

Executive Summary



(author K. Pęczalski)

State Party

Poland

State, Province or Region

Świętokrzyskie (Holy Cross) Voivodeship
Districts (Powiat) Ostrowiec Świętokrzyski and Opatów

Name of Property

Krzemionki prehistoric striped flint mining region

Geographical Coordinates to the Nearest Second

Id	Name of the component part	Region(s) / district(s)	Latitude	Longitude
	Krzemionki prehistoric striped flint mining region – all component parts	Świętokrzyskie Voivodeship	N 50.9225	E 21.5499
K1	Krzemionki Opatowskie Mining Field	Ostrowiec Świętokrzyski	N 50.9681	E 21.5024
K2	Borownia Mining Field	Ostrowiec Świętokrzyski	N 50.9258	E 21.5636
K3	Koryczna Mining Field	Ostrowiec Świętokrzyski and Opatów	N 50.9116	E 21.6045
K4	Gawroniec Settlement	Ostrowiec Świętokrzyski	N 50.8843	E 21.5289


K1 - KRZEMIONKI OPATOWSKIE MINING FIELD


K2 - BOROWNIA MINING FIELD

K3 - KORYCIZNA MINING FIELD

K4 - GAWRONIEC SETTLEMENT

KRZEMIONKI
Prehistoric Striped Flint Mining Region

 NOMINATED PROPERTY

 PROPOSED BUFFER ZONE

0 750 1500
m

print map scale = 1 : 30000 at A2 layout format
base map: ISOK geoportal.gov.pl by: NID World Heritage Unit date: Oct-2017

ALL COMPONENTS MAP



Textual Description of the Boundary(ies) of the Nominated Property

The Property is a serial nomination of four component parts that, together, represent a singular ensemble of the prehistoric exploitation of flint. It contains the best preserved, most technically diverse and complete prehistoric flint mining assemblage known. All elements necessary to express potential Outstanding Universal Value are included and the boundaries of the nominated Property have been drawn to constrain all principal attributes. Buffer zones have been delineated around each component part to identify a sufficient area within which development or other factors might have a negative impact that could otherwise be a threat to the potential World Heritage values of the property.

Criteria under which Property is Nominated

Criterion (i) represent a masterpiece of human creative genius;

Criterion (iii) bear a unique or at least exceptional testimony to a cultural tradition or to a civilisation which is living or which has disappeared;

Criterion (iv) is an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history.

Draft Statement of Outstanding Universal Value

Brief synthesis

Krzemionki prehistoric striped flint mining region (in short: *Krzemionki*) is located in the north-eastern fringe of the Świętokrzyskie (Holy Cross) Mountains in central Poland on both sides of Kamienna River. It is a serial property comprised of four component parts: the principal Krzemionki Opatowskie Mining Field; two smaller mining fields, Borownia and Korycizna, aligned on the same geological structure; and the Gawroniec prehistoric miners' permanent settlement that received rough axes from the mines for finishing and polishing prior to distribution. The property dates from 3,900 BCE to 1,600 BCE (Neolithic to Early Bronze Age) and is one of the largest known complexes of its type. It is also the most complete and wholly readable socio-technical system of prehistoric underground flint mining and processing known in the world, and illustrates the greatest range of prehistoric flint mining techniques known in a single property. Features include great chambers with a floor area of over 500 m² that are unknown from any other site. Moreover, a unique type of flint – striped flint banded in exceptional zebra-like patterns of alternating shades of grey – was mined and fashioned into axes and distributed in a verifiable radius of 650 km from the complex, in present-day Germany, Czech Republic, Moravia, Slovakia, western Ukraine, Belarus and Lithuania.

A diverse range of mine types are also identified with different surface expressions in a remarkably intact anthropogenic surface that presents a rare prehistoric industrial landscape of shaft depressions and up-cast waste, remnants of flint workshops, miners' camps and communication routes. Gawroniec Settlement, integral to the functional integrity of the deposit management system, is clear testimony to the organisation of a prehistoric community based around mining.

Criterion (i): *Krzemionki prehistoric striped flint mining region* is an outstanding example of exceptional creative and technical ability, providing clear testimony to early human inventiveness, mining techniques and organisation. The network of mine shafts, galleries and chambers excavated in hard limestone illustrates the greatest range of prehistoric mining techniques evidenced in a single site. It is an exemplar of the prehistoric 'mining phenomenon' whereby a radically new principle of underground mining allowed large quantities of better quality flint to be exploited from deeply buried seams.

Criterion (iii): *Krzemionki prehistoric striped flint mining region* is illustrative of the living and working patterns of settled prehistoric communities that distinguish the Neolithic period from that which preceded it. It provides exceptional scientific and anthropological evidence that supports a complete physical testimony of a distinctive cultural tradition that has disappeared.

The value of the nominated Property, including the integral Gawroniec Settlement (also the region's most significant prehistoric settlement), is further enhanced by the proven distribution of striped-flint axes that have been identified in a radius of over 650 kilometres from the complex – the greatest recorded range for prehistoric flint axes as significant indicators of prehistoric movement.

Criterion (iv): *Krzemionki prehistoric striped flint mining region* provides exceptional evidence that the prehistoric period, which brought flint mining to produce tools, was a watershed period in the history of humankind. Diverse underground prehistoric mining structures are present in the nominated Property – comprising open-pit, niche-gallery, gallery, room-and-pillar, and chamber mines – and primary workshops survive intact amongst well over 4,000 shafts and pits.

Integrity

Krzemionki prehistoric striped flint mining region, as a whole, comprises the best preserved, most technically diverse and complete prehistoric flint mining assemblage known. All elements necessary to express potential Outstanding Universal Value are included in the serial property that represents the exploitation of the only deposit of striped flint to be mined in prehistory. Principle features and attributes have been confirmed in detail using a combination of historic and recent archaeological research, including Airborne Laser Scanning that has accurately mapped the sites in 3D under forest cover. The permanent settlement site, on a promontory in open agricultural fields, was archaeologically excavated in the late-1940s and '50s and the boundary exceeds the archaeological site boundary that contains all known evidence of prehistoric settlement.

The site does not suffer from current adverse development or neglect.

Authenticity

Krzemionki prehistoric striped flint mining region is characterised by an exceptional level of authenticity, in all its attributes, expressed in elements that include: the well preserved form and structure of the underground such as shafts, chambers, communication galleries, transport corridors, supporting pillars or waste heaps of mining and processing, as well as the aboveground industrial landscape consisting of shaft depressions and up-cast waste, remnants of flint workshops, miners' camps and communication routes. The majority of the mining fields are left unexcavated. At Krzemionki Opatowskie Mining Field, a small segment of the mining field has been excavated archaeologically and, after some conservation work, gives unparalleled access to workings with a diversity and combination of attributes that have remained almost unchanged for over 5,000 years. Attributes of Gawroniec Settlement are equally easily read in terms of location and setting, form, and archaeological evidence that is tangible proof of organisation and process directly tied to the mining fields. Archaeological excavations were conducted between 1947 and 1961 and apart from extensive waste from flint processing, dateable evidence included pottery (large storage vessels, funnel-shaped

flasks and vases, ceramic pipes, and ceramic weaving spindles) and organic remains which were radiocarbon-dated to between 3,500 and 3,200 BCE. New, additional and higher resolution, radiocarbon dates for the mining fields are being compiled during 2017–2018.

Protection and management

The nominated Property is under full legal protection in its entirety. The management system for *Krzemionki prehistoric striped flint mining region* will be implemented by the 'Krzemionki' Archaeological Museum and Reserve (Muzeum Archeologiczne i Rezerwat „Krzemionki”), a local museum that is renowned in Poland and which takes a lead role in the management and protection of *Krzemionki*. Its organisational structure will be adapted and extended to the other three component parts in the series as part of a new property management plan process currently (2018) in development and which will be adopted in that year. Currently there are no recognisable threats or vulnerabilities to the preservation of the nominated Property for future generations.

Name and Contact Information of Official Local Institution/agency

Organisation:

Ośrodek ds. Światowego Dziedzictwa w Narodowym Instytucie Dziedzictwa

(Centre for World Heritage at the National Heritage Board of Poland)

Address: ul. Kopernika 36/40, 00-924, Warszawa, Poland

Tel: +48 22 826 02 39, 22 826 92 47

E-mail: unesco@nid.pl, info@nid.pl

Web address: www.zabytek.pl, www.swiatowedziedzictwo.nid.pl



Stefan Krukowski in Krzemionki, 1960 (photo D. Kostkowski)