This year we have a mini-sensation of sorts to report in the site of Poggiomarino, about 18 kms east of Mt. Vesuvius on the south bank of the Sarno River. Poggiomarino was discovered during excavations for a new sewage treatment plant for the city of Naples. Archaeologists, led by excavator Dr. Claude Albore-Livadie, fought to keep the site as a protected archaeological zone and as of this writing seem to have won. See reports on their website http://www.archemail.it/poggio.htm with impressive photographs, also in Archaeologia Viva (July/August 2002). According to Dr. Albore, Poggiomarino seems to have existed as a settlement from the middle of the 2nd millennium BC to the 8th/7th centuries BC when it was destroyed by fire. When Laura Reis and Dr. Albore sawed sections from the dock, the planks still had about three fingers' worth of burned grain on them, attesting to the severity of the destruction and the almost-immediate covering over by other burned destruction debris. Poggiomarino because of its marshy environs is built of oak posts hammered into the muck of the river-bank and then filled with earth, stones, and more timber, rather like an Irish crannog. Dr. Albore and the Pompeii Soprintendente, Dr. Pietro Giovanni Guzzo, under whose auspices the excavation is allowed to continue, kindly permitted us to select 122 long-lived oak posts from the mini-islands you see in the photographs. The inhabitants must have hopped from islet to islet on little bridges or gone about by boat, much in the manner of the inhabitants of the southern Iraqi marshlands. Some samples crossdate, and others do not, which makes us suspect that we have wood from a variety of periods through the millennium-long history of the site. The pottery and metalwork from the destruction that ended the occupation is Orientalizing, so that means 8th/7th centuries BC, but we have no clear idea of how far back our wood goes. Wait until next year for a report.

Poggiomarino:



Italian Crannog? A Poggiomarino "island." Bands of tape show sampled oak posts, all below the A.D. 79 Vesuvius eruption debris.

In a change from our usual format we enclose reduced back-to-back versions of two posters from the 2001 Davos Symposium on "Climate and People." If you are over 21, you may find a magnifying glass helpful to pick out the details. Somewhat more easily visible will be a program on "King Midas" produced by 3bmtv, the British equivalent of the Discovery Channel, a good bit of which was filmed in this laboratory and at Gordion. It is supposed to air in January. When it will appear in the USA is anybody's guess, but you will see some old familiar faces and places.

Yearly reports like this are often difficult to lay out for the reader, simply because the dendrochronological material we collect does not come to us in any predictable or logical, much less coherent, order, nor are the samples of equal quality or equally easy to measure and crossdate. For every "Gee-Whiz" sample we must have ten that are humdrum at best, and that does not begin to take into account the hundreds of samples we reject in the field as hopeless.

Acemhöyük:

For instance, the first juniper sample from the Kayran Mevkii Tumulus near Gordion, collected in a salvage operation by personnel from the Museum of Anatolian Civilizations in Ankara, took Maryanne Newton all of 45 minutes to prepare, measure, and crossdate to 862 BC. By contrast, three large boxes from a large building at Acemhöyük, just north of the Sarikaya Palace, sent to us by Prof. Aliye Öztan, have occupied 15 people for a month, and the end is not yet in sight, even though the majority of the 60+ samples were poplar and consequently undatable. There are, however, some 15 pieces of pine and long-lived oak with microscopic rings—all in what is now an essentially treeless plain just south of the Great Salt Lake. The oak and pine appear to be datable (Maryanne is still working on it) against wood collected in earlier years from both Acemhöyük and Kültepe and wiggle-matched in place with a low error margin.

Team members for the summer 2002 collecting trip were Pam Sullivan (who has succeeded Jennifer Chiment as Lab Supervisor), students Laura Reis and Whitney Tassie, and Government Representative Nilüfer Karakas from the Antalya Museum. We came back at the end of August with a third of a ton of wood and charcoal, augmented last month by the charcoal from Acemhöyük. In the lab this term 20 people are working away on the summer's haul, including old-timers Kelly Jenks, Defne Bozkurt, and Beth Ryan in addition to the summer crew.

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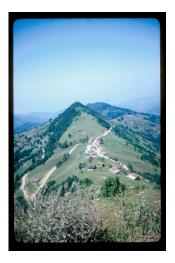
55°C or 131°F Pam Sullivan, Whitney Tassie, and Laura Reis collect 51 Roman and 7th century Byzantine timbers inside a thermal bath.

Three other sites with potentially important information for us because they should fill in some of our gaps are Allianoi (2nd century Roman with a Byzantine re-use), a thermal bath east of Pergamon, now being excavated by Dr. Ahmet Yaras, from which we have 61 samples. The photograph shows Laura Reis and Pam Sullivan collecting what might be 7th century Byzantine timbers from one of the baths. Another site is Klaros (archaic), being excavated by Prof. Nuran Sahin.

The third is Kerkenes Dag, possibly Herodotos's Pteria (6th century), to which excavator Dr. Geoffrey Summers invited our Define Bozkurt and where she retrieved some very good sections of pine charcoal. As of today the Kerkenes ring-sequence is 197 years long. It ought to extend our Bronze Age/Iron Age chronology downward by at least a century.

Define also collected a trunkload of charcoal samples from Dr. Sachihiro Omura's site of Kaman-Kalehöyük in Kirsehir Province. We know the Iron Age part of Kaman well from earlier visits, but this time the wood, all oak with tiny rings, is Early Bronze Age, something we have always wanted.

Bogazköy and Alacahöyük produced Hittite and Iron Age charcoal respectively, and the Agaçbasi bog above Sürmene east of Trabzon and 500 meters above today's upper timberline, produced yet more timbers that we expect will be 5th millennium BC. We were also told of a village 25kms. south of Agaçbasi that is built almost entirely of wood extracted from these bogs, and the proprietor of the local teahouse, where everybody on the yayla gathers, has appointed himself our unofficial guide to more prehistoric wood.





On the left, 2000m altitude, Agaçbasi bog is down on the right. Our newly self-appointed guide at the teahouse with Prof. Kuniholm and Laura Reis (right).

Forests and Shipwrecks:

In the forests we revisited a number of familiar spots, specifically Çatacik east of Eskisehir and Oltu east of Erzurum where our data sets ended in 1981. An ice storm at Çatacik last December had knocked down some 150,000 trees, so we had our pick of the best. The Çatacik chronology now runs from 2001 back to 1292. The Oltu chronology is not yet finished, but the ring-sequence is around 370 years. We ourselves were almost finished at Oltu when we got caught in a landslide followed by a violent rainstorm. The mountainside just came down into the Çoruh River. Whitney Tassie took some pictures of it (I was too busy driving). Meanwhile for two dozen spectacular photographs of the floods and damage, see the Milliyet newspaper web site at www.milliyet.com.tr/content/galeri/sel/sel01.html, see especially picture #5. The washed-out highway is where we had been some hours earlier.



Easy does it Pam Sullivan extracting a plank of the Bozburun shipwreck as Whitney Tassie and Laura Reis watch.

The importance of getting these forests brought up to date lies in both Maryanne's and Carol Griggs's dissertation projects which involve working up the palaeoclimatology of Anatolia and the Aegean. Now they can use the meteorological data from 1927, when the Turkish Meteorological Service was established, to present. A "present" that ended 20 years ago, where far too many of our chronologies end, was just not sufficient for this exercise. The notion is that they are going to

work up a model for climate/tree-ring relationships for half the years between 1927 and 2001, then see if they can 'predict' what we know actually happened in the other half of this period. Once they get a model that works, the exercise will be to 'retrodict' what happened with the climate all the way back to prehistory.

Matthew Harpster gave us the last batch of his Byzantine frames and planks from the Bozburun shipwreck. Usually one expects to see oak frames and pine planks. The Bozburun ship is built

backwards, so to speak, with pine frames and oak planks. I have never heard of such a thing. Do any readers have a suggestion as to what we might make of this?

For new bibliography, some of it as recent as two weeks ago, see our website which is about to be updated by Leonor Guariguata. Reprints are in the process of being made. Ken Harris reports that the WINDOWS version of CORINA, our ring-measuring and analysis program is almost ready to be released via the web.

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last modified March 6 2003 lg