

NOW

c/o Prof. Mikael Fortelius
Department of Geology
P.O. Box 11
FIN-00014 University of Helsinki
Finland

Vox: +358-9-1912-3419
Fax: +358-9-1912-3466
Email: gem_dig@gaia.pc.helsinki.fi

15.10.1997

Dear colleague,

The first years of the NOW database have gone, and with them the years of highly coherent and organised data entry. NOW, such as it was used for the synthetic chapters of Bernor-Fahlbusch-Mittmann (and is available on request from *gem_dig@gaia.pc.helsinki.fi*), is far from free of errors, but it is still a uniquely up-to-date source of information regarding the occurrence and attributes of the Miocene mammals of Europe on a continental scale. It was never complete, and it still isn't. Several taxa (notably Proboscidea) are missing altogether, and most localities have incomplete faunal lists. The selection of localities is also somewhat random (the case of Austria was especially remarked upon in this regard). We are gradually filling in holes but there is no concerted effort comparable to the "Reisensburg Process".

In our opinion the database is already a valuable resource, and we would like to contribute to its being more extensively used than has been the case so far. In the long run, such databases have the potential of bringing fossil mammals into contact with neighbouring fields, for example palaeoclimate and biodiversity modelling and research. Meanwhile, we know from first-hand experience that the database is already a wonderful resource for many mundane, everyday tasks involving Eurasian Neogene mammals. We feel strongly the need to continue the process of building the database as well improve the quality of the data. We are writing to you in the hope that you might share our interests and be willing to participate in the next step of developing the NOW database.

To begin with, there are currently four main sources of new data into NOW:

1. Specific research projects that need to augment the existing data in some way (especially "ecomorphological" attributes of the animals)
2. The ESF "HOMINET", which is revising and adding (primarily) the hominoid-bearing localities of Europe
3. A collaboration project with the IVPP to database all Chinese later Cenozoic mammal localities
4. Data extracted from the literature by our students and ourselves.

In addition to these and somewhat different in nature are plans to fuse NOW with other existing databases with a similar structure (EUQUAM, ETE, FAUNMAP). Such plans will proceed

independently of our development of NOW, and will not change the basic principles outlined below.

Not all the data arriving to the database are of equal quality, and not all specialists agree on the details of taxonomy or dating, to say nothing of interpretation that is more speculative. Only some relatively powerful verification mechanism can prevent the growing database from decaying into a chaotic state, with taxa represented by multiple nomina and perpetuation of various long-since-recognised errors.

In establishing such a verification mechanism one must balance several factors. It is important that the database retains a broad base in the field, so that it can grow as a common resource. On no account must it be seen as the toy, or worse, the exclusive research tool, of some small clique! It is also important to minimise the workload put on single individuals. On the other hand, for a database more important even than correctness is consistency. This means that once a certain classification and nomenclature has been adopted, any competing scheme must be put aside until, perhaps, it is verified and a conscious decision is made to adopt it. A similar principle applies to stratigraphic correlation and related issues, and these factors argue against having too many individuals directly involved with the supervision of the data.

What we propose here is the creation of an Advisory Board for NOW, consisting primarily of the core group from the original Reisenburg Process, augmented (or replaced) by colleagues who have since joined the project. The Board would feature specialists and taxa, on stratigraphy, and on particular regions, and would complement itself as required. The Board would rarely (if ever) be expected to act as a body, but would be more like the advisory board of a scientific journal, where individual members would advise on matters with their special sphere of expertise. The default duty would be to review (or distribute for review), perhaps once a year, data listings of various sorts, such as lists of localities and ages, lists of localities and their fauna, lists of taxa with ecological interpretation, and so forth. Beyond keeping an eye on the quality of the data in this manner, board members would be well placed to guide the direction of development and to initiate or facilitate research projects.

The first step in this direction was already taken when Hans de Bruijn kindly agreed to coordinate a complete overhauling of the small mammal data, a project currently underway. At the moment we visualise a Board of somewhat the following composition and primary responsibility:

Proposal for Advisory Board of the NOW database

Taxonomy and ecomorphology

General small mammal coordinator – Hans de Bruijn
Mein, Höck, Bolliger, Römer... (Hans: please provide a list of your people!)
General large mammal coordinator – Ray Bernor
Hominoid Primates – Peter Andrews
Cercopithecoid Primates – Eric Delson
Feloid Carnivores – Lars Werdelin
Arctoid Carnivores – Suvi Viranta
Suoids – Jan van der Made
Tragulids – Elmar Heizmann

Cervids – Getrude Rössner
Giraffids – Nikos Solounias
Bovids – Alan Gentry
Equids – Ray Bernor
Chalicotheres – Louis de Bonis
Tapirs – Jens Franzen
Rhinoceroses – Kurt Heissig
Proboscideans – Bill Sanders
Hyracoids – Elmar Heizmann
Tubulidentates – Sevket Sen

Stratigraphy

General stratigraphic coordinator – Sevket Sen
Remmert Daams
Volker Fahlbusch
John Kappelman
Pierre Mein
F.F. Steininger
Qiu Zhuding

Regional coordinators

Western Europe – Jorge Agustí
Eastern Europe – George Koufos, Adam Nadachowski
Carpathian Basin – Kordos Laszlo
Southwest Asia – Sevket Sen
Russia – Inesa Vislobokova
Indian subcontinent – David Pilbeam
China – Qiu Zhuding

Geology and taphonomy

Sedimentology – J.P. Lunkka
Taphonomy – Miranda Armour-Chelu

Palaeoecology

Peter Andrews
Kay Behrensmeyer
Mikael Fortelius
Peter Ungar

Contacts with related projects

The ETE Consortium – John Damuth
The ESF Network on Fossil Insects – ?
Terrestrial molluscs – ?
Leaf floras – Johanna Kovar-Eder
Pollen floras – Jean-Pierre Suc

General coordination and development

Overall coordination and data entry – Mikael Fortelius
Database structure and technical development – John Damuth
Associate NOW coordinator – Suvi Viranta

A few words about the “data policy” that we have in mind. As agreed during the preparation of the Bernor-Fahlbusch-Mittman volume, all contributors are entitled to the full data set that was produced. It was also agreed that this data set would become public with the publication of the

volume, and this is the basic principle that we intend to maintain. New data deposited in the NOW database can be kept under restricted access until a project is completed, but will eventually join the growing mass of public data available to all bona fide researchers. Another basic principle is that the NOW data should not be distributed directly to third parties. Everybody is required to get their data directly from NOW (*gem_dig@gaia.pc.helsinki.fi*), to ensure that the currently available version is used, and to allow us to keep track of how and where NOW data are being used. (Backup copies of older versions will, of course, be kept and made available for verification purposes.) In the future, a version of the public data will also be available on the world wide web, probably as a collaboration project with the ETE database.

We hope that you will accept our proposal and join the NOW database Advisory Board. Whether you do join or not, we hope that you will let us know your opinion and any suggestions you may have, including suggestions for additional people you feel should be involved.

With our highest hopes and best wishes,

Mikael Fortelius Ray Bernor Hans de Bruijn Sevket Sen Lars Werdelin