ELECTRONIC COMMUNICATION: POSSIBILITIES FOR AFRICA

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ABSTRACT

There are few veterinary libraries or information centres in sub-Saharan Africa, on average one or two per country. This scarcity makes co-operation all the more vital. For successful co-operation, effective communication structures are essential. Steps that libraries can take to promote electronic communication in order to render a more effective information service to their clients are described, namely:

- *The use of the Internet listservers such as VET-LIB-L for communication of information between libraries;*
- *The use of non-university networks such as SANGONET and HealthLink;*
- *Making university networks such as the University of Pretoria's ROMINFO available for non-university persons, via dial-in facilities;*
- *The creation of electronic forum facilities; and*
- *The roles of UNINET, SUNSITE and MISANET in Africa.*

A starter list of contact details of currently available online veterinary faculties, libraries and institutions in Southern Africa is provided.

One of the key issues differentiating the information rich from the information poor is the availability of effective communication structures. Only if these are in place and are utilised can the essential role of library co-operation to promote access to information be fulfilled.

Electronic developments in the communications field are leading to sophisticated telecommunications infrastructures. The so-called "Electronic Library" (9) is now within our grasp.

It is especially important in the veterinary library sphere in Africa that electronic communication is explored, developed and utilised.

There are few veterinary libraries in Sub-Saharan Africa, each country having approximately two, usually one attached to a veterinary school, the other to a state department. This scarcity makes co-operation all the more vital for the effective functioning of these information centres, enabling them to fulfill their essential role in the animal health communities they serve (10).

The following steps can be considered by libraries to promote electronic communication in order to render a more effective information service to their clients:

1 THE USE OF THE INTERNET

The most effective electronic communication network available to information workers worldwide is the Internet.

The following applications of the Internet are found to be particularly useful forms of electronic communication, namely Listservs, FTP, Gopher, WWW and electronic conference facilities.

A Listservs

For us the most important application of the Internet is the Internet Listserv VET-LIB-L.

This is the discussion list of librarians of the veterinary and related subject field libraries of the world.

There are approximately 155 members, mostly in the United States. It is a most useful forum where members exchange

relevant and topical information or request hard-to-come-by articles. Members agree that it is the single most useful means of communication for a veterinary librarian.

All veterinary libraries should join this Listserv. So far the only African libraries connected are ours and the Onderstepoort Veterinary Institute. There are other libraries in Africa with e-mail connections such as the Medical Library of the University of Zambia, the Veterinary Library of the University of Zimbabwe, the Veterinary Faculty of the University of Eduardo Mondlane, Mozambique, and the ILRI Library in Nairobi, Kenya. If these libraries joined this Listserv as well Africa will be a step closer to the information dissemination ideal.

Various attempts are being made to increase the number of Internet connections:

- the RINAF (Regional Informatics Network for Africa) project which will eventually link Internet services to 15 African countries. It is an UNESCO and Italian Government project (1);

- the KCI-NET project (8) of the Kenya Computer Institute in Kenya which is a large and fastgrowing network of African scientists; and

- the CABECA (Capacity Building for Electronic Communication in Africa) initiative is helping to further Internet connectivity in Africa.

Other useful listservs for animal health information workers are VETINFO-L, VETMED-L, Primate-talk, Dom-bird, Goats, Exotic-L, DEERLIST and WILD-REHAB-L.

These are useful information aids for information specialists with their emphasis on animals. Through information obtained from these Listservs (which include notices of new publications) they are able to keep themselves and their users up-to-date easily and effectively.

A most useful source to guide one in one's quest for animal health information on the Internet is the electronic journal, the *American Veterinary Computer Society Newsletter*. Every two months it appears in the Library's e-mail "in-tray" with the latest on what is new in electronic sources of animal information and how to access these sources. For a minimal annual subscription your library can become a member, thereby improving its role as information provider.

B File Transfer Protocol (FTP)

FTP can be used to build the library's electronic sources collection, downloading relevant animal health information on to disc or printing it for one's users, such as descriptions of various animal breeds. Here one can find information often difficult to obtain or unavailable in the more conventional publication forms.

C Gopher

Gopher is the user-interface program that makes FTP and other types of file transfer easier by opening from menus. It does need a lot of time to access. We find World Wide Web faster in this regard.

D World Wide Web

WWW is a more sophisticated program for Internet file transfer. It is growing phenomenally, providing more and more information sources to the electronic user (3).

The following Web sites are most useful for animal health information:

- the University of Montreal has a database of veterinary conference proceedings as well as the veterinary journal contents pages database on the Web, available to all who can access the Internet (http://brise.ere.umontreal.ca/ ~jettejp); and

- the Electronic Zoo. This file describes animal-related computer

resources to be found on the Internet, including veterinary medicine, agriculture, biology, environment and ecology whether they be files, databases, FTP archive sites or electronic publications (http://netvet.wustl.edu).

E Conference facilities

This Internet facility has great potential for information dissemination. An example of such an electronic conference in the animal health information field is the WINROCK International Livestock Conference held in 1993 (9). The advantages of the electronic conference are the abolition of travel costs, wider participation and electronically published conference proceedings.

2 DIAL-IN-FACILITIES: UNIVERSITY OF PRETORIA NETWORK

In the interests of continuing education where the University of Pretoria's Veterinary Faculty intends expanding its role in the sub-continent, network connections for post-graduate students are essential.

The University has made its own network (ROMINFO) available to these students who are able to dial-in with their telephone - modem link and search the library catalogues as well as CD-ROM databases running on the network.

Post-graduate students can also use the University's e-mail facilities enabling them to communicate freely with the library staff, requesting articles quickly and easily.

3 NON-UNIVERSITY NETWORKS

Other local networks which can be used to promote the dissemination of animal health information are SANGONET and HealthLink.

SANGONET (Southern African Non-Governmental Organisations Network) is an example of a local information network which is rapidly expanding, enabling its members to make use of the Internet

communication structure to give and receive information especially for the underdeveloped regions.

HealthLink (formerly HealthNet) is also for the developing areas far from the cities with established health care facilities. It is a SatelLife project serving the health communication needs of countries in the developing world (4), (7).

4 BULLETIN BOARDS AND HOME PAGES

Our library and the Faculty in conjunction with the CSIR's Worldnet Africa (formerly called NIBS) are now creating a unique electronic forum facility called VET-AFRICA, mainly for practising veterinarians needing information.

We are starting with a bulletin board to allow participants to send and receive messages. As most of these practising vets are still new to computer technology it was thought best to let them first get used to using e-mail before expanding.

This was the brain-child of the Department of Herd Health. They realised that the rural large animal practitioners need to have access to the latest relevant information quickly and effectively, whether available in the Library or direct from the specialists in that department.

Future possibilities for this bulletin board include providing abstracts of relevant publications, contents pages of journals in their subject areas, and the Library's latest accessions lists.

The Veterinary Faculty at Onderstepoort is now developing its own Home Page on the Web. This is a most effective advertising tool for your library or information service. For instance, by clicking on to the Veterinary Library entry of the Onderstepoort home page you will be able to read all about this very Conference (http://137.215.115.243/animconf.htm) or (http://www.up.ac.za)

5 UNINET, MISANET AND SUNSITE

Other important developments in electronic communication in Africa include the networks Uninet, Misanet and Sunsite.

- Uninet is the network of South African universities enabling them to use the Internet. It is expanding now into the rest of Africa, for instance in Zambia (5).

- Misanet is the electronic network of the Press. It is a low cost mail network, with head office in Namibia. It allows independent newspapers to be constantly on line to each other (2).

- Sunsite (6) has 14 sites worldwide with Wits being the only African site. Sunsite makes basic health information available free of charge. Sunsite at Wits is specifically for Southern Africa with information on Africa for the rest of the world. For instance, it is now placing the Taung skull on the network.

Thus it can be seen that Electronic Communication is available in Africa, that it can be used in various ways to enhance the dissemination of information by veterinary or animal health libraries.

A starter list of contact details of currently online veterinary faculties, libraries and institutions involved with animal health in Southern Africa is provided. It was compiled by Dr Stan Miller of the Faculty of Veterinary Science, University of Pretoria.

Please alert us as to omissions or new entries so that we animal health information workers in Africa can become a viable information community, enabling us to function effectively in the animal health areas we serve.

REFERENCES

1. ABBA, L. et al. 1993. Technical platform adopted in the RINAF project to bring basic Internet services to 15 African countries, in S.H. Mandil et al (Eds.). Health Informatics in Africa - HELINA 1993, Excerpta Medica, Amsterdam, pp 183-190.

2. BADAL, S. 1995. The Role of online information systems in non-government organisations. The Electronic Library 13(4):279-281.

3. CRISP, J. 1995. Untangling the Web. CTICM Update 6(1):29-30

4. HUTCHINS, J. 1994. SatelLife. Bulletin of Tropical Medicine and International Health, 2(1), 1-5.

5. LAWRIE, M. 1995. Southern Africa Internet-working; where we are, where we could be. The Electronic Library 13(4):397-399.

6. MAN, D.L., MEYERS, G. and PRANJIVAN, T. 1995. Sunsite: possibilities for Africa. The Electronic Library 13(4):379-381.

7. MEYERS, G. 1995. HealthLink: SatelLife and HealthNet in South Africa. The Electronic Library 13(4):293-297.

8. OCHUODHO, S.J. 1993. Electronic networking and delivery of health service: the Kenyan experience, in S.H. Mandil et al. (Eds.) Health Informatics in Africa - HELINA 1993, Excerpta Medica, Amsterdam, pp 194-198.

9. SPEEDY, A.W. 1994. The new communications media in livestock development, World Animal Review, 80/81(3-4), 13-18.

10. VAN DER WESTHUIZEN, E. 1993. Information for Africa: the role of the Veterinary Library, University of Pretoria, Onderstepoort. Proceedings of the 1st International Conference of Animal Health Information Specialists, July 16-19 1992, Reading, England. p 75-81.

SOUTHERN AFRICAN, ' VETERINARY LIBRARIES AND RELATED CONTACT POINTS

Country	Librarian at institution or other institution	Electronic address & References	FidoNet addresses for Southern Africa'."
Angola	Facultate de Ciencias Agrarias & Instituto de Investigacao Veterinaria, Huambo	Gopher gopher.psg.com	SYSOP: Allan Cain ID: dwang. NODE NAME: angonet.gn.apc.org
Botswana	Botswana College of Agriculture	Gopher gopher.psg.com	
	Directorate		
Kenya	Veterinary Research Department (Mugaga)		
	Ministry of Livestock Development		
	University of Nairobi, Faculty of Vet Medicine University of Nairobi, Kabete, General Access		
	College of Agriculture & Vet. Science		
	ILRAD (International Laboratory for Research on Animal Diseases; now called the International Livestock Research Institute/ILRI)	Postmaster@ILRAD.MSM. CGNET.COM	
	Kenya national computer Institute (KCI) society, the Kenya Computer launched a bimonthly newsletter, KCI-News, in 1994		KCI@ARCC:GN.APC.ORG
Lesotho	Lesotho Agricultural College		
Malawi	Ministry of Agriculture		
	Veterinary Research Laboratory		
Mozam-bique	Faculty of Veterinary Science, Universidade Eduardo Mondlane	Postmaster@IMPALA.UEM.MZ or try Gopher gopher.psg.com, a BBS	SYSOP: Venancio Massingue. NODE NAME:ID: venacio.dzowo.uem.mz
Namibia	General	Gopher gopher.psg.com.BBS	
	Dept. of Agriculture and Nature Conservation		
	Dr H W Lisse, Postmaster in Namibia, Windhoek	NamNet@lisse.NA	
South Africa (RSA)	Faculty of Veterinary Science, University of Pretoria. (a) General. Mr Hannes Hattingh, Postmaster at Onderstepoort Faculty. (b) Library	(a) Postmaster@OP1.UP.AC.ZA or HANNES@OP1.UP.AC.ZA (b) VETBIB@OP1.UP.AC.ZA	
	Onderstepoort Veterinary Institute (OVI): (a) General. (b) Library	(a) Postmaster@OVISUN.OVI.AC.ZA (b) DAVID@MOON.OVI.AC.ZA	
	Medical University of Southern Africa (MEDUNSA) Library	MedLib@MCD4340.MEDUNSA.AC.ZA	
	Directorate of Animal Health LAN & The Southern African Commission for the Conservation and Utilisation of the soil (SARCCUS)	Postmaster@ VETHQ.DLO.AGRIC.ZA LABDIR@VETHQ.DLO.AGRIC.ZA EPI@VETHQ.DLO.AGRIC.ZA	
	Uninet-ZA, FRD	Mike Laurie, id:mlaurie@frd.ac.za or (generally) uninet@frd.ac.za	SYSOP: Simone Shall, NODE NAME: worknet.apc.org
	Medical Research Council (MRC)	Postmaster@MRCVM.MRC.AC.ZA	
Swaziland	Dept.of Animal Production and Health. General:	Gopher gopher.Psg.Com	
Tanzania	Livestock Production Research Institute. General:	Gopher gopher.psg.com	
	Sokoine University of Agriculture, Faculty of Veterinary Medicine, Morogoro. General:	SYSOP: William Sangiwa ID: bsangiwa, NODE NAME: costech.gn.apc.org	
Uganda	Animal Health Research Centre, General:		
	Faculty of Veterinary Medicine, Makerere University, General:	DMUTAZINDWA@USAID.GOV	SYSOP: Charles Musisi ID: cmusisi, NODE NAME: mukla.gn.apc.org
Zaire	Faculty of Veterinary Medicine, University of Lubumbashi, General:		
Zambia	Central Veterinary Research Station		
	University of Zambia, Samora Machel School of Veterinary Medicine, Lusaka. General:	Mbennett@unza.zm or MBennett@17.fl.n761.z5.fidonet.org	UNZAMEDLIB@F1.N761.Z5.FIDONET.ORG or mbennett@fl.n761.z5.fidonet.org NODE NAME: SYSOP: Mark Bennett ID: mbennett, NODE NAME: unza.gn.apc.org
Zimbabwe	Veterinary Research Laboratory		
	Faculty of Veterinary Science, University of Zimbabwe, Harare. General or Library	Postmaster@zimbix.UZ.ZW or Gopher gopher.psg.com or Achi@uzlib.uz.zw	SYSOP: John Sheppard ID: NODE NAME: zimbix.uz.zw