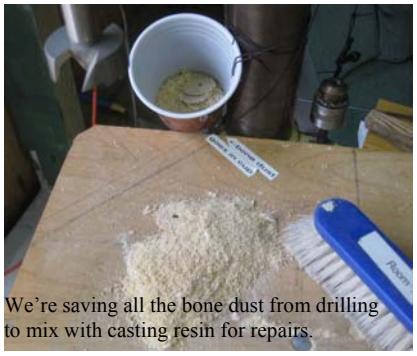
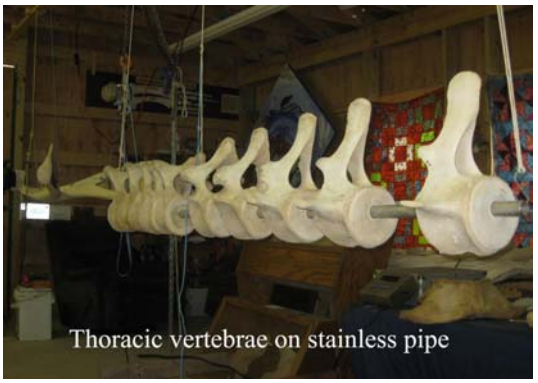
Bonehenge Update by Keith – 13June2010

1) <u>Drilling and mounting the thoracic vertebrae:</u> I'm using forstner bits on a press to drill holes in the vertebral centrums for mounting on schedule 40, $1\frac{3}{8}$" stainless steel pipe. I drill from one side then flip the vertebra over to finish the hole from the other side. Leveling each vertebra before drilling is critical so they line up perfectly to fit the pipe. It is also necessary to drill a small pilot hole after drilling the 1st hole so that the 2 holes meet in the center. We're saving all the bone dust because mixing it with casting resin makes fabulous repairs (see below).

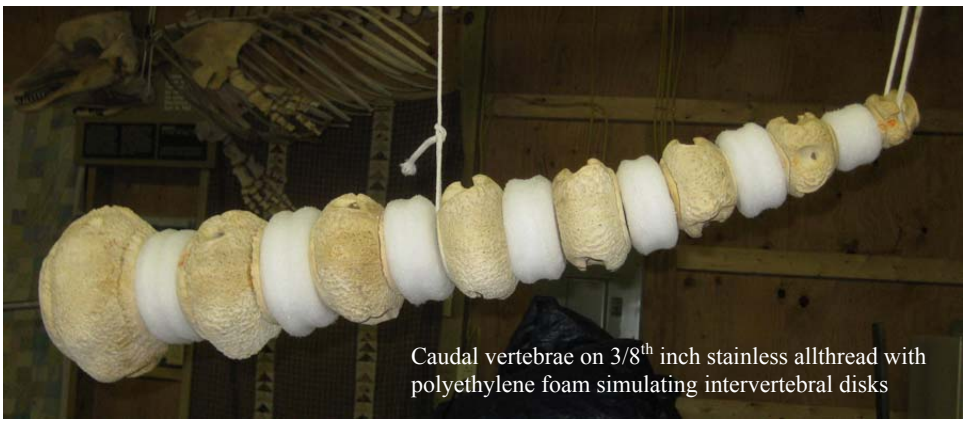

Leveling a vertebra before drilling

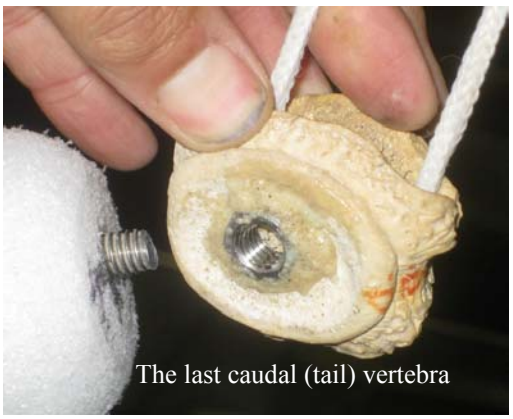

drilling a pilot hole


We're saving all the bone dust from drilling to mix with casting resin for repairs.


Thoracic vertebrae on stainless pipe

2) <u>The caudal (tail) section:</u> For the caudal (tail) section, we are mounting the vertebrae on $\frac{3}{8}$" stainless steel allthread, using polyethylene foam to simulate the intervertebral disks.


Caudal vertebrae on 3/8th inch stainless allthread with polyethylene foam simulating intervertebral disks


The last caudal (tail) vertebra

3) <u>Rib repairs:</u> Parts of some ribs are very fragile and several of the heads have actually broken off. To make the repair I've drilled ¼ inch holes in the broken parts (2 holes in each part) and set in ¼ inch allthread with casting resin. That's easier said than done because the holes never line up perfectly so I end up setting the allthread in one side and then drilling greatly oversized holes in the other side to allow the 2 parts to wiggle together before applying the resin.


Bone dust mixed with Alumalite casting resin