Islamic Republic of Iran

Iranian Cultural Heritage, Handicrafts and Tourism Organization

ICHHTO

Nomination of

Hyrcanian forests

For Inscription on the World Heritage List

Executive Summary

Tehran 2018

Executive Summary

State Party

Iran (Islamic Republic of)

State, Province or Region

The proposed serial nomination is comprised of 15 components primarily located in three Northern Iranian provinces: Golestan, Mazandaran and Gilan, with small parts extending into the provinces of Semnan and North Khorasan**.**

Name of Property

Hyrcanian Forests

Geographical coordinates to the nearest second

The geographical coordinates and position of the components of the nominated serial approach are presented hereafter in one overview table and map.

Overview of names, central geographical coordinates and surface areas of the proposed components

ID	Name of the component part	Region(s) / District(s)	Coordinates of the Central Point	Area of Nominated Component of the Property (ha)	Area of the Buffer Zone (ha)
01	Golestan (North)	Golestan Province, North Khorasan Province	55°43'27.4"E, 37°25'17.3"N	17,873.18	64,300.77
02	Golestan (South)	Golestan Province, North Khorasan Province, Semnan Province	55°43'32.3"E, 37°20'26.4"N	10,658.08	
03	Abr (East)	Golestan Province, Semnan Province	54°56'41.6"E, 36°48'45.3"N	6672.52	23,323.35
04	Abr (West)	Golestan Province, Semnan Province	55°6'3.4"E, 36°48'57.0"N	10,991.08	
05	Jahan Nama	Golestan Province	54°24'5.5"E, 36°39'55.0"N	11,339.73	26,862.83
06	Boola	Mazandaran Province	53°23'37.5"E, 36°5'55.8"N	17,516.47	12,344.21
07	Alimestan	Mazandaran Province	52°24'14.2"E, 36°10'24.9"N	394.30	845.98

08	Vaz (East)	Mazandaran Province	52°7'30.2"E, 36°16'44.8"N	2,218.16	3,720.15
09	Vaz (West)	Mazandaran Province	52°3'39.8"E, 36°18'26.9"N	4692.37	
10	Kojoor	Mazandaran Province	51°40'3.5"E, 36°32'45.7"N	14,891.80	9,628.50
11	Chahar-Bagh	Mazandaran Province	51°13'1.7"E, 36°15'30.8"N	6,886.44	2,663.80
12	Khoshk-e-Daran	Mazandaran Province	51°3'50.3"E, 36°43'38.1"N	214.47	39.08
13	Siahroud-e-Roudbar	Gilan Province	49°40'19.3"E, 36°53'59.2"N	11,197.40	15,897.40
14	Gasht Roudkhan	Gilan Province	49°9'9.9"E, 37°3'56.0"N	10,541.13	16,015.37
15	Lisar	Gilan Province	48°49'56.4"E, 37°56'8.0"N	3,397.61	1,487.35
Total area (ha)				**129, 484.76**	**177, 128.8**

Textual description of the boundary(ies) of the nominated property

The nominated area is based on a serial approach uniting 15 components, which were carefully selected according to the following criteria:

- Representativeness in terms of the climate-based gradients and geographical "corner stones" of forests from Northwest to East and elevation, ranging from the lowlands to mountain forests in high altitudes while taking into account integrity considerations;
- Coverage of the largest and most intact remnants of primary forests;
- Representativeness in terms of the diversity of forest types, and of the specific plant and animal life including the endemic and relic species and most important wildlife habitats;
- Coverage of large, undisturbed stands of primary forests illustrating all temporal and spatial phases of forest regeneration cycles;
- Inclusion of the two major ecotones, i.e. the transition zone of forests beyond the tree line in the high mountains, as well as the abrupt transition between forests markedly distinct drylands of the Irano-Turanian bio-geographical region;
- Expected capacity to further evolve as complex forest ecosystem and adapt to global change;
- Effective conservation and unambiguous governmental commitment to consolidate the conservation efforts for the selected components.

Golestan consists of two parts. Part 1 stretches from the northern extreme of Tangrah toward eastern Qhousheh, running along the north to the eastern extreme of the Tatli village, which marks the northern extreme of Golestan (01) and reaches the ecotone on the eastern border of the component. Part 2 (Golestan (02)) stretches from the northeast of Dasht-e Shad, going towards the east of Kondeskouh, running in the north to the Asian Highway, where it moves eastern-ward toward the northern part of Dasht village. Abr (01), stretches from the southern part of Aliabad-e-Katul toward the east to Zarringol and from there to the southeast to the north of Shirinabad and is limited to Afra Takhteh. Abr (02) stretches from the eastern part of Shirinabad toward the northeast to the east of Miyanrustaq, going to the east to the southwest of Jouzchal. Jahan Nama (05) stretches from the northern extreme of Haji Abad, running in the north to the east of Saad Abad, through to the north and then to the east and reaching the southern part of Ziarat. Boola (06) stretches from the northeast of Gelard village to the eastern most of Pachi village and from there it stretches north to the eastern part of Partekola, stretching through northeast and later southeast to reach Chehardeh Roudbar and from there going in a southeast direction to Bandebon. Alimestan (07) stretches from the southernmost part of Alimestan village to the north and later the south towards the northwest of Emamzadeh Ghasem. The northernmost coordinations of the component are: 36.1852 latitude / 52.4071 longitude. Vaz (08) stretches from the northernmost of Laskooti toward the northwest to the eastern part of Michkakhooni. It then stretches in the northeast up to Kondeskoben and from there to the western part of Vazeolia. Vaz (09) stretching from the eastern part of Roudbarak, running though the northeast to reach the southernmost of Vazeolia from where it moves in the southeast direction to reach the limits of: 52.1679 longitude / 36.2894 latitude. Kojoor (10), stretching from the southern part of Bin, running in the northwest to 51.5479 longitude and 36.5876 latitude. It then stretches in the northeast to reach the southern part of Bandpeh and from there to the east to reach Dizirkala. Chahar-Bagh (11), stretching from the western most of Elamol toward the west and in the east of Angoran it stretches to the northeast to reach Dozdband and from there to the southeast to reach the northwest of Varkalo. Khoshk-e-Daran (12) is in the form of a rectangle with the following coordinates (longitude: 51.0576 and latitude: 36.7158, longitude: 51.0607 and latitude: 36.7393, longitude: 51.0717 and latitude: 36.7363, longitude: 51.0659 and latitude: 36.7158). Siahroud-e Roudbar (13), stretching from the northern parts of Pas Talkoh, going toward the northwest to the south of Renask Bon and from there it stretches in the southeast to Shah Shaheedan. Gasht Roudkhan (14), stretching from the northernmost of Ziandasht, running toward the west to Diezab and from there to the northeast to Gerdvalst and from there to the east to Fousheh. Lisar (15), stretching from the

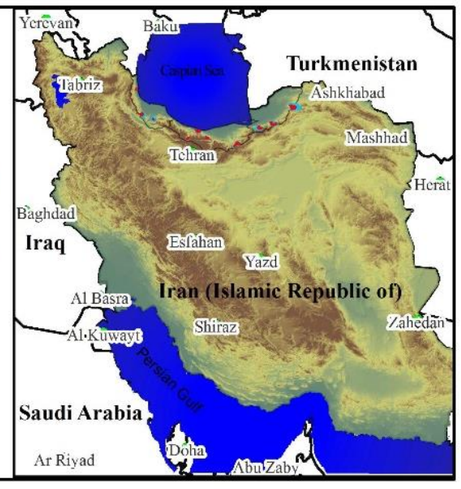
west of Pesara, running through the west to the east of Rasmje and from the north to Tongsar, running through the north to Kolmar, going toward the east to the surroundings of Siahjafar.

A4 or A3 size map(s) of the nominated property, showing boundaries and buffer zone (if different)

The overview map hereafter shows the location of the proposed component parts within the Iranian part of the Hyrcanian Forests. Please find more detailed maps of all components and their buffer zones in chapters 1, 2 and in the annex.

Legend

- Proposed/Nominated Component Part
- Proposed Buffer Zone



Criteria under which property is nominated (itemize criteria)

Inscription on the World Heritage List is proposed under criteria (ix) and (x):

Criterion (ix):

The nominated area is a globally outstanding example of the evolution of temperate forests, the survival of fossil tree species, as well as of the ongoing ecological processes of diversification and adaptation to constantly changing environmental conditions. The scale and the degree of naturalness are extraordinary by the standards of temperate forests, which is why natural ecological and biological processes continue to function in ways that are not possible elsewhere.

Criterion (x):

The nominated area is the natural habitat for numerous relic, rare, endangered, and endemic species, for which the Hyrcanian Forests are renowned.

Draft Statement of Outstanding Universal Value

Brief synthesis

Along more than 850 kilometres, almost two million hectares of the Hyrcanian Forests cover the northern slopes of the Alborz Mountains, as a continuous green belt of deciduous broadleaf forest. These forests are located in the North of Iran with a smaller portion reaching into neighbouring Azerbaijan and encompass a remarkable diversity of forest types along two major ecological gradients: The first from the northwest to the east; the second being a major altitudinal gradient from slightly below sea level all the way to the tree line at around 2,500 to 2,800 m.a.s.l. in rugged mountainous terrain. The Hyrcanian Forests constitute one of the most important remnants of primary temperate deciduous broad-leaved forests anywhere on the planet. They tell the fascinating story of uninterrupted and ongoing evolution over some 25 million years from the Tertiary period to this day, an extraordinary story of continuity and survival, of persistence and flexibility, of adaptation and diversification.

Two distinct ecotones further set the Hyrcanian forests apart. While the ecologically fascinating transition from forests to subalpine and alpine vegetation at the tree line is not unusual per se, the abrupt encounter of lush temperate forests with rugged drylands and semi-deserts is most

extraordinary. The Hyrcanian Forests are renowned for their high biodiversity, numerous relic and fossil species of both flora and fauna, a high degree of endemism across numerous taxonomic groups and consequently an irreplaceable genetic pool. Noteworthy species include, for example, several relic tree species such as the famous Parrotia tree *(Parrotia persica)*, which also stands out during the spectacular autumn coloring. Charismatic large mammals include the endangered Persian Leopard, Brown Bear, Wild goat and Wild Cat. The serial World Heritage approach to the Hyrcanian Forests is based on the selection of a network of the most intact, formally protected forests representing the biological wealth and diversity of forest types and ecotones across the forest region.

Justification for Criteria

Criterion (ix)

Globally, it is extremely rare that the evolution of a temperate deciduous forest region has never been interrupted over such a long period of time and is ongoing at such a large scale and with such a high degree of naturalness. The forests could thereby diversify into an exceptional range of forest types along a gradient from sea level up to the tree line at some 2,500 to 2,800 m.a.s.l., as well as in a gradient of decreasing humidity along the southern shore of the Caspian Sea from the northwest to the east. The annual precipitation exceeds 2,000 mm in Northwest, dropping to some 500 mm in the East. Particularities include an exceptionally diverse and complex understory, an unusually high proportion of large, old trees and rare plant communities. There are two major ecotones between the Hyrcanian Forests and adjacent ecosystems. In the higher altitudes of the Alborz Mountains, the mostly deciduous forests meet subalpine and alpine thorn-cushion vegetation without the coniferous forest belt commonly found as a transition zone in comparable ecological settings in the Northern Hemisphere. Elsewhere, the deciduous forests are adjacent to open juniper woodland, semiarid grassland and even semi-desert ecosystems, a highly unusual setting. The forests are not only of irreplaceable conservation value, but also a unique scientific reference area helping us understand natural temperate forest ecosystems and their relationships with immediately adjacent yet markedly distinct ecosystems.

Criterion (x)

The Hyrcanian forests are a critically important and irreplaceable refuge for countless species of flora and fauna associated with the relic Arcto-Tertiary forest. The most conspicuous “living

fossils" include tree species like the Persian Ironwood (*Parrotia persica*), a monotypic endemic tree genus, Caucasian Wingnut (*Pterocarya fraxinifolia*), Caspian Honey Locust (*Gleditsia caspica*) and Caucasian Elm (*Zelkova carpinifolia*). Silk tree *(Albizia julibrissin)* and Caucasian Persimmon (*Diospyros lotus)* are temperate representatives of tropical genera. Overall, more than 3,000 vascular plants have been documented in the forests and immediately adjacent ecosystems. The longstanding, isolated evolution of the Hyrcanian Forests has resulted in a high degree of relic and endemic species across many taxonomic groups.

The rich mammal fauna includes viable populations of large predators, such as the Brown Bear, Wolf and Persian Leopard, along with three other native cat species. The recorded 58 mammals include 18 bat species. The Hyrcanian Forests encompass several internationally recognized Important Bird Areas with a noteworthy total number of some 180 species. The herpetofauna includes more than 30 reptiles and several endemic amphibians, while more than 50 species of native freshwater fish are found in the streams and creeks of the Hyrcanian Forest region.

There can be no doubt that the Hyrcanian Forests include the most important refuge areas of Arcto-Tertiary forest elements in West Eurasia, which are the only chance for the in-situ conservation of a great number of relic and endemic species of plants and animals and of invaluable scientific importance.

Statement of Integrity (for all properties)

In contrast to the loss or fundamental alteration of most of the temperate forests of North America, Europe and East Asia, as well as in the Southern Hemisphere, and despite traditional forest resource use and of current human pressure, remarkably large areas have maintained a very high degree of naturalness due to a combination of remote location, difficult access and active conservation efforts. To this day, there are remote areas free of road access and any industrial use. Over decades, various types of protected areas and forest reserves - de facto protected areas – have been established in an attempt to conserve the most intact remaining forest areas. This network or system of protected areas underpins the serial World Heritage approach. Concretely, the nominated area is comprised of carefully selected protected forests constituting the most significant intact forest remnants and representing the ecological and biological wealth and diversity of the Hyrcanian Forests. Jointly, the components of the serial nomination constitute a meaningful and representative portion of the forest region. The components are embedded in a much larger forest landscape, which continues to maintain

important ecological linkages even though the human footprint is high and increasing, particularly in the lowlands towards the Caspian Sea. It is acknowledged that analysis is ongoing and that there is considerable potential to further extend the serial network in the future.

Requirements for protection and management

The entire Hyrcanian Forests in Iran are public and for the most part under the responsibility of the Forest, Range and Watershed Organization (FRWO). Realistic conservation vision for the Hyrcanian Forests is likely to rest on two pillars: (i) the effective conservation of the impressive portion of still exceptionally intact forests; and (ii) the sustainable management of all other forests to satisfy local to economic needs, while taking into account conservation considerations. The nomination represents one important stepping stone in the identification and long-term protection of a representative network of the most valuable forests areas. There is room for further refining the available information and to further develop the network of protected areas in the Hyrcanian Forest region and future extensions to the current World Heritage proposal are envisaged.

FRWO is legally in charge of the overall protection, rehabilitation, development and harvesting of forests and rangelands. FRWO is also responsible for Forest Reserves, Natural Forest Parks and Nature Parks under its authority among many other tasks. Besides the former areas under FRWO responsibility, the Department of Environment (DoE) has the mandate and responsibility to identify and protect areas of particular conservation importance across Iran, which has resulted in the creation of important protected areas in the Hyrcanian Forest region under four categories: National Park, Wildlife Refuge, Protected Area and National Natural Monument. Therefore, there are de facto two complementary protected area systems in Iran's Hyrcanian Forests. The serial nomination integrates the two systems by bringing together the most valuable protected areas under one coherent umbrella. Furthermore, the nomination process identified intact forests and added those to the existing protected areas.

The proposed serial approach is an unprecedented opportunity to establish an overarching framework for the identification and coherent and effective management of the most valuable remaining areas in the Hyrcanian Forest region. The framework can explicitly serve to consolidate the communication, coordination and cooperation of the various institutions involved in forest management and conservation. Equally important, the World Heritage

umbrella can and must serve to address the question of landscape connectivity between protected forest areas. A consolidation of the management and conservation is needed in order to address a multitude of complex challenges and threats. These include encroachment and conversion for agricultural purposes and secondary homes, forest fragmentation as a result of increasing road and other infrastructure, excessive levels of livestock grazing, illegal or excessive logging and in some areas pollution from agrochemicals. The entire nominated area and its buffer zones are under strict protection and managed by effective governmental institutions, ensuring an adequate framework for long term protection and management.

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