Water Herman van Dam

Surname : van Dam
 Name : Herman
 Date of birth : 08-11-1947
 Nationality : Dutch
 Civil status : Single

6. Education :

| Institutions : | Wageningen University, University of Nijmegen | |
|---------------------------|---|--|
| Date: from(months/year) | January 1981 – May 1987 | |
| to (months/year) | | |
| Degree(s) or diploma(s) : | PhD Environmental Sciences | |

| Institutions : | University of Amsterdam, University of Leiden |
|---------------------------|---|
| Date: from(months/year) | October 1965 – June 1973 |
| to (months/year) | |
| Degree(s) or diploma(s) : | MSc Biology |

7. Language skills: (Mark 1 to 5 for competence, where 5 is the highest)

| Language | Passive | Spoken | Written |
|----------|---------------|----------|---------|
| English | 5 | 5 | 5 |
| French | 3 | 2 | 2 |
| German | 5 | 4 | 3 |
| Dutch | Mother tongue | <u>.</u> | · |

8. Membership of professional bodies:

Working Group Ecological Water Management, (honorary member), Netherlands-Flemish Society for Ecology, Netherlands Institution of Biologists (NIBI), Netherlands Society for Water Management (NVA), Netherlands-Flemish Circle of Diatomists (honorary member), International Society for Diatom Research, International Limnological Society

9. Other skills (e.g. computer literacy, etc.):

MS Word, MS Excel, MS Power Point, Past (ecological statistics), Canoco (multivariate statistics), management of integrated projects, development of water quality assessment systems

10. Present position: Independent Senior-consultant Water and Nature

11. Years within the company: 7

12. Key qualifications:

Dr. Herman van Dam is an aquatic ecologist with a broad experience on water and nature in European countries. He worked for 20 years as a research scientist (mainly on phytobenthos and monitoring in freshwater ecosystems, also on aquatic macrophytes and macro-invertebrates) for the Ministry of Agriculture, Nature and Fisheries. From 1994 to 1999 he was the Head of the taxonomical department of AquaSense, including experts of macro-invertebrates, phytoplankton, phytobenthos and macrophytes. From 1999-2006 he worked as a senior-ecologist for Grontmij | AquaSense.

Recently he was the leader of several inter-institutional projects to develop nation wide systems for ecological assessment of water quality. He was a member of the Netherlands Expert team for setting reference conditions and standards, as a part of the implementation of the European Water Framework Directive and was involved in the EcoSurv-project for the developments of methods to assess Ecological Quality Ratio's in Hungarian rivers and lakes. He was involved in the EU-Lower Dnistr River Basin Management Plan Project as a phytobenthos and macrophytes expert.

He participates in extensive national and international networks of researchers, consultants and agencies. By writing over 300 professional reports and journal papers and by presenting oral papers he has learned to present the essentials of complex situations clearly. He transferred his expert knowledge by giving training courses for aquatic ecologists and analysts.

13. Specific experience (in (future?) EU member countries)

| Country | Date: from (months/year) to (months/year) | Specification | Name and brief description of the project |
|---|--|--|---|
| Netherlands, Belgium, Denmark, Germany | 1982-1983 | Several weeks of sampling and meetings in each of the countries | Development of a system to assess acidification of surface waters by means of diatom analysis |
| A, CZ, D, EST, FR, H, I, L, N, NL, PL, S, SP, UK | 1989-1994 | Annual 3-days meetings in selected countries | Member of Programme Task Force of the International Co-operative Programme on Assessment and Monitoring of Acidification of Rivers and Lakes (Convention on Long-Range Transboundary Air Pollution) |
| FR, D, I, L, UK, SP, S, PL, EST, N, CZ, H, A, NL, | 1995-1996 | Two 3-day meetings in FR and A | International standardization of sampling methods for benthic diatoms for water quality assessments in European running waters. |
| Austria | 1998-1999 | 2-day meeting in A, most work in NL | Development of a trophic indicator system in running waters by means of phytobenthos (diatoms) |
| Hungary | 2004-2005 | Meetings, training course and reporting, 4 weeks in HU, 2 weeks in NL | International expert macrophytes, phytoplankton and phytobenthos for implementation of the European Water Framework Directive |
| Ukraine | 2006-2007 | Meetings, training, 2 weeks | Lower Dnistr River Basin Management Plan Project, phytobenthos expert |

14. Professional experience

| Date : | July 2006 |
|--------------------|--|
| from (months/year) | Present |
| to (months/year) | |
| Location | Amsterdam |
| Company | Herman van Dam, Senior-consultant Water and nature |
| Position | Senior-consultant Water and Nature |
| Description | As an independent consultant Herman van Dam is still involved in many different smaller and larger projects. He continuous to work on long-term projects for water authorities,. A selection of activities: |
| | Monitoring of moorland pools in the period 1900 to 2010 in programs for acidification reduction and climatic change Monitoring of effects of eutrophication reduction programs in lakes and ditches |
| | Lake restoration |
| | Forensic science |

| Date: | May 1999 |
|--------------------|--|
| from (months/year) | July 2006 |
| to (months/year) | |
| Location | Amsterdam |
| Company | Grontmij AquaSense |
| Position | Senior-consultant Ecology |
| Description | As a senior-ecologist Herman van Dam was involved in many different smaller and larger projects, often as a leader and often also as a collaborator and transferred his large expertise to junior-consultants. A selection of activities: |
| | International expert implementation Water Framework Directive in Hungary Expert Dutch group for Implementation of Water Framework Directive Instructor Monitoring in WFD Turkey Project (SENTER) Development of systems for ecological assessment of water quality (brackish water, urban water, moorland pools) Monitoring of phytoplankton in rivers (International Rhine Commission) System for trophic assessment with diatoms in Austrian running waters Water quality expert in legal procedures |

| Date: | June 1994 – May 1999 |
|--------------------|---|
| from (months/year) | |
| to (months/year) | |
| Location | Wageningen |
| Company | AquaSense |
| Position | Head of Department of Taxonomy |
| Description | In this period Herman van Dam was responsible for the acquisition and performance of many smaller and larger projects, mainly funded by water authorities. The projects involved sampling, analysis and reporting of monitoring results of water chemistry, phytoplankton, phytobenthos, macrophytes and macro-invertebrates. In this period he improved his social skills in order to change from a pure science driven expert to a consultant primarily willing to serve the companies clients. |

| Date: | January 1976 – May 1994 |
|--|---|
| from (months/year) to (months/year) | |
| Location | Leersum (The Netherlands) |
| Company | Research Institute for Nature Management (RIN) / DLO-Institute for Forest and Nature Research (IBN-DLO) (Presently Alterra) |
| Position | Aquatic Ecologist |
| Description | In the period at RIN / IBN-DLO Herman van Dam acquired a widely known expertise on the ecology of diatoms and developed a system for ecological water quality assessment with diatoms, which was rewarded with the Dresscher Prize of the Netherlands Society of Aquatic Ecology. He was active in paleolimnology and monitoring of the ecological effects of atmospheric deposition on small lakes and wrote his PhD-thesis on this subject. He published regularly in international scientific journals. He was secretary of the Netherlands Working Group of Ecological Water Assessment and president of the Netherlands-Flemish Diatom Society and the 12th International Diatoms Society. |

| Date: | October 1973 – August 1975 |
|--------------------|--|
| from (months/year) | |
| to (months/year) | |
| Location | The Hague / Leersum |
| Company | National Institute for Drinking Water Research (presently RIVM) |
| Position | Ecologist |
| Description | Herman van Dam was a member of a team, which prepared an Environmental |
| | Impact Assessment of an artificial recharge project in the main acquifer (Veluwe area) of the central Netherlands. He reported about the effects of expected changes |
| | in water level oscillations and water quality on terrestrial vegetation and |
| | biocommunities in small streams |

15. Others:

| Training participation: | Various computer courses, social skills in acquisition etc. |
|------------------------------|--|
| Patents: | - |
| Awards: | Th.G.N. Dresscher Award of the Netherlands Society for Aquatic Ecology, Honorary memberships of Dutch Working Group Ecological Water Management and Netherlands-Flemish Circle of Diatomists |
| Professional apprenticeship: | |

16. Selected reports and publications (from 373 items)

H. van Dam & A. Mertens (2013) Partial recovery of shallow acid-sensitive lakes from acidification: the danger of internal eutrophication Environmental Scientist. April 2013: 12-17

R.J. Stevenson, Y. Pan & H. van Dam 2010. Assessing environmental conditions in rivers and streams with diatoms. In: J.P. Smol & E.F. Stoermer; The diatoms: Applications for the environmental and earth sciences (2^{nd} ed.). Cambridge University Press, p. 57-85.

H. van Dam 2009. Evaluatie basismeetnet waterkwaliteit Hollands Noorderkwartier: trendanalyse hydrobiologie, temperatuur en waterchemie 1982-2007. Herman van Dam, Adviseur Water en Natuur, Amsterdam. Rapport nr 708. 253p.

- M. Lurling & H. van Dam 2009. Blauwalgen giftig groen: de biologie en risico's van cyano-bacteriën. STOWA-rapport 2009-43. STOWA, Utrecht. 48p.
- H. van Dam (2007) A revised WFD-metric for river phytobenthos in The Netherlands. Report 618.2. Adviseur Water en Natuur, Amsterdam. 44p.
- H. van Dam, J. Padisák & C. Kovács 2005. Ecosurv BQE report phytobenthos. Under the authority of the Ministry of Environment and Water, Hungary. EuropeAid 114951 /D/SV/2002-000-180-04-01-02-02. BioAquaPro, Debrecen/ MottMac Donald, Croydon / DHI, Copenhagen / Arcadis, Arnhem / Grontmij | AquaSense, Amsterdam, 54p.
- Expertteam Reference Conditions and Standards Implementation Water Framework Directive in The Netherlands (2004). Macrophytes and phytoplankton. STOWA, Utrecht.
- H. van Dam, W. Gotjé, R. Franken & T. Ietswaart 2002. STOWA-systeem voor de ecologische beoordeling van brakke, binnendijkse wateren. H2O 35(6): 22-25.
- Stoddard, J.L., D.S. Jeffries, A. Lükewille, T.A. Clair, P.J. Dillon, C.T. Driscoll, M. Forsius, M. Johannessen, J.S. Kahl, J.H. Kellogg, A. Kemp, J. Mannio, D. Monteith, P.S. Murdoch, S. Patrick, A. Rebsdorf, B.L. Skjelkvåle, M.P. Stainton, T. Traaen, H. van Dam, K.E. Webster, J. Wieting & A. Wilander 1999. Regional trends in aquatic recovery from acidification in North America and Europe. Nature 401: 575-578.
- Rott, E., E. Pipp, P. Pfister, H. van Dam, K. Ortler, N. Binder & K. Pall 1999. Indikationslisten für Aufwuchsalgen in Österreichischen Fliessgewässern Teil 2: Trophieindikation. Bundesministeriums für Land- und Forstwirtschaft. Wien. 248p.
- Kelly, M.G., A. Cazaubon, E. Coring, A. Dell'Uomo, L. Ector, B. Goldsmith, H. Guasch, J.
 Hürlimann, A. Jarlman, B. Kawecka, J. Kwandrans, R. Laugaste, E.-A. Lindstrøm, M. Leitao,
 P. Marvan, J. Padisák, E. Pipp, J. Prygiel, E. Rott, S. Sabater, H. van Dam & J. Vizinet 1998.
 Recommendations for the routine sampling of diatoms for water quality assessments in
 Europe. J. Appl. Phycol. 10: 215-224.
- IKSR 1997. Plankton im Rhein 1995 Plancton dans le Rhin. Internationale Kommision zum Schutze des Rheins. Commission Internationale pour la Protection du Rhin. Koblenz. 32 p.
- H. van Dam 1996. Partial recovery of moorland pools from acidification: indications by chemistry and diatoms. Neth. J. Aquat. Ecol. 30: 203-218.
- G. van Dijk & H. van Dam 1996. Monitoring of algae in running waters in The Netherlands. In: B.A. Whitton & E. Rott (Eds) Use of algae for monitoring rivers II. Proc. Int. Symp. Innsbruck, 17-19 Sept. 1995. p. 169-170.
- H. van Dam & A. Mertens 1995. Long-term changes of diatoms and chemistry in headwater streams polluted by atmospheric deposition of sulphur and nitrogen compounds. Freshwater Biology 34: 579-600.
- H. van Dam, A. Mertens & J. Sinkeldam 1994. A coded checklist and ecological indicator values of freshwater diatoms from The Netherlands. Neth. J. Aquat. Ecol. 28: 117-133.
- H. van Dam & R. Buskens 1993. Ecology and management of moorland pools: balancing acidification and eutrophication. Hydrobiologia 265: 225-263.
- H. van Dam & H. van Dobben 1982. Effects of acid atmospheric deposition on ecosystems in The Netherlands. p. 547-554 in: T. Schneider en L. Grant (eds.). Air pollution by nitrogen oxides. Elsevier, Amsterdam.
- H. van Dam 1979. Diatoms and water quality in lowland streams in the province of Northern Brabant (The Netherlands). Hydrobiological Bulletin 13: 13-21.

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