

# FORMAT FOR RECORDING GEOSITES FOR INCLUSION IN GEOSITES DATABASE

## Primary identifying data

1. GEOSITE accession number
2. \*National site accession number
3. \*Geosite name (synonyms)
4. \*State, District/town (or equivalent)
5. \*Geographical coordinate: latitude and longitude
6. Approach to the site: How to reach the site from the nearby known place/s giving the distances and directions with a map
7. Character of site (e.g. crag/tor, quarry, sea cliff, river terrace, mine adit, reef, cirque, cave, drumlin, esker)

## Primary geological data

8. Type of site (e.g. landform, stratigraphic profile - site may for instance be a cave, with a profile)
9. \*Primary geo(morpho)logical interest (qualifying for GEOSITES status)
10. \*Framework element or context represented (theme, region/province or age, e.g. ice front, time unit, fossil/mineral group)
11. \*Chronostratigraphy
12. \*Description of primary interest  
Level and type of importance: (Regional/ National/ International; Scientific / Educational)
13. \*Comparative assessment/justification (site justified as part of theme, province or age)
14. Qualities in relation to other sites

## Secondary supporting data

15. Map sheet (at least at scale of 1: 50,000)
16. Elevation
17. Geosite area (km<sup>2</sup>)
18. Ownership: (public / private) Whether the geosite is in public domain or in the land owned by private individual / organization with the details of the owner

19. Protection status (assurances of integrity), accessibility

What are the perceived problems / threats both natural / human induced for the maintenance of the site and the possible solutions including whether any agency is interested in taking care of the maintenance

20. Priority of geoconservation: Whether it should be attended immediately or can be taken up in due course

21. Scope of being a part of Geopark: Can this geosite be clubbed with other important nearby geosites to group them to be a Geopark. If known give the details. If not known say Not sure.

22. Literature, key references

23. Sources of data, collections

24. Illustrations including photographs

25. \*Proposer(s)

\* marks items that are the essential data required at the first stage of GEOSITES proposal. The rest can be filled in later.

## **PRINCIPLES FOR ASSESSMENT OF THE SCIENTIFIC MERITS OF PROPOSED GEOSITES**

A proposer of a GEOSITE should ask themselves the following questions with regard to the potential candidate site or area:

- i) what is its significance for an understanding of geological evolution (inorganic and organic)?
- ii) What is its significance for an understanding of geological/geomorphological mechanisms and processes?
- iii) How complete are the phenomena present: are all relevant features covered, e.g. in a volcano, how complete is the magmatic series, how many effusive rocks and types, or periods of eruption, etc, are there?
- iv) How well has the object been studied, how sizable is its literature, how well are key parameters measured (absolute/radiometric age determinations, identification of minerals, fossils etc)?
- v) What is the special, typical or unique feature of the site in time and/or in space? How are its rock/deposit/landform and its time/areal relationships significant?
- vi) What is the quality of material which is the particular focus of interest at the site?

- vii) For what part of the geological column or which geological phenomenon is this site representative?
- viii) Categories (e.g. stratigraphic, mineralogical, volcanic etc) are not significant in terms of quotas. The types of site a country selects are to be determined by the nature of its geo(morpho)logical make-up, [its outstanding features and their contribution to geodiversity].
- ix) In what selection network (time or thematic) does this locality fall, and make a vital part?

## **GUIDELINES FOR SELECTION OF GEOSITES**

Justification of the outstanding value of a proposed geosite should be demonstrated: this means that its position nationally and regionally has to be made clear. Its validated place as an example of, or part of, for instance, a regional structure, a vital stratigraphic interval, tectonic episode or glacial phase depends on the essential part it plays in elucidating such a theme, structure, event or epoch.

- i) Size of an individual site is of no significance. Larger areas may contain multiple core areas' each independently of special' interest: interest, significance and representativeness should be demonstrated for each of these.
- ii) Integrity is important, and any site proposed should be conservable, and protected [effectively] from damage.
- iii) Geological conservation principles should apply, i.e. conservation means protection for use, including, where appropriate, collecting, [not preservation].
- iv) As far as possible, inappropriate collecting, by both professionals and amateurs, should be discouraged (except, particularly, in areas of appreciable material loss through natural processes.
- v) Sites should not be worked out', with all good and representative material removed to remote museums, other collections or private establishments. If specimens are not readily visible, then there should be good potential for further collecting.
- vi) Museums on sites, with collections, may be a satisfactory alternative.
- vii) The provision of sites for education, recreation, training and research may be a desirable factor.
- viii) The integrity and conservation of a proposed site should be subject to monitoring, where possible and appropriate.

ix) Geo(morpho)logical sites are best considered singly, each significant interest being assessed: but synergistically, it may be desirable to group like sites as clusters or within larger entities such as national parks. However, all sites must be judged individually and be capable of standing alone for the purposes of assessment and justification.

x) Equal concentration of sites by area is not feasible (relative to size of country or other area): this must be the case, to avoid the charge of subjectivity.

xi) In selecting sites for Geosites, it is more important to assess candidates comparatively within a context, to make informed comparisons with other possible candidates: this involves some further research.

xii) Size (the largest') and age (the first' or oldest') are only some of the relevant factors, they cannot automatically be equated with the best'.

xiii) Sites with a complex record, subject to multidisciplinary studies, or with a long history of research, or a substantial bibliography are likely to be better candidate sites. But this does not rule out new or unexploited sites.

xiv) Nomination of a Geosite should be in the form of a concise and focused well-argued case. The Geosite documentation format should be used.