ENNZ: Environment and Nature in New Zealand

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Editor's Comment

The December 2006 edition of *Environment and Nature in New Zealand* leads with a controversial opinion piece by Associate Professor Chris de Freitas on climate change. Given the current public discussion about this subject and the New Zealand Government's commitment to reducing carbon emissions, de Freitas' comment that governments should instead listen to climate scientists 'who do not indulge in doom-laden conjecture' comes as a timely reminder about the need for robust science in this country. His emphatic belief that such scientists are calm and unbiased, unlike 'hard-line environmental groups' and adherents of Kyoto, may surprise many of our readers. De Freitas' perspective has, in the past, caused considerable controversy. His editorial handling of a much criticised article in *Climate Research* in 2003 which was seized on by the present Bush Administration resulted in the resignation of the editor-in-chief and three other members of the editorial board.

As Francis Reid reminds us, the nexus of science, media and government has always been important and may be blinding government officials working on climate policy, as well as historians of science who have neglected the role of newspapers in informing scientific opinion in the nineteenth century. His examination of the newspaper clipping as an object of natural history claims to develop historiography on scientific expertise in the colonial context, as well as to sound a note of caution about the way scientific results are reported on.

Kate Hunter reports on the one-day, cross-sector, trans-Tasman conference on water held at Victoria University in October, showing that, 'on the ground', water management policy in parts of Australia and New Zealand is working in crisis-management mode. She emphasises the value of communities developing relationships with 'their' bodies of water as a means to limiting a purely extractive and therefore destructive mindset. Where environmental scientists have identified major problems with flow, erosion and species depopulation, policy changes have helped create a climate of incentives for communities to respond positively.

Many thanks to our contributors,

Matt Morris
Guest Editor

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About Us

This Newsletter aims to provide a forum for debate on environmental topics and detilas of upcoming events, including conferences, books, seminars, etc. If you want to contribute articles or reviews of exhibitions or books, or want your details added to the Member's List, please contact:

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P.S. In the future it is planned to include the list of members only in one issue per year.

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Special thanks to Kyle Matthews for sorting out formatting difficulties and to Matt Oliver for maintaining the site.

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Climate of dissent

Chris de Freitas

The global warming issue is as emotionally charged as it is widely misunderstood. Moreover, there is a fixation with a majority view and "consensus science", which suggest that advancement of scientific understanding is a matter of voting. Scientific authority is achieved over time, not granted by official declaration or voting. In a lecture in 2004, author and scientist Michael Crichton said: "The work of science has nothing whatever to do with consensus. Consensus is the business of politics. The greatest scientists in history are great precisely because they broke with the consensus."

Few climate scientists deny that carbon dioxide emissions have risen or that human activities have an impact on climate, but almost everything in global climate science is subject to uncertainty and debate. Some people attack those scientists who promote scepticism as agents funded by the fossil fuel industry. Using this logic, one must conclude that all funding contaminates all results. How do we explain the views of scientists who do not buy into the global warming hype who have taken no money from the fossil fuel industry? In fact, many go to great lengths to stay clear of the private sector to avoid any potential ad hominem attacks and accusations of corruption.

The message from many hard-line environmental groups appears to be driven more by dogma and propaganda than science. The facts speak differently. Although no one yet has the full story on climate change, there are a few key issues which ultimately drive public opinion and on which alarmist dogma relies. There is evidence of global warming. The climate has warmed about 0.6C in the past 100 years, but most of that warming occurred prior to 1940, before the post World War II industrialisation that led to an increase in carbon dioxide emissions.

But warming by this small amount, 0.006 °C per year, does not confirm that carbon dioxide is causing it. Climate is always warming or cooling. There are natural variability theories of warming. The reason that a debate exists is because it is so difficult to attribute observed warming to human activities, as opposed to the many natural causes of warming. There may be agreement that warming is occurring, but assigning a cause is an entirely different matter.

Undoubtedly the current warming could be caused by human-caused greenhouse gas emissions, but we understand so little about the causes of natural climate variability that it is not possible to determine what part of the very small amount of observed warming is human-caused. To support the argument that carbon dioxide is causing it, the evidence would have to distinguish between human-caused and natural warming. This has not been done.

The results of a study published this year in Geophysical Research Letters showed that one fifth of the warming of the upper layers of the oceans that took place over the past

48 years has been cancelled out by a strong cooling trend in only three years (2003-2005). Are we to believe that warming is caused by humans, but that cooling is natural?

Whatever the cause of the changes in the climate, none of it is unprecedented. During the Medieval Warm Period, from 900 to 1200 AD, the Vikings sailed in Arctic waters that are now permanent sea ice, and farmed in Greenland soil that is now frozen. This was followed by the Little Ice Age which ended around 1850.

"Predictions" of future climate come from mathematical climate models. But these models have not been verified, so their output is merely conjecture and not capable of being the mainstay of policy. It is an uncontroversial fact that the scientists who construct global climate models accept that their models do not adequately handle key aspects of the climate system, such as the role of clouds and aspects of heat transfer in ocean circulation.

Water vapour dominates the greenhouse effect, and global-warming predictions are based heavily on how water vapour is likely to respond to increased carbon dioxide. But climate science is not yet capable of predicting this response. Predictions from climate models are of little value until they are reliable. A climate model is just a hypothesis until there is empirical evidence that proves it is correct.

In a good deal of the literature on global warming, claims about the future state of climate are based solely on model results. These are often treated as factual and quoted as justification for the Kyoto Protocol. Model predictions reflect only the belief of the modellers. But when models are presented to the public as predictive tools and a basis for public policy, the issue of social responsibility arises.

Adherence to the Kyoto Protocol will mean far-reaching industrial changes and billion-dollar decisions. Given that the financial stakes are extremely high, surely the validity of these models should be more carefully assessed. Compare this to businesses which must thoroughly audit their financial statements and forecasts.

The issue of carbon dioxide and the perceived risk of dangerous climate change has taken on life of its own because it suits so many agendas: air quality, consumption of finite resources, energy efficiency, reduced dependence on costly foreign oil, opposition to industrial growth, zeal of environmentalism, international economic competition, revenue generation from environmental taxes, ongoing supply of research funds.

Which way forward?

Many global warming sceptics contend that liberal environmental agendas are behind alarming global-warming headlines; on the other hand, sceptics often bring policy agendas of their own. Enlightened government leaders should not identify with either of these groups. Sane and reasonable advice will come from climate scientists who do not indulge in doom-laden conjecture, but calmly continue their search for evidence that proves or disproves theories or hypotheses about possible human impacts on global climate.

These scientists are ever-willing to modify their views as new facts emerge. They know that, given a choice between alarmism and honesty, science must always choose honesty. This might be used as a platform to arrange a review of New Zealand's strategy on climate science research, the basis of claims government scientists make and current national climate policy.

Perhaps one constructive way forward is joining the Asia-Pacific Partnership on Clean Development and Climate (APP). Countries already APP members – United States, Australia, Japan, China, India and South Korea – account for most of the world's population and a large part of its industry. The pact looks at how to develop technologies to reduce emissions rather than having specific reduction targets confined to small group of developed nations as is the case with Kyoto.

Chris de Freitas is an Associate Professor in the School of Geography, Geology and Environmental Science at the University of Auckland.

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Newspapers as objects of natural history?

Francis Reid

In the nineteenth century, the collection of objects of natural history was central to the intellectual status of many men of science. Having access to an extensive collection of geological, zoological, botanical or ethnological specimens enabled various individuals to make seemingly authoritative claims regarding taxonomy or in relation to such topics as the formation of mountains or organic evolution. Although the largest collections were located in metropolitan centres, such as London, Paris and Berlin, many of the specimens originated in Europe's colonies. The flow of objects from colony to metropolis, and the related issue of how colonial or metropolitan men of science attempted to make knowledge claims, has been extensively studied by historians of science. Nineteenth century natural history specimens, alongside scientific instruments, provide historians with avenues through which science can be studied as a branch of cultural history. There is also an institutional rationale for this tendency among historians of science to work with objects: many university history of science departments have been built up around pre-existing collections and museums, and it is advantageous to these museums and to their associated academic departments or researchers to assert that funding the collection leads to the production of quality historical research.

Numerous monographs and articles, therefore, focus on how particular objects or collections were made, assembled, or classified, and on how objects were given different meanings in different contexts. The power relations assumed or implied by the process of collection are also of interest to historians. Among all this worthy research, however, one of the major objects collected by men of science during the nineteenth century has been almost entirely ignored. Any historian working on the nineteenth century finds piles of these particular objects during routine spells in the archive. Yet while historians frequently refer to and quote from them, somehow their physicality is forgotten, and the fact that they played as prominent a part in contemporary networks of exchange as did bones, rocks or dried plants is neglected. The object group to which I am referring is the newspaper – or, more particularly, the newspaper clipping.

It is my contention that the newspaper clippings found in archives today, together with other clippings in folders compiled by archivists or nineteenth century men of science, or pinned to contemporary letters, could profitably be read as objects of natural history, or as their proxies. Read in this way, the clipping ceases to be simply a textual source from which historians gain an approximate account of historical events and a window on public opinion. Asserting that newspaper clippings could be objects of natural history also transcends recent work on print culture and the history of the book. While such research helpfully emphasizes the production, distribution, consumption and cultural physicality of print, I consider it impossible to understand the function performed by clippings in the scientific community without drawing the parallel with herbaria, botanic gardens, zoological parks and museums.

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Geographies of print and institutional science in colonial New Zealand

This assertion, I believe, holds true for scientific communities in late nineteenth century Europe and its settler colonies. In this paper, however, my evidence comes exclusively from New Zealand, where the bulk of the archival research towards my PhD has been conducted, and where the importance of newspapers to the scientific community was particularly apparent. New Zealand was a relatively late British imperial acquisition, formally annexed in 1840. By the late nineteenth century the Colony was a geographically isolated collection of settler communities, divided into several autonomous provinces, and unified by a colonial Governor and a parliamentary government that, after 1865, sat in the centrally located city of Wellington.

Travel and communication between settler towns and hamlets was incredibly slow and difficult. Through to the end of the century large sections of the central North Island were controlled by indigenous Maori groups hostile to European incursion. Transport infrastructure was rudimentary: many roads were impassable in winter; Dunedin and Christchurch, the two major cities in the South Island, were not linked by rail until 1878, while the North Island rail line linking Wellington and Auckland was only completed in 1908. As a consequence of these geographical realities, New Zealand had – and, indeed, still has – no national newspaper. Rather, virtually every settler region and town had at least one newspaper, and the Colony's entire population, which did not reach one million until the first decade of the twentieth century, produced literally dozens of dailies. Maori language newspapers were also important to indigenous groups, but as these publications were mostly ignored by the European scientific community in New Zealand, they do not feature in my analysis.

The geographical factors that led to the existence of so many newspapers similarly affected the scientific institutions established in colonial New Zealand. Few institutions could claim to be truly Colony-wide in their scope or influence. In the early 1860s three of the provincial governments founded geological surveys. These were all superseded by the Geological Survey of New Zealand, which was established by the colonial government in 1865. This latter institution, however, was often viewed with suspicion by men of science outside of Wellington. Similarly, following the establishment of the University of Otago in Dunedin in 1869, other provinces attempted to found their own separate university colleges, and these were loosely connected through the degree-conferring University of New Zealand. By the end of the nineteenth century the five or six largest urban areas in New Zealand had established museums, while, from 1867 onwards, provincial scientific societies with more than fifty members had the opportunity to incorporate with the government-funded New Zealand Institute and to submit papers for publication in the Institute's annual volume of *Transactions*. Although Colony-wide institutions did exist to oversee provincial efforts, therefore, institutional science in New Zealand was essentially organized on a provincial basis, reflecting the provinces' geographical isolation from one another.

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Although there were never many more than a dozen men employed in colonial New Zealand on the geological surveys, or as university professors or museum curators, the membership of societies incorporated with the New Zealand Institute peaked at well over a thousand in the early 1880s. A wide cross-section of the settler elite, including lawyers, engineers, medical doctors, politicians and clergymen, was formally involved in institutional science, primarily as members of scientific societies. It is my contention that newspapers were extremely important to this group of men as sources of information and fora for the discussion of scientific ideas, and also as objects of exchange and sources of intellectual authority.

The prominence of science in colonial newspapers

What, then, did colonial newspapers contain to make them of such importance to members of the scientific community? The first thing to be noted about newspapers in New Zealand is how frequently they advertised themselves as being scientific. Almost all newspapers provided full coverage of the meetings of local scientific societies and included a "scientific notes" section in which information was provided about scientific advances overseas. Many newspapers went as far as to incorporate the word science into their titles – in 1879, for example, the Dunedin paper the *Otago Witness*, adopted the full name *Otago Witness: A Weekly Journal of Commerce, Agriculture, Mining, Science, Mechanics, The Turf, Sports &c*.

The fact that New Zealand's nineteenth century newspapers accorded science a high profile is not particularly surprising. The word was fashionable throughout the world in the second half of the nineteenth century, and during this period it was commonly believed that all forms of human thought could be made scientific. The imperial historian Christopher Bayly argues, for example, that "science was as influential in the mind-set of the nineteenth century as religion had been during the Renaissance" and that an "important aspect of many versions of liberalism, positivism, and communism was their belief that they were scientific". Similarly, historian John MacKenzie comments that the "striking thing about nineteenth-century science was indeed that it was ubiquitous". In New Zealand, a faith in the progress of science was incorporated into justifications of the entire colonial project, and science thus had added potency for settler communities.

New Zealand's newspapers also lionized the leading figures of the local scientific community, and followed and scrutinised their activities alongside those of other social identities, including politicians and members of the judiciary. In October 1867, for example, Wellington's *The Evening Post*, reported on the recent antics of Dr, later Sir, James Hector, the director the Geological Survey of New Zealand and manager of the New Zealand Institute, and his friend Judge Johnston. "It appears", the paper stated, that

> the Judge was driving out on the West Coast Road, with Dr. Hector and a party of ladies, when, near Porirua, one of the horses got his leg over the traces, and began to plunge. Dr. Hector descended to extricate him, the ladies also getting out of the carriage, and the Judge was in the act of following, when the horses started off at a wild gallop, and, after a short

career, dashed the trap to pieces down one of the precipices by which the road is bounded.

The press coverage of Hector – who was born and educated in Scotland – was, admittedly, somewhat extraordinary. It is virtually impossible to pick up a New Zealand newspaper published in the final quarter of the nineteenth century and not find some reference to him. His opinions on proposals for industrial and agricultural development had the power to attract investors and alter government policy. As an indication of Hector's influence and perceived importance, the Dunedin publication *The Triad: A Monthly Magazine of Music, Science, & Art*, included his name alongside those of the scientific heroes Herschel, Pasteur, Edison, Newton and Kant in the header of its first edition in 1893. However, while the lionization of Hector was extraordinary, it was not unparalleled. Newspapers in Christchurch, for example, gave the activities of Julius von Haast, Canterbury's provincial geologist and museum director, similar coverage.

Moreover, men of science were acutely aware that the press could be crucial to their career prospects and to the future of the institutions they worked for or supported. In 1892, for example, when the ornithologist and lawyer Sir Walter Buller sent a specimen of the kiwi species *Apteryx haasti* to Samuel Henry Drew, who was in the process of turning his private natural history and ethnography collections into the nucleus of the Wanganui Public Museum, Buller stated that he thought "the acquisition by your Museum of this noble bird is worth a paragraph in the 'Wanganui Chronicle', because there is only one public Museum in the Colony which can boast of its possession…whilst, so far as I am aware, there is not a single specimen in any public Museum in Europe or in America…I mention the 'Chronicle'", Buller continued, "because, in order to fan the public interest in your Museum, you cannot too often get favourable mention in the newspapers". Science and men of science thus enjoyed prominence in colonial newspapers both because science was particularly fashionable and because men of science had a desire to enhance the public profiles of themselves and their institutions.

Newspapers creating space for debate and controversy

Furthermore, a significant strand of scientific discourse – generally overlooked by historians in New Zealand – was only possible because of newspapers. This was because newspapers provided a unique space for debate, controversy and the rapid interchange of ideas. Controversy was certainly not absent from meetings of societies incorporated with the New Zealand Institute, but there was a social limitation on how far arguments could be pushed in New Zealand's small urban centres where rival protagonists were likely to be in regular face-to-face contact with one another. Also, because travel between the Colony's cities was difficult, debates at society meetings were limited to participants who lived in a particular province. When disputes spilled over into print, the fact that the *Transactions and Proceedings of the New Zealand Institute* appeared only once a year limited the speed with which disputants could have their papers published. This restriction was alleviated somewhat by the short-lived *New Zealand Journal of Science* which appeared every two months between 1882 and 1885. However, in both of these publications anonymous papers were not accepted,

and criticisms of individuals, ideas or institutions were therefore made in the knowledge that personal clashes could ensue.

In contrast, the rapid interchange of ideas was possible in newspapers: anonymous letters were frequently printed, and vicious critiques were more likely to be published than was the case in scientific journals because controversy had the potential to excite public interest and thus increase circulation. Many members of the scientific community therefore made use of newspapers to vent criticisms of their peers, and institutional science itself came under attack from outsiders excluded from, or marginalized in, scientific societies. In November 1867, for example, a correspondent to the Auckland newspaper *The New Zealand Herald*, writing under the nom de plume "Alphabet", expressed his incredulity that Auckland's proposed Philosophical Society would lead to any positive utilitarian outcomes. "Of course there is not the least objection to any number of philosophers seeking the "philosopher's stone,"" Alphabet explained, "always supposing that they have nothing else to do, and that they live upon their philosophy; but when they ask honest meal-men to hunt in couples with them there is much to be feared lest the philosopher will increase though the price of flour should rise".

Similarly, in November 1884 Robert Hall Bakewell, the Manchester born physician, and notorious letter writer and controversialist, wrote to the Christchurch newspaper, *The Lyttelton Times*, to complain that "The Canterbury Philosophical Institute, like all the others similarly named in New Zealand, is chiefly remarkable for the entire absence of any philosophy in its proceedings, its members or its library". Instead, Bakewell announced, the Institute, to which he belonged, was "dying, suffocated by the biologists". Bakewell's letter provoked a flurry of responses, many written under pseudonym, which were also published in *The Lyttelton Times*. In late nineteenth century New Zealand numerous other debates and controversies – including the notorious Sumner Cave dispute of 1874-1876 – were only possible because of the conventions of newspaper publication.

Newspapers provided space for the rapid exchange of letters and created distance between writers and their targets, and therefore broadened the scope for public disputes within the scientific community. Men of science, however, did not always accept newspapers as a legitimate forum for research and debate, and there existed an element of competition between newspapers and scientific societies and journals. In 1872, for example, the Council of the Philosophical Institute of Canterbury complained of a "dearth of papers and communications", and suggested that their Institute was "the proper medium for publishing much valuable information which is at present forwarded to newspapers and English periodicals".

Newspapers as Objects of Natural History?

Thus far I have argued that newspapers were extremely important to New Zealand's scientific community; that newspapers covered the activities of scientific societies and lionized leading men of science; and that newspapers facilitated scientific controversy and debate through the rapid interchange of letters, many written anonymously. Why then did I make the claim in my introduction that newspaper clippings should be read as objects of natural history? The answer lies in the archive. Newspapers, like wild

animals and plants, do not have unlimited ranges. In the same way that some plants naturally occur only in deserts or alpine regions, a newspaper published in a province, city or nation does not generally have a circulation beyond the boundaries of that locality. In other words, if something of interest to a man of science is written in a newspaper in one town, but he lives in another town, he will only see it if its existence is brought to his attention by a correspondent. Newspapers are physically bounded, and in the nineteenth century they were incorporated into networks of exchange in exactly the way that other objects of natural history were collected and exchanged.

My examples of how newspaper clippings performed functions indistinguishable from natural history specimens come exclusively from the archive of the Colonial Museum, now housed in the Museum of New Zealand Te Papa Tongarewa. Clippings of scientific society meetings were forwarded to James Hector in Wellington because, as the manager of the New Zealand Institute, it was his task to compile and publish proceedings of each society in the Institute's annual volume. It was generally accepted that newspaper reports were the fullest records available. Secretaries of scientific societies therefore forwarded clippings to Hector with covering notes explaining how the reported account differed from official minutes. It was thus important for society secretaries to encourage journalists to attend society meetings, and if possible to convince them to join the society. In 1882, for example, William Colenso, the Secretary of the Hawkes Bay Philosophical Institute, wrote to Hector enclosing "a cutting from one of our locals, [the] 'Dy. Telegraph,'…the Editor, now a member of our Institute, was present, at our Meeting, & apparently took great interest therein". Many members of the scientific community eagerly read newspaper reports of the proceedings of scientific societies, and Hector often received letters from individuals asserting that they had been misquoted and who were keen to set the record straight.

Newspaper clippings reporting society meetings were also sent to men of science in Britain and elsewhere in the Australasian colonies. Such forwarded clippings did much to maintain positive relations between men of science in New Zealand and those in other colonial or metropolitan centres, and therefore performed a similar role to forwarded natural history specimens or book exchanges. However, it appears that newspaper coverage of society meetings began to diminish towards the end of the nineteenth century – at least, during the 1890s many men of science complained that this was the case. In 1896, for example, Thomas Jeffery Parker, professor of biology at the University of Otago, informed Hector that Hector was mistaken "in supposing that the Dunedin newspapers supply full reports of our meetings". This change was in part due to decreased membership of scientific societies and to the rise of other organized leisure activities – some men of science, for example, attributed the decline of science in newspapers to the increased prominence of sport. None the less, clippings continued to be important sources of information and objects of exchange between New Zealand's men of science.

In the case of James Hector, however, it appears that the most important function of his collection of newspaper clippings had little to do with reports directly relating to the scientific community. Most newspapers contained a great deal of economic information – data such as export tonnage and commodity prices. They also carried information on crop yields and successful agricultural practices, as well as reports of

unusual natural phenomena or discoveries of novel plants and animals. In the last case, clippings reporting natural phenomena or natural history specimens could be collected in place of first hand experience or possession of the object in question.

What fascinates me about the collection of newspaper reports of natural phenomena and industrial progress is how these collections related to scientific expertise. James Hector, as director of the Colonial Museum and Geological Survey, and manager of the New Zealand Institute, was frequently called upon to give evidence before parliamentary committees on questions as diverse as exporting wool to Japan and improving fibre production from New Zealand flax. On several occasions he coordinated New Zealand's presence at international industrial exhibitions. As his friend Professor John Macmillan Brown put it in an article in the Christchurch newspaper, *The Press*, in December 1907, shortly after Hector's death, Hector's "position was one of the most extraordinary in relation to the Ministries of the sixties, seventies and eighties…no Ministry could afford to have him absent during the session, for he was scientific encyclopedia [sic], oracle, and factotum to the Cabinet and the House".

How was it possible that Hector could be such an expert on so many scientific issues? Obviously his earlier education at the University of Edinburgh, and his experience surveying in Canada and New Zealand were important both in forming his scientific methodology and cementing his reputation, as were the animal, mineral, vegetable and ethnological collections he assembled in the Colonial Museum. But I believe the humble newspaper clipping was also very important.

In the Te Papa archive are dozens of folders of newspaper clippings on all topics relating to the scientific community and New Zealand's emerging economic activities. Through these collections, Hector had resources available to him that could not be supplied by local or international scientific journals. Not only did Hector need an overview of global advances in science and technology, he needed a sense of how these advances were being applied in colonial New Zealand. Newspapers alone provided this overview, and therefore he collected them and they became an important source of his expertise. Although I have not been able to spend much time working through the archives of New Zealand's other leading men of science, what research I have done indicates that Hector's use of a newspaper clipping collection as a general reference point and source of expertise was not unique. In the papers of the naturalist George Malcolm Thomson in the Hocken Library in Dunedin there are similar extensive collections of clippings on a diverse range of topics. It is my impression that while such clipping collections have been important sources of information for modern historians, the fact that so many nineteenth century men of science actually possessed them is generally ignored.

Conclusion – a reluctance to abandon the heroic?

Claiming that newspaper clippings were objects of natural history is of course a somewhat tongue-in-cheek assertion. It is true that there are many reasons why the identification of newspapers as natural history specimens is not a perfect one – newspaper collections were not displayed in museums or at exhibitions; men of science did not explicitly claim they had privileged knowledge by virtue of their newspaper

collection, in the way that they sometimes did in regards to herbaria and the like, even though they actually did obtain much of their information through newspapers; nor did men of science refer to newspaper clippings as being natural history objects. The secondary claim that I have made in this paper – that colonial New Zealand newspapers were full of science, and that they were very important to the nature of debate in the scientific community – is itself a substantial historiographic innovation. Historians often write about the scientific community as if it was separate from society as a whole, and they anachronistically apply the labels "professional" and "amateur" to past thinkers to reinforce this supposed separation. In New Zealand, newspapers reveal that the labels "professional" and "amateur" are not particularly helpful for describing scientists in the late nineteenth century.

My primary claim – that newspapers were objects of natural history – though perhaps bold, is a helpful corrective to historians who ignore the importance of newspapers as objects for exchange and sources of expertise. Why, I find myself asking, therefore, are the collections of clippings compiled during the nineteenth century commonly ignored? Are historians so keen to get a scoop by quoting an obscure newspaper source that they don't like to reveal that their source was initially collected by a man of science, and is now stored in an archive? I know I've felt that temptation. My personal theory as to the root cause of academic blindness in this area, however, lies in debates surrounding science, society and the media. At present there is a great deal of media and academic angst over whether the media accurately report how scientists go about their work and what they conclude. This angst is mostly in relation to climate change: debates include whether it is possible for scientists to gain media coverage for results that aren't extreme and sensationalist, and whether the media can convey the contingent nature of most scientific findings. While some commentators note that scientific practice is modulated by media reception, most of the statements made by scientists and reporters on the issue of science and climate change in the media assume that there is a pure scientific method, and that if there is a problem it is with how that method is understood by reporters. In other words, public discourse assumes a diffusionist model for the transmission of scientific knowledge.

Given this is the ruling paradigm for the modern understanding of science and the media, it is not hard to see why historians have struggled to grasp the importance of newspaper collections to nineteenth century men of science. Asserting that newspapers were important sources of information for men of science rather than simply locations where their work was reported reverses the commonly assumed flow of information. A parallel to this is seen in the historiography of military intelligence, where historians such as Christopher Andrew argue that James Bond-style secret agents are relatively marginal components of modern surveillance systems, and that most information the state obtains concerning foreign powers is gathered from close-reading of public sources, including newspapers. Recasting the nineteenth century scientific expert as an individual obsessed with newspapers diverts attention from the glamorous science equivalents of asking for martinis shaken and not stirred – which includes laboratory experiments, museum collections, and large scale events such as exhibitions and public lectures. But if historians want to understand what scientists actually do, it is probably healthy for them to be reminded that most scientific practice is more mundane than heroic. And in so far as mundane science in the nineteenth century – including

newspaper research – involved a broad-ranging utilitarian focus, it was this brand of science that was most encouraged by governments expanding their provision for scientific research and keen to justify increased expenditure.

Francis Reid, Doctoral Student, Cambridge University

Conference Report:

Trans-Tasman 'States of Mind' series, 2006: Water, Friday 27 October

Kate Hunter

Each year since 2001, the Stout Research Centre at Victoria University, sponsored by the Australian High Commission, has hosted a one-day trans-Tasman conference. These are broad-ranging and interdisciplinary conferences, attracting audiences of policy-makers, scholars and interested members of the public. The theme for 2006 was Water, and invited speakers were Wayne Ngata (Ngati Ira, Ngati Porou), David Young, (freelance historian) and Dr Marion Savill (ESR Christchurch) on the New Zealand side, and Dr Paul Sinclair (Environment Victoria), Dr Melita Stevens (Melbourne Water) and Tony McAvoy (Aboriginal barrister and Land Council adviser) from Australia.

The conference was opened by Wayne Ngata who laid out a theme that others were to return to during the day: that of relationships with and around water, the *engagement with* water rather than simply the *use* of it. The message that people care about the quality and quantity of water when they have a relationship with it was strengthened by the second session where both David Young and Paul Sinclair argued that the growing dislocation, particularly of urban populations from water was a contributing factor to

its degradation. There are differences in the forms of degradation of rivers in Australia and New Zealand: the Victorians are now urgently concerned with quantity and management of flow in their rivers. The Murray has 70% of its flow removed for agriculture resulting now in vast swathes of degradation along its banks where once environmental flow sustained large floodplains and this has been exacerbated to crisis point by ten years of drought. In New Zealand, the key concern is water quality and indicator species such as the Whio (blue duck) and eels are signalling mounting crisis in our river systems. Both of these speakers, and the following session on water quality (Marion Savill is the Environmental Microbiology leader at ESR and Melita Stevens is the Drinking Water Quality Manager at Melbourne Water) emphasised the strong need for incentives for agriculture particularly to become more water efficient and to reduce water-polluting practices. Environment Victoria campaigns for 'water efficiency ratings' on labelling, Melbourne Water provides fencing materials, pipes and troughs to assist farmers to keep stock out of streams, and ESR are currently supporting the Sustainable Farming Fund, educating farmers on reducing microbial pollution.

Throughout these sessions, however, ran the thread of relationships: recreation created family and personal relationships with water; good working relationships between farmers and water utilities were essential to changing farming practices; those relationships were also important if water was to be valued, priced accordingly, and for farmers to be given fair prices for their produce without alienating urban consumers. In the final session Tony McAvoy, in a discussion of Native Title rights to water in Australia, reminded us that these relationships – or lack of them – are deeply historical and colonial, that in the juggle to allocate and extract water, cultural water has been totally ignored. When indigenous use of water was finally considered in legislation in the late twentieth century (most centrally in the Water Management Act 2000), there was no water to give indigenous people.

Overall, the conference had less historical content than I was expecting, but it was nonetheless a thought-provoking and at times slightly alarming day. Each break saw audience approach the water jugs more thoughtfully.

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Conference Report:

Environment and Nature in Asia

James Beattie

KEY TERMS
environment, Asia, gardens, Japan, China, Philippines, animals, conservation

This special one-day symposium on the environment and nature of Asia took place on Saturday 2 September 2006, at the University of Otago, Dunedin, New Zealand.

The conference brought together an interdisciplinary team of scholars from New Zealand and overseas. Scholars of environmental history, garden history, literature, and history of science presented papers. These were (in order of presentation):

Associate-Professor Nanyan Guo (University of Otago)

Nature and Culture of the Ogasawara Islands

Catherine Knight (University of Canterbury)

"King of the Forest", or "Fugitive of the Forest"? The Japanese relationship with the bear: past, present and future.

Dr. James Beattie (University of Otago)

Growing Chinese Influences in New Zealand: Chinese Gardens, Identity and Meaning in Dunedin and New Plymouth

Dr. James Beattie (University of Otago), J.M. Heinzen (Cambridge University) and John Adam (UNITEC)

Japanese Gardens and Plants in New Zealand, 1850-1950: Transcultural and Transmission

Dr. Jacob Edmond (University of Otago)

Yang Lian's Auckland: A Psychogeographic Poetics

Associate Professor Greg Bankoff (Visiting Professor of Disaster Management, Coventry University and School of Asian Studies, University of Auckland)

The Science of Nature and the Nature of Science in the Nineteenth Century Philippines

Dr. Geoff Watson (Massey University)

Shifting Sands and Sweeping Steppes: Representations of Central Asian Environments in British Literature during the "Great Game" Era c. 1830-1914

Dr. Claire Brennan (James Cook University)

Nineteenth Century Animal Networks: Asia and Australasia

The following day a conference field trip was taken to explore the former site of Seacliffe Lunatic Asylum and pa site at Karitane.

More information on the conference can be found at the following website or by contacting Dr. Beattie.
Website:
http://www.otago.ac.nz/humanities/research/clusters/asianz/envt_nature_symp.html#details
E-mail:
james.beattie@stonebow.otago.ac.nz

SPONSORSHIP

The conference was proudly sponsored by the **Asia:NZ Foundation**, **'Asia in New Zealand' Research Cluster**, University of Otago. It was also supported by the **Department of History** and **Department of Music**, University of Otago.

PUBLICATION

A Special Edition of the *New Zealand Journal of Asian Studies* to be edited by Dr. Beattie in June 2007 will be devoted to selected papers from this symposium, as well as those by invited contributors.

ENNZ: Environment and Nature in New Zealand

Upcoming Conference:

49th Annual Conference of the International Association for Vegetation Science

New Zealand: New home; new habitat! New ideas?

Palmerston North, New Zealand: 12-16 February 2007

Website: http://iavs2007.massey.ac.nz

Contact: Jill Rapson. G.Rapson@massey.ac.nz
Ecology,
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The 49th Annual Conferenceof the International Association for Vegetation Science (IAVS) is to be held at Massey University's Turitea Campus in Palmerston North from 12th to 16th of February 2007. There will be excursions both before and after the conference, as well as a selection of day-long mid-conference excursions.

Planned symposia are:

- New Zealand forest dynamics - doing it our way? (Organiser: Glenn Stewart);
- Invasive plants: novel functional groups and ecosystem effects? (Organisers: Peter Bellingham and Peter Williams);
- Evolved to be eaten? (Organiser: Sandra Diaz);
- Bioinformatics - Temporal and spatial syntheses of vegetation data (Organiser: Susan Wiser);
- Drivers of global change (Organiser: Martin Sykes);
- Better than alone? - The role of symbioses in vegetation (Organiser: Helga Bültmann);
- Urban vegetation, or just a lot of plants? (Organiser: Ken Thompson).

ENNZ: Environment and Nature in New Zealand

Conference costs

Registration (IAVS member)	NZ$ 600
Registration (non-IAVS member)	NZ$ 700
Student	NZ$ 350
Accompanying person	NZ$ 180
Day registration	NZ$ 170 per day
End of conference BBQ	NZ$ 70
Pre-conference trip	NZ$ 950
Post-conference trip	NZ$ 2200

Registration includes lunch and the Drinks, Nibbles, and Posters session, as well as your choice of mid-conference excursion (though a surcharge may apply).