

## FLORENCE RADIOCARBON DATES III

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This list comprises age measurements carried out from January 1976 to July 1976. Dated samples are all of archaeological interest, from Italian territory. Pretreatment of samples, production of purest CO<sub>2</sub> and counting techniques have been described elsewhere (Azzi, 1972; Azzi *et al*, 1973; Azzi *et al*, 1974). Ages of samples are calculated using the conventional half-life of  $5570 \pm 30$  yr and refer to 1950. Errors are stated in terms of one standard deviation of counting statistics.

### ACKNOWLEDGMENTS

We thank submitters for providing financial support.

### SAMPLE DESCRIPTIONS

#### I. ARCHAEOLOGIC AND HISTORIC SAMPLES

##### *A. Italy*

#### **Grotta Paglicci series**

Charcoal from Grotta Paglicci on left side of Settepenne V on S side of Gargano promontory near Rignano Garganico, 15km E St Severo, prov Foggia, Apulia (41° 39' 8" N, 15° 36' 51" E). Coll 1972 to 1975 and subm 1975 by A Palma di Cesnola, Ist Antropol e Paleontol Umana, Siena. Layers of this series contain different cultural horizons of Superior Paleolithic Age. Detailed information about the structure of the site was previously reported (Azzi *et al*, 1974).

#### **F-94. Grotta Paglicci 3,a**

Charcoal from Layer 3,a. Final Epigravettian industry with many geometric miroliths.

**11,440 ± 180**  
**9490 BC**

#### **F-95. Grotta Paglicci 4,a,c**

Charcoal from Layer 4,a,c. Final Epigravettian industry.

**11,950 ± 190**  
**10,000 BC**

#### **F-96. Grotta Paglicci 5,b,c**

Charcoal from Layer 5,b,c. Final Epigravettian industry with truncated backed blades.

**13,590 ± 200**  
**11,640 BC**

#### **F-64. Grotta Paglicci 6**

Charcoal from Layer 6 related to final Epigravettian industry.

**14,270 ± 230**  
**12,320 BC**

#### **F-65. Grotta Paglicci 7**

Charcoal from Layer 7. Last layer with final Epigravettian industry.

**14,820 ± 210**  
**12,870 BC**

**F-66. Grotta Paglicci 8** **15,460 ± 220**  
**13,510 BC**  
Charcoal from Layer 8. Evolute Epigravettian.

**F-67. Grotta Paglicci 9** **15,270 ± 220**  
**13,320 BC**  
Charcoal from Layer 9. Industry like F-66.

**F-68. Grotta Paglicci 10** **15,320 ± 250**  
**13,370 BC**  
Charcoal from Layer 10. Industry probably related to initial phase of Evolute Epigravettian age.

*General Comment (APC):* ages of Layers 10 to 8 agree with chronology of Evolute Epigravettian found in Riparo C, Grotta delle Cipolliane, Str 3 (Lecce, Apulia); dates of Layers 7 to 5 resemble Final Epigravettian of Ugento, Lecce (R-271: 14,170 ± 170; R-272: 13,870 ± 110) and Riparo Tagliente, Layers 15 and 16 (R-605a: 13,430 ± 180; R-605: 13,330 ± 160). Dates of Layers 4, 3, and 2 can be related to many settlements of Final Epigravettian found in N and S Italy: Grotta Romanelli, Lecce, Layers A and B (R-56: 11,930 ± 520; R-58: 11,800 ± 600), (Alessio *et al*, 1964); Grotta Erica, Salerno, Str C, Sec B, Cut 3 and 4 (F-38: 11,275 ± 360; F-39: 11,690 ± 370); Grotta Perciata, Palermo (F-27: 11,960 ± 330); Grotta dei Genovesi, Trapani (F-19: 11,710 ± 295); Nicchia Gamba, Salerno (F-25: 11,630 ± 230); Grotta del Romito, Cosenza, Lev 6a (R-299: 11,500 ± 200); Grotta della Cala, Salerno, Str H (F-21: 12,030 ± 220); Grotta della Madonna, Praia a Mare, Cosenza, Str X inf (R-293: 12,100 ± 150); Riparo Tagliente, Verona, Str 14 (R-604: 12,000 ± 400; R-371: 12,040 ± 170), (Alessio *et al*, 1970).

**F-69. Torre Mozza** **4020 ± 150**  
**2070 BC**  
Charcoal from open site with fireplace and pottery from Località Torre Mozza, com Piombino, prov Livorno (42° 56' 33" N, 14° 12' 08" E). Coll 1976 by A Galimberti, Ist Antropol, Siena, and subm 1976 by A Palma di Cesnola. Charcoal from base of anthropozoic level with pottery probably related to Final Bronze age. Date does not agree with typology (pers commun).

**F-70. Grotta della Cala Atrio** **29,850 ± 870**  
**27,900 BC**  
Charred bones from the front part of Cala Cave, Salerno, S Italy (40° 00' 02" N, 15° 22' 57" E). Coll and subm 1975 by P Gambassini, Ist Antropologia, Siena. Layer contains an Aurignacoid lithic industry with carinated, muzzle and scrapers; it underlies Q Layer of Gravettian age (F-22, F-23 and F-24: R, 1973, v 15, p 483).

#### **Castelcivita series**

Charred bones from base (Lev 10-11) and middle (Lev 9) levels of a reddish sand layer in Castelcivita Cave, Salerno, S Italy (40° 29' 41" N,

15° 12' 36" E). Coll and subm 1975 by P Gambassini. Layers contain a lithic industry of an early phase of Upper Paleolithic with marginal backed blades of Dufour type. Fauna include *Equus*, *Cervus*, and micro-mammals (Gambassini, 1976).

**F-71. Castelcivita 10,11** **32,470 ± 650**  
**30,520 BC**  
Charred bones from Level 10 and 11.

**F-72. Castelcivita 9** **32,930 ± 720**  
**30,980 BC**  
Charred bones from Level 9.

### Dicomano series

Charcoals from different levels of a Bronze age layer coll in open site of Dicomano, prov Florence (43° 53' 26" N, 13° 04' 26" E). Coll 1974 and subm 1976 by L Sarti, Ist Antropol, Siena. Analyzed layers, contained broken pottery and lithic industry, lay between 2 alluvial layers.

**F-73. Dicomano I** **2850 ± 80**  
**900 BC**  
Charcoal, from -1.45m depth between archaeol and alluvial layer, which contains medieval remains.

**F-74. Dicomano 2** **3270 ± 80**  
**1320 BC**  
Charcoal, -2.50m deep in core of archaeol layer.

*General Comment* (PG): typologically, Dicomano settlement belongs to Middle Bronze age; date agrees with typologic estimate.

### Riparo del Belvedere series

Charcoals from Monfenera, Low Valsesia, prov Vercelli, Piemonte (45° 42' 30" N, 8° 19' 30" E). Samples set a chronologic frame for Belvedere stratigraphy, unique in N Italy, except for Veneto.

**F-75. Riparo del Belvedere MF 4 196:0** **1225 ± 70**  
**AD 725**  
Charcoal from D 15 area, R.2 fireplace, R.2 superior layer. Sample assoc with Late Roman and Early medieval materials. Coll 1969 and subm 1976 by F Fedele, Ist Antropol, Torino. *Comment* (FF): date establishes chronologic position of Early Medieval settlements in NW Italy and agrees with hypothesis.

**F-76. Riparo del Belvedere MF 4 744:1** **3440 ± 150**  
**1490 BC**  
Charcoal from B 22 NE area, Gr-W fireplace, Grcb unit, R.3 layer. Coll 1972 and subm 1976 by F Fedele. Sample assoc with pottery and bones fragments. *Comment* (FF): date of this Neolithic settlement in Piemonte establishes chronology of VBQ culture in NW Italy.  
*General Comment* (FF): first 2 dates of these cultures found in NW Italy.

**St Martin de Corléans series**

Charcoal from prehistoric and archaeol settlement of St Martin de Corléans, from W suburbs of Aosta, Val d'Aosta (45° 27' N, 17° 40' E) at +586m, near St. Martin de Corléans Church. Samples coll in N part of settlement, which was divided in 2 areas, called, respectively, St Martin Nord and St Martin Sud. Samples belong to a large settlement containing Megalithic constructions raised between end of Neolithic and Eneolithic ages. Materials analyzed coll 1969 to 1971 and subm 1975 by F Mezzena, Sov Antichità, Aosta.

<b>F-77. St Martin de Corléans P7</b>	<b>4720 ± 150</b> <b>2320 BC</b>
Charcoal from wooden pile, without stone base.	
<b>F-78. St Martin de Corléans P 12</b>	<b>5020 ± 180</b> <b>3070 BC</b>
Charcoal from wooden pile, with stone base.	
<b>F-79. St Martin de Corléans P 13</b>	<b>4325 ± 170</b> <b>2375 BC</b>
Charcoal from wooden pile, without stone base.	
<b>F-80. St Martin de Corléans P 15</b>	<b>4800 ± 170</b> <b>2850 BC</b>
Charcoal from wooden pile, with stone base.	
<b>F-81. St Martin de Corléans P 16</b>	<b>4840 ± 190</b> <b>2890 BC</b>
Charcoal from wooden pile, with stone base.	
<b>F-82. St Martin de Corléans P 17</b>	<b>4910 ± 200</b> <b>2960 BC</b>
Charcoal from wooden pile, with stone base.	
<b>F-83. St Martin de Corléans P 19</b>	<b>4450 ± 180</b> <b>2250 BC</b>
Charcoal from wooden pile, without stone base.	

*General Comment* (FM): samples were found in big holes, in which were erected probably totemic piles, with alignment NE-SW; perhaps settlement was a worship area (Mezzena, 1974).

**Isola Santa series**

Charcoal from an open settlement with Mesolithic industry in Isola Santa, in Turríte Secca R Valley, Alpi Apuane, com Careggine, prov Lucca (44° 03' 48" N, 14° 15' 22" E). Samples coll and subm 1975 by C Tozzi, Ist Antropol, Pisa.

<b>F-89. Isola Santa L 3</b>	<b>1270 ± 120</b> <b>AD 680</b>
Charcoal from L 3 Layer, probably disturbed, supposition confirmed by date that is too recent and does not agree with typology.	

**F-90. Isola Santa L 4 a,b,c**

Charcoal from superior part of Layer L 4.

**9370 ± 150  
7420 BC****F-91. Isola Santa, L 4 d,e**

Charcoal from inferior part of Layer L 4.

**9980 ± 160  
8030 BC**

*General Comment (CT):* F-90 and -91 oldest dates of Mesolithic settlements (Sauveterroid type) and agree with absolute chronology given by Epipaleolithic and Upper Paleolithic of Adige Valley deposits.

**F-92. S Maria di Leuca**

Charcoal from Level 5 of Sec C in Bronze age village of S Maria di Leuca, prov Lecce (39° 47' N, 18° 22' E). Coll 1975 by G Cremonesi, Univ Lecce, and subm 1975 by C Tozzi. Sample from a level in which a fire-place and much pottery of Apenninic culture were found. Date is probably too old topologically.

**4050 ± 140  
2100 BC****F-93. Catignano**

Charcoal from Structure 59 in Neolithic village of Catignano, prov Pescara (42° 21' 27" N, 13° 44' 08" E). Coll and subm 1975 by C Tozzi. Date seems too recent; in relation to pottery and stratigraphy of Grotta dei Piccioni and Grotta S Angelo, Catignano village is older than beginning of Ripoli culture.

**4920 ± 210  
2970 BC**

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