Door:** The door is designed to hang from the inside of the tipi, from #1 and D pole and the lacing pins, and come out through the door hole, securing to the outside pegs. There are two poles that keep the door tight, give it weight and support it on the outside of #1 and D pole. To have the door open, roll up on the outside and tie the tapes over the appropriate lacing pin. Notes: The door opens down-wind. i.e. fix only one of the bottom ties... in severe weather it pays to fix both.




**Setting the Inner Liner** The liner hangs on the inside of the poles, from a cord that runs around each pole using either technique shown in *Figure 6.* It provides a draft-free space inside, whilst allowing a circulation of air between it and the outer liner (to draw the smoke out). Measure up pole #1 to a height 10cm below the height of your liner, including the plastic base. Tie a piece of cord to pole #1 at this height and proceed around the tipi passing behind each pole and back to #1 (*Figure 6*). A more sophisticated technique is to

Figure 6



pass the cord around the inside of the poles, looping each pole, and inserting two small sticks as shown in *Figure 6a.* This allows any drips to run down the inside of the pole without catching on the cord and dripping. Next hang the liner, tying the tapes around the cord. Do not tie the liner *tight* against the cord, let it hang off the cord freely... the liner should preferably not contact the poles. The bottom 20 or 30cm should touch the floor by the poles. If you have a plastic bottomed liner, the plastic should extend about 20cm off the floor and at the join between cotton and plastic ~ the plastic should be on the inside ie. seams are on the outside. Start from pole #1 and work around to the left. The part in contact with the floor can be secured by the mats or ground sheet, or by means of logs rolled in cloth (*Figure 6*). The liner extends around to the D pole, where the last section remains unattached (or can be tied to slide) so that it can be pulled clear of the doorway (*Figure 6*).

Figure 6a

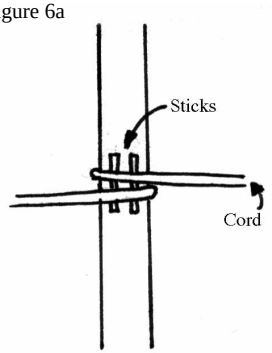
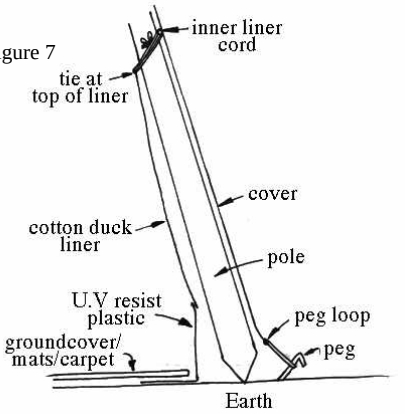



Figure 7




**Smoke Flap Positions:** Properly used, the smoke flaps will draw air through the tipi and expell all smoke whilst still giving protection from rain. Directions are given as if standing in front of the tipi looking at the smokeflaps. For most positions the smokeflap cords should be tied to a stake in front of the tipi. In general the flaps should always be angled downwind. Try to avoid pitching the tipi where the wind can come directly towards the tipi front.

1. **No wind:** Poles crossed behind the tipi, flaps open, cords can be tied out to each side to completely open the flaps *(Figure 8).*
2. **Wind from Right:** Both poles come round to the right hand side, both flaps point downwind. Stronger wind or heavier rain, bring the tops of the flaps closer, so only a narrow slit is left. Cords straight out to front *(Figure 9).*
3. **Wind from Left:** Reverse the above.
4. **Wind from Behind:** The same as Step 1 but bring flaps closer together by bringing poles more paralell behind.
5. **Wind from Front Left or Right:** As for 2 and 3 above, but bring the cords around to the same side as the flaps are pointed and tie to one of the pegs.
6. **Wind Directly from Front:** Smokey tipi!!
7. **Gone out, gone away, or big storm etc:** loosen cords; open both flaps, then bring one pole nearly to the front, **inside** the top of the other, then bring the other pole all the way around to the front to wrap around the other. Tie the cords off to a peg on the first side *(Figure 10).* The smokeflap butts should be about half to one meter away from the tipi

with the flaps taught ~ the main weight rests on the butts, some against the side of the tipi. Mostly it is common sense to keep an eye on the weather ~ it is a great way to stay in touch with exactly what is happening around you!

Figure 8

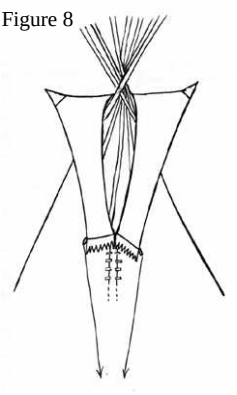


Figure 9

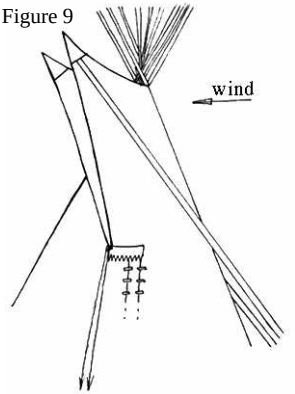
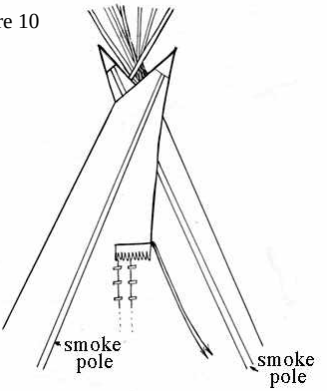



Figure 10

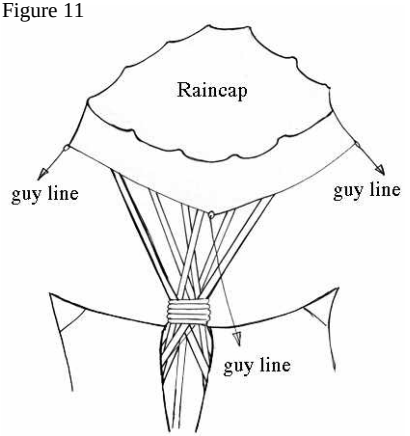



## Miscellaneous Notes

**Flooring:** We use wood chips to a depth of 10cm, with rush matts and rugs over the top ~ but anything will do... try to get a good, soft, insulative layer between you and the earth. Either a waterproof (damp proof) layer or a thick air-filled layer is essential. Beds raised on pallets will give good ventilation underneath. The free end of the rope can be tied to a pole, or tied down to a stake driven into the earth just in front of the fireplace. This provides extra achorage in severe weather, occassionally you may wish to tighten it.

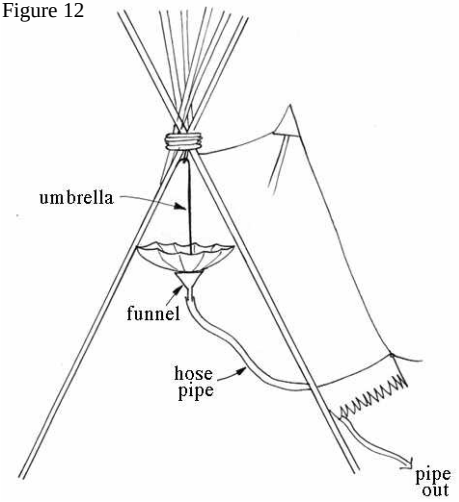
**Rain & Raincaps:** The poles above the tipi collect rain. Very little rain will actually fall into the tipi, but water will collect and run down the poles. Smooth poles will not drip, rough ones will, and you will have to manually run the drips down the poles to stop it. Once a channel is established it will not drip anymore. Smooth poles are a joy! One solution is a "raincap" secured over the pole ends...this means shortening the poles to about half to one meter above the Apex... and fitting a canvas umbrella over the poles, tied down with guys. This is a way to totally stop all leaks, drips etc. The only drawback being the loss of the aethsetic grace of long tapering poles, and a few extra guy lines.

Figure 11




Another ingenious solution *(Figure 12)* is to suspend an umbrella upside down from the apex

Figure 12




inside the tipi. Attached is a funnel, which feeds water out through a hose through the smoke flaps and into a bottle (obviously not a native Indian innovation, but effective). Otherwise, enjoy the odd drip, they're fine.... and the sun always comes out again!

The Fire: The fire is generally located forward of centre, underneath the smokehole. Do not dig the fire into a pit, as the real heat of a fire comes from the base, radiating out. A fire with shallow rocks around will radiate heat even at groud-level, much better than one in a hole or surrounded by huge rocks. A large "feeder" log from the door side will radiate heat through the tipi as it slowly burns and glows. Some folk use a pot-belly stove, but make sure the chimney stops one and a half meters above the stove to avoid concentrated hot air burning the canvas. We use a gas bottle and ring when we don't feel like lighting the fire for a cup of tea. Otherwise, a fire-powered kitchen is a simple joy ~ a tripod and a grill, baked vegetables, ember toaster and a camp oven!

Normally a bed would be positioned at the back of the tipi (least drips, most headroom, best view) although additional beds can be to the sides. Some folk also build a wooden decking slightly raised in the back half of the tipi...

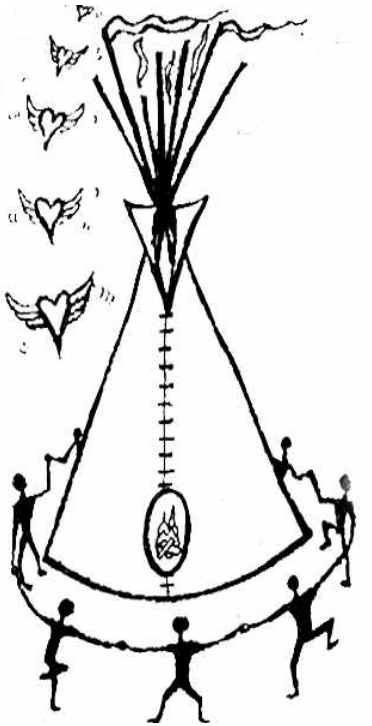
From now on, its all up to you.....ENJOY!

## Welcome to the Circle

Everything the power of the world does is done in a circle
The sky is round and I have heard that the Earth is round like a ball
and so are all the stars
The wind in its greatest power whirls
Birds make their nests in circles,
for theirs is the same religion as ours
The sun comes forth and goes down again in a circle
The moon does the same, and both are round
Even the seasons form a great circle in their changing,
and always come back to where they were
The life of a man is a circle from childhood to childhood
and so it is in everything where Power moves

Our tipis were round like the nests of birds
And these were always set in a circle
The nations hoop
A nest of many nests
Where the great spirits mean't for us to hatch
Our Children

Black Elk



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