## **Description of Additional Supplementary Files**

File name: Supplementary Data 1

**Description:** Summary table for each sequenced individual describing sampling site, results of the radiocarbon dating, genome sequencing summary statistics, and contamination estimates

File name: Supplementary Data 2

**Description:** Information on sequencing libraries per individual

File name: Supplementary Data 3

Description: Description and SNP number information for ancient individuals (new and

previously published) analyzed in this study

File name: Supplementary Data 4

**Description:** Mitochondrial mutation info for individuals sequenced in this study

File name: Supplementary Data 5

**Description:** Y chromosome variants for individuals sequenced in this study

File name: Supplementary Data 6

**Description:** qpAdm results for a set of European Mesolithic cline individuals

**File name:** Supplementary Data 7

**Description:** Results for WHG genetic and geographic distance regression analysis

**File name:** Supplementary Data 8 **Description:** qpAdm results for a ukr

File name: Supplementary Data 9

**Description:** f4 admixture test for ukr samples

File name: Supplementary Data 10

**Description:** qpAdm results for a ukr104

File name: Supplementary Data 11

**Description:** f4 and f4-ratio test for Neolithic Romanian and Polish samples

File name: Supplementary Data 12

**Description:** Kinship results for Ukrainian, Romanian and Polish samples

**File name:** Supplementary Data 13

Description: Y-chromosome mutation description for the Yasinovatka family samples

File name: Supplementary Data 14

**Description:** Paired individuals in conditional nucleotide diversity calculation

File name: Supplementary Data 15

**Description:** Extended info on radiocarbon datings and stable isotope values from human bone

collagen for the Ukrainian samples, used in Supplementary Note 4

File name: Supplementary Data 16

**Description:** Summary of interpreted reservoir effect for the investigated individuals with or

without  $\delta 13C$  and  $\delta 15N$  signatures.

File name: Supplementary Data 17

Description: Extended information on the radiocarbon dates and isotopic measurements for

Romanian individuals.