



Learning to Change the Future

A bird's-eye view of the history of the IUCN
Commission on Education and Communication
by Frits Hesselink and Jan Čeřovský



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Cover photo by Jan Čeřovský: IUCN/Field Studies Council course in environmental education for teacher trainees, North Wales, UK, August 1971.

Introduction

The dynamics of a knowledge network – inspiration, new ideas, new learning – are rarely documented. Years later all that is often left are publications on a shelf, names in an archive, and myths and stories about the old days. But let us not forget that individuals initiated actions promoting programmes, projects and opportunities for many others to improve their knowledge, attitudes and skills. The authors studied various records¹ and questioned eye-witnesses² in an attempt to learn from the knowledge network developed over time by the Commission on Education and Communication of the International Union for Conservation of Nature (IUCN CEC).

We are most interested in the main shifts in paradigms, Commission goals and leading thinkers, and less in a detailed description of all past events³. We came across many strengths and weaknesses of a formal and voluntary knowledge network. We wish this short history to provide new generations in CEC, IUCN and the wider conservation community with some idea of where it all started and the metamorphosis CEC has experienced since the early days of IUCN. For us it has been an exciting learning exercise⁴.

CEC, the oldest Commission of IUCN

In 1948 IUCN was founded as the International Union for the Protection of Nature (IUPN), a Union of States and non-governmental organizations (NGOs). Various efforts had been undertaken since 1900 to develop international cooperation in nature conservation to protect what was later called the integrity of the world biosphere. Swiss naturalists in particular made attempts towards organized action. Both world wars hampered these attempts. Shortly after 1945, two conferences on international nature conservation were held in Switzerland (Basel 1946, Brunnen 1947). They paved the way for the Constitutive Conference of the International Union for the Protection of Nature, organized by UNESCO with the vigorous support of its Director-General, Julian Huxley. The conference took place from 30 September to 7 October 1948 in Fontainebleau (France). It was attended by representatives of 25 governments, 126 national institutions and eight international organizations⁵.

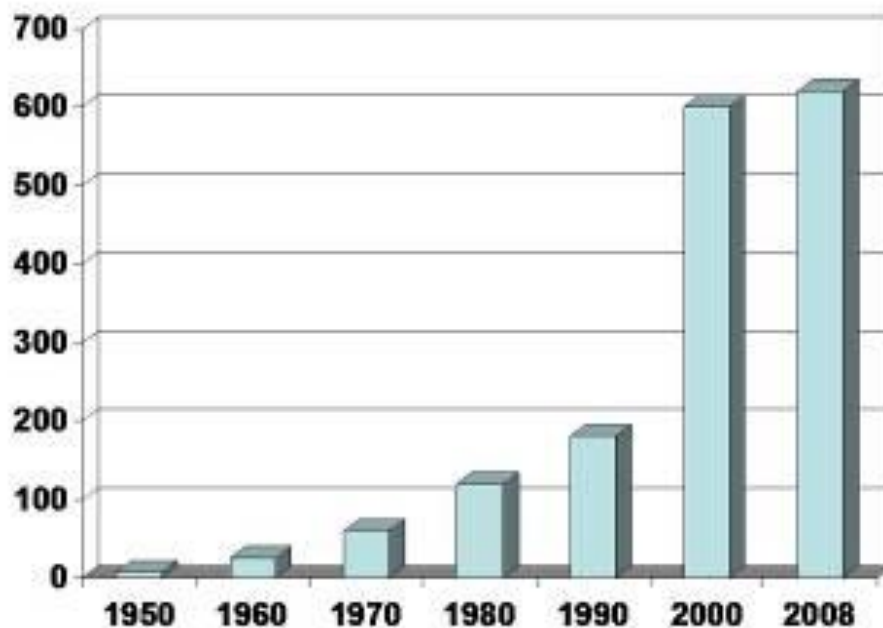
A small Secretariat headed by Jean-Paul Harroy (Belgium) was established in Brussels to serve IUPN. It was the time of post-war reconstruction, the beginning of the cold war and decolonization and the beginning awareness of population pressures on natural resources. According to its original statutes, IUPN had six fields of work, including one that would become central to our Commission: “To educate adults and children to realize the danger which lies in the alteration of natural resources and the necessity of action against such a danger”.

The first IUPN Commission, the Permanent Committee on Conservation Education, was established at the conference in Fontainebleau (France) that founded IUPN. William Vogt (USA, 1902-1968) was appointed to tackle this field of work as chair of the new Commission. He was one of the founders of IUPN and a well known ornithologist.

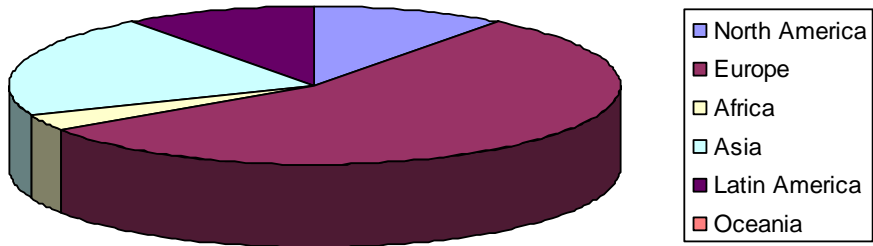
The Commission on Education, established as such in 1949 by the IUPN Council, initially had eight members. This predecessor of the current IUCN Commission on Education and Communication (CEC) was generally referred to as EduC⁶. In the early years, the IUCN Council appointed Commission chairs for a two-year period, eligible for re-appointment indefinitely. Chairs could be appointed again and again, and sometimes were for political reasons, until this changed in the 1980s with the introduction of elections. Today we have terms of four years, and Commission chairs are only eligible for a maximum of two terms. They are elected by IUCN members during the IUCN General Assembly.

Membership of Commissions was from the beginning rather restricted, conferred only on those who were outstanding conservation leaders and renowned scientists in their field of expertise. Even in the seventies IUCN Commissions had fewer members than today. In the mid-sixties CEC had 15 members from 14 different countries; in 1970, CEC had 29 members from 21 countries (mostly from the North)⁷. Only the chair of a regional committee was considered a member of the Commission, in part accounting for the low Commission membership numbers. Members of regional committees did not belong to Commission, although today they are automatically members. This membership structure imposed distance between the Commission and the regions, leaving the regional activities largely in the hands of individual chairs—each with different levels of mobilization and leadership. Although the first steps towards regionalization started in the sixties, regional balance in CEC was only achieved at the end of the nineties. Gender balance still has not been completely achieved in all regions.

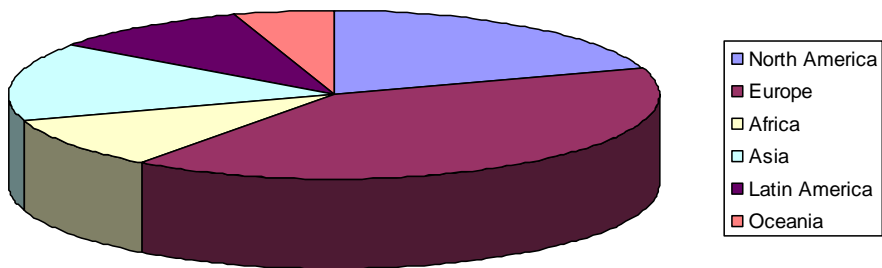
Development of the CEC membership over the years



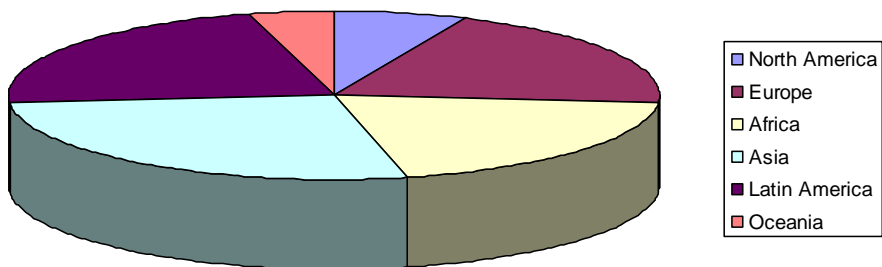
Regional Balance CEC Membership in 1972



Regional balance CEC membership 1992



Regional balance CEC membership in 1999



1950s: Promoting nature conservation

In the mid-fifties, the founders of IUPN largely understood nature to mean “wildlife”, with a strong focus on outstanding natural features such as species and places that were threatened by economic development and population growth⁸. This view of nature was a point of contention between Americans and Europeans, among others. However, prevailing opinion at IUCN was that the public needed to become aware of the importance of the conservation of wildlife. To accomplish this goal, it was decided that CEC should focus on schools.

In Italy in 1950 CEC distributed 39,000 booklets for teachers and 130,000 illustrated pamphlets for students. It was our first campaign to raise awareness, with financial support from UNESCO⁹. The idea was that the Commission would call on its experts in different countries to up-scale the Italian approach and make IUPN indispensable to UNESCO, thereby sustaining its financial support¹⁰.



William Vogt, Ira Gabrielson, Max Nicholson, the first IUCN Publications: CEC products!

In 1952 the IUPN Council appointed Ira Gabrielson (USA, 1889-1977), another founder of IUPN, as CEC Chair. During his term the Commission produced the first IUPN publication: *A Guide to Conservation* by the American scholar Laurence Palmer.

In 1956 the General Assembly in Edinburgh, UK, changed the name from IUPN to IUCN, International Union for Conservation of Nature and Natural Resources. The intent was to overcome “a much more limited and perhaps more defensive or sentimental image”¹¹. The change of name broadened the scope of IUCN action. In the fifties CEC focused on outdoor and out-of-school nature education in accordance with the slogan “take them out” promoted by the famous conservationist Edward Max Nicholson (UK, 1904-2003), also a founder of IUCN. He served as CEC Chair from 1958 to 1960.

CEC helped to organize youth summer camps mostly in Europe and North America. In 1956 CEC helped to create the International Youth Federation for the Study and Protection of Nature (IYF) with Jacques de Smidt, a Dutch university student, as its first President¹². For the next two decades the IYF functioned as a “youth arm” of IUCN.



Campfire at the 3rd General Assembly of IYF during the camp in Evo, Finland, August 1958. Photo Alpo Luomajoki.

1960s: Conservation education extends over a global scene

The 1959 revision of the IUCN Statutes continues to describe education as a key area of work for IUCN. An article under Tasks of IUCN calls for: “Promotion and wide diffusion of education and information aimed at increasing public awareness of nature protection and conservation of natural resources” (Article II.c.).

The mandate of CEC at the time focused on educational policies and youth. In 1960 the IUCN General Assembly took the decision to move the Secretariat from Belgium to Switzerland. The Assembly also appointed the leading Russian conservationist Lev K. Shaposhnikov (1915-1979) as CEC Chair. He held this office from 1960 to 1978, with a series of re-appointments spanning 18 years¹³.



Lev Shaposhnikov, Don Aldridge, Pierre Goeldin, Jan Čeřovský, Report on Nature Conservation in Eastern Europe.

In this decade the concept of ecology emerged. UNESCO started its programme Man and the Biosphere, and IUCN started its Commission on Ecology. Ecology is defined as the interconnectedness in nature and the role and impact of the human species. For CEC this meant a further broadening of its scope. Conceptually this was the start of seeing conservation education as different from the scientific and technical paradigms of conservation itself. Conservation education focused on building capacities for free and informed choices. In 1966 IUCN delegated full responsibility for the IYF to CEC¹⁴.

In 1968 UNESCO convened the World Biosphere Conference of governmental experts in Paris, starting the global “first environmental wave”. The Conference was divided into three commissions, among them one on education chaired by Jan Čeřovský (former Czechoslovakia, 1930)¹⁵. The result was the first international elaboration of the concept of

environmental education. It described education as a life-long process in schools of all types and levels, and also in out-of-school activities, integrated within the entire general education. It promoted a close link between the natural and social sciences. And it recognized the importance of local and regional cultural, educational, scientific and cultural patterns. CEC played an important role in the Conference, although it was still relatively small and consisted mostly of biologists from Europe and North America with an affinity for education.

The IUCN General Assembly in Poland 1960 adopted a CEC-initiated recommendation to start establishing regional committees of commissions. The first regional committee of CEC was formed in the early sixties, the North West European Committee for Environmental Education (NWEC)¹⁶. Following its example, the East European Committee (EEC) was established in 1967¹⁷. EEC has played a unique role, as it was the first and only internationally established conservation body East of the “iron curtain”. Both Committees had the advantage over other regional committees that their leaders were civil servants who were allowed to carry out CEC activities during the workday time of their Ministries.

Also at the regional level, CEC held conferences in Bangkok (Thailand)¹⁸ and Bariloche (Argentina)¹⁹ in the mid-sixties. These were important events in these regions to spread the idea of conservation education and start CEC networks. Between the late sixties and early seventies, CEC established regional committees in India, North America²⁰, Latin America²¹, South and Central Africa and Western (Francophone) Africa; unfortunately, they lacked Secretariat support and were short-lived.

In the late sixties Jan Čeřovský was appointed as the first education officer in the IUCN Secretariat²², a position he held until the early seventies. He was instrumental in launching a mimeographed CEC Newsletter published regularly during the years of his service in the Secretariat.



Left: The establishing conference of the East European Committee, Praha, Czech Republic, September 1967. From left to right: Thomas Pritchard (CEC Deputy Chair), Lev K. Shaposhnikov (CEC Chair), Vladimír Novotný (Director, Czech Institute for Protection of Monuments and Nature), Jan Čeřovský (CEC Deputy Chair), František Tepper (Head, Department of the Czech Ministry for Culture), Joseph Berwick (IUCN Secretary General), interpreter. - Photo Archive, Czech Agency for Nature Conservation and Landscape Protection. Middle: Break during the meeting of NWEC, Germany, May 1967. From left to right: Martha ("Muffy") Henderson (USA, later the second wife of Harold J. Coolidge, IUCN President 1966-1972), Jan-Piet Doets (The Netherlands), Thomas Pritchard (UK). - Photo Jan Čeřovský's archive. Right: Participants of the international Third Czechoslovak "Intercamp" organized by IUCN CEC/IYF, and held in the Czech Krkonose (Giant Mountains) National Park during the stirred days – after the invasion of Russian troops - of late August 1968. Photo Jan Čeřovský's archive.

1970s: Developing the concepts of environmental education

The seventies saw an immense growth in environmental actions by governments and NGOs²³. Highlights of the decade included the United Nations Conference on the Human Environment in Stockholm (1972) and the Intergovernmental Conference on Environmental Education, organized by UNESCO in cooperation with UNEP in Tbilisi (1977). IUCN CEC took part in the preparation of both events and organized preceding expert meetings in Europe and North America to elaborate the concepts of environmental education.

Population and consumption were seen as the main cause of environmental degradation. The approach towards solutions was to maintain ecological processes, genetic diversity and sustainable use. The role of environmental education and participation was to achieve a change in behaviour.

Of special importance was the “International Working Meeting on Environmental Education and the School Curricula” (Carson City, Nevada, USA, 1970)²⁴. This IUCN and UNESCO event was attended by a considerable number of participants from the South. The meeting endorsed the definition of environmental education recognized and used for many years:

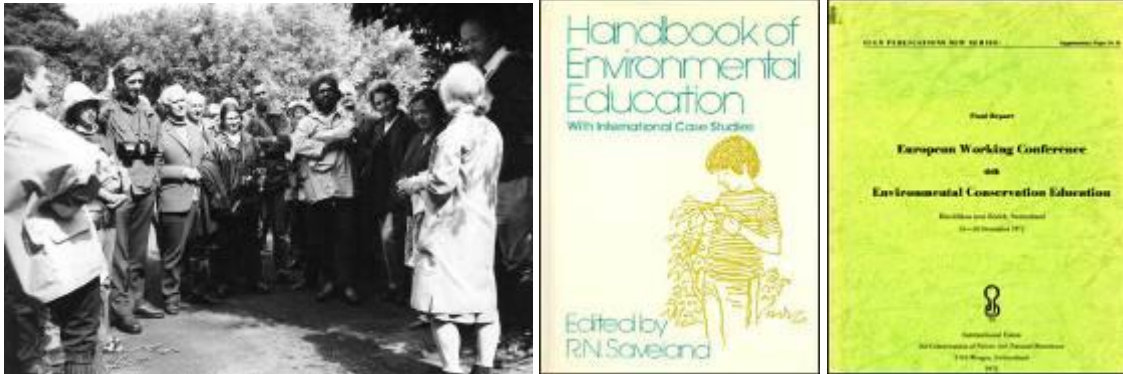
Environmental education is the process of recognizing values and clarifying concepts in order to develop skills and attitudes necessary to understand and appreciate the interrelatedness among man, his culture and his biophysical surroundings. Environmental education also entails practice in decision-making and self-formulation of a code of behaviour about issues concerning environmental quality.

The meeting also worked out a chart on the integration of environmental education into the entire school curricula at different levels. A number of follow-up meetings and other activities in several home countries of the participants were inspired by the meeting.

IUCN CEC was also heavily involved in the first-ever World Youth Conference on Environment in 1971 (Hamilton, Ontario, Canada), taking an active part in its preparation and implementation. The event has been described as a “youth overture” before the United Nations Conference in Stockholm the following year, an observation confirmed by a participant in both events, Maurice Strong, chief organizer and Secretary-General of the 1972 conference.

Another major CEC event was the First European Conference on Environmental Conservation Education in Rueschlikon near Zurich, Switzerland (1971)²⁵. One of the recommendations of this conference urged the governments “to make it possible for individuals to give service to the community in the environmental field as an alternative to compulsory military service”.

In late sixties and early seventies, grants from the World Wildlife Fund (WWF) supported CEC. The intellectual potential gathered by CEC in the early seventies is reflected in the *Handbook of Environmental Education*²⁶, edited by Robert N. Saveland (USA), a CEC member and one of the leading thinkers in the 1970 meeting in Nevada, USA.



The participants of the IUCN/Field Studies Council international course in environmental education for teacher trainees, Bets-Y-Coed, North Wales, UK, August 1971, interviewing locals about their environment. - Photo Jan Čeřovský. Education Commission Handbook of Environmental Education, CEC Conference Proceedings.

The North West European Committee for Environmental Education was now meeting yearly. Governments and conservation institutions in the host countries provided financial support. One of the persons instrumental for the success and continuity of the NWECE was Chris Maas Geesteranus (Netherlands, 1945), who served as Secretary from 1975 to 1988 and later as Chairman from 1988 to 1995. As the EEC activities in Eastern Europe were declining, the NWECE was increasingly driving the global commission, which still had a very small membership. The discourse in CEC focused very much on pedagogy, and the role of nature in personal development in various learning situations, and much less on conservation as the overarching objective²⁷.

CEC members comprised half of the keynote speakers at the preparatory workshop for the new UNESCO/UNEP International Environmental Education Programme in Belgrade (former Yugoslavia) in October 1975²⁸. The endorsed “Belgrade Charter” identified eight fundamental principles of environmental education:

1. to take into account the environment as a whole with all both natural and human-made aspects;
2. to be a continuous life-long process;
3. to be interdisciplinary in its approach;
4. to emphasize the participation in problem solving;
5. to act globally but with respect to regional differences;
6. to consider both present and future situations;
7. to examine the entire development and growth from the environmental perspective;
8. to promote local, national and international co-operation.

In 1977 CEC presented the key statement on environmental education and prepared draft reports on several major issues for the Intergovernmental Conference on Environmental Education in Tbilisi. At this time, Commission Chairs could speak on behalf of IUCN and undertake activities for the Union. This is why most reports of international education events refer to “IUCN” but rarely mention any specific Commission. When mentioned, CEC is referred to as the IUCN Education Commission.

From this time period until the mid-nineties, the CEC Steering Committee customarily included representatives of UNEP, UNESCO and WWF.

CEC Chair Lev Shaposhnikov resigned in 1978, having served in this position since 1960. That year there was no CEC candidate to vote for at the 14th IUCN General Assembly at Ashkabad, USSR. In its next session after the General Assembly, Council appointed Scottish environmental education expert Don Aldridge (UK, 1930-2008) as the new chair²⁹, although this met with opposition. Council then appointed Pierre Goeldlin (Switzerland, 1937) as

acting chair. Pierre, the Swiss Representative to the IUCN Council, said he found it challenging to find a new permanent chair due to “the abstract nature of educational concepts and the wide scope of the subject”³⁰.

1980s: With a focus on teaching and training, CEC seeks its role in IUCN

The next CEC Chair was Albert Baez (USA, 1913-2007). Things seemed to change a little with Al's election. He had a background in science education, unlike the conservation or biology background of his predecessors³¹. He focused on formal education and training and took hold of organizational and professional politics³². Julia Marton-Lefèvre (Hungary, 1954) was Deputy Chair. She later held the position of Director of the International Council for Science (ICSU), and is currently Director General of IUCN.



Al Baez, Julia Marton-Lefèvre, CEC Teacher Guides about the World Conservation Strategy and the Rain Forest

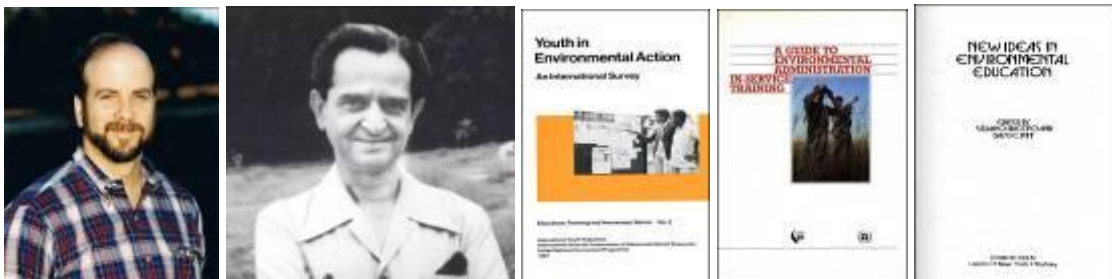
During the eighties CEC struggled vigorously for its survival. Although education had been a high priority in the first IUCN World Conservation Strategy,³³ the work of CEC seemed to some to lack a direct connection to the IUCN Programme. Overall, there was a ‘disconnect’ between environmental education on one hand, and conservation science and technical conservation projects on the other hand. There also was an ongoing divergence in working style as CEC sought more open and transparent communication. There were disagreements between IUCN and WWF about a range of subjects. Differences also arose between IUCN leadership and the Commission over financial support and human resources. When the time came, Al Baez did not stand for re-election.

Meanwhile, CEC engaged in conceptual work for UNESCO, UNEP and the wider environmental education community. During the decade, CEC produced a range of products. The Commission developed a multi-media pack for teachers on the IUCN World Conservation Strategy, a guide on training opportunities for protected area managers, and a guide for the formation of wildlife clubs. Wildlife clubs were seen as one of the major vehicles to raise awareness, especially in African countries. Mass media campaigns had heightened the profile of WWF, raising expectations about the role of CEC in influencing government policies³⁴.

This was a period of growth for the North West Europe Committee. Much of the conceptual environmental education discourse continued in the NWECE, which embarked more and more on its own path. It played an increasingly important role working with its Eastern European counterpart in exchanging ideas and experience across the iron curtain³⁵. In 1984 both European Regional Committees held a joint meeting in Helsinki/ Espoo, Finland. Al Baez and Julia Marton-Lefèvre chaired the event, which marked the beginning of a new East-West cooperation in IUCN³⁶. The joint meetings continued every two years combined with topical conferences³⁷.



Left: Participants of the NWE and EE Committees' joint meeting, Bø, Norway, June 1988, starting to experience the "Take them out" in Norwegian style: a 2 day tour of 40 kilometers in the wild nature of the Telemark mountains. - Photo Jan Čefovský
 Middle: Conference on education for sustainable development for Norwegian educators, organized by the NWE and EE Committees, Bø, Norway, June 1988. John Smyth delivering his lecture. - Photo Josef Velek. Right: Joint meeting of NWE and EE Committees, Bø, Norway, June 1988, opening session. From left to right: Eniko Szalay-Marzsó (Deputy-Chair, EEC), Jan Čefovský (IUCN Councillor), Chris Maas Geesteranus (Chair, NWECE). - Photo Josef Velek.



Gerald Lieberman, M.A. Partha Sarathy, Youth in Environmental Action, A Guide to Environmental Administration, In-Service Training, New Ideas in Environmental Education

In 1984 Gerald Lieberman (USA, 1950) was elected CEC Chair. He took the lead on the International Youth Conference on the Environment, travelling to Moscow to make arrangements directly with the Soviet government to get the initiative off the ground. It had been originally promoted by the CEC NWECE and CEEC joint meeting in 1984. The conference attended by hundreds of students was a great success. Dr. Lieberman resigned in favor of his deputy chair, M.A. Partha Sarathy (India, 1923), in 1986.

The new CEC Chair kept the Commission's network going with voluntary assistance from CEC member Dart Thalman (USA). The Commission could not operate without any support, however. During this time period, CEC lacked financial or secretariat support from IUCN. Partha moved the CEC secretariat to Bangalore, India, where he used his own resources to set up an office with staff.

In 1988 the Commission's name was changed at the 17th IUCN General Assembly (San Jose, Costa Rica). It was now the Commission on Education and Training.

CEC had almost 80 members by the end of the eighties. They were predominantly from the North³⁸ and included academics, biologists, science educators, pedagogical researchers and teacher trainers. CEC was looking beyond the classical environmental education. Most importantly the challenge was to connect with the fast-growing IUCN programme.

1990s: Championing strategic planning for education and communication

In 1990, the Commission's name changed to its present form—the Commission on Education and Communication, to widen the focus of the Commission for new approaches. This name was approved at the 18th IUCN General Assembly in Perth, Australia.

In 1992 IUCN introduced its second World Conservation Strategy, known as “Caring for the Earth”, with UNEP and WWF. Also in 1992, the Earth Summit produced Agenda 21 as a global agenda for transition to sustainability in the 21st century. The concept of sustainable development emerged in the early nineties. Caring for the Earth attributes the cause of environmental degradation to human development exceeding the carrying capacity of the Earth. The strategy suggests that the approach towards solutions is to change attitudes and practices. The role of education is to provide knowledge and training, while advertising and entertainment should influence public opinion. Agenda 21 is based on the view that environmental degradation is caused by unsustainable lifestyles and values as well as patterns of consumption and production. Approaches to solutions can be found in national awareness programmes towards sustainability. The role of education is to disseminate ecological, technical, scientific and legal knowledge.

Partha Sarathy continued as Chair until 1994. He widened the focus of the Commission for new approaches, with film as one of his main fields of interest. As a personal initiative, he instituted the IUCN CEC Tree of Learning Award for outstanding contributions to environmental education and awarded it to Professor John Smyth, Al Gore and Kartikeya Sarabhai, among others. He also secured funds from the Dutch Ministry of Agriculture, Nature and Fisheries that enabled CEC to return to IUCN headquarters in Gland, Switzerland³⁹. Thanks to him CEC again had a future.

Dutch funding made it possible for CEC once again to have secretariat and operational support at IUCN headquarters⁴⁰. For over 14 years Wendy Goldstein (Australia, 1945) managed the CEC network with the help of Cecilia Nizzola-Tabja (Peru). Part of the ‘deal’ on the funding in 1990 between IUCN, the CEC leadership and the Dutch Government was the appointment of Frits Hesselink (Netherlands, 1945) as CEC Deputy Chair, a position he held from 1990 to 1994⁴¹. He focused on the organizational management of the CEC network, regionalization into the South, and relationships with regional offices. The aim was to link education and communication with the emerging goals of sustainable development and interactive policy-making.



CEC network managers in Switzerland: Wendy Goldstein; Cecilia Nizzola-Tabja; CEC coordinators in regional offices meeting in Gland 1996: Nargis Alavi, Ana Puyol, Susan Matindi, Jinie Dela, Cecilia Nizzola-Tabja, Lorena Aguilar; Jacquie Chenje; IUCN UNESCO Meeting on Strategic Planning for Education and Communication: Victor Kotchekov (UNESCO), Liz Hopkins (IUCN), Frits Hesselink, Peter Bos (Netherlands); Marc Wilke (European Commission); CEC Steering Committee members and focal points in 1999: front row: Badri Pande, Juliana Chileshe, Mary Karanja, middle row: Ana Puyol, Susana Calvo, Dinh Thi Minh Thu, Mai Elrimisy, Aliou Faye, Jacquie Chenje, Angèle Luh Mbazona, Susan Matindi, Jesús Cisneros, back row: Frits Hesselink, Abdelhamid H. Belemlih, Luis Artigas, Ziyad Alawneh, Moussa Batchily Ba - photos by Wendy Goldstein.



Launch of SASEANEE 1993 (photo by Wendy Goldstein), Latin American Network Meeting 1995 (Photo IUCN SUR), European Network meeting after merger in 1996

Regionalization was increasing. In 1993 CEC welcomed the creation of a new regional network in Asia. The network, called SASANEE⁴², was established with secretariat support from the Centre for Environment Education in Ahmedabad, India. SASEANEE conducted a number of regional training programmes in education and communication for environment and development. About 90 professionals from over 18 countries were trained under this initiative, which ran from 1993 to 2005. In another region, Latin America, another vibrant new network emerged. It received support from the IUCN Regional Office for South America. In 1992 three European committees met in Kranjska Gora, Slovenia, and held a travelling Conference on Education for Sustainable Tourism. They included a Southern European Committee. In 1994 the three European CEC Committees merged under new leadership⁴³ and brought the European network in line with the global CEC programme.

Despite Dutch support and the Commission's emerging regional networks, the added value of CEC to the IUCN programme was unclear⁴⁴. In 1993, the Secretariat commissioned a small expert committee⁴⁵ to come up with a proposal about the Commission's future. Looking for reasons to abolish CEC, research by committee members yielded unexpected results. Some saw for the first time that education and communication could be more than academics talking about pedagogical concepts; it could be strategic and relevant to society. One visit to a CEC activity, for example, proved the Commission's current work was a far cry from the expected focus on children and conceptual education jargon. Instead, a committee member witnessed two dozen consultants working with curriculum developers, schoolbook publishers and suppliers, a National Examination Board and six Ministries to bring about change towards sustainability in the formal education system⁴⁶. The committee discovered that CEC was developing a new approach known as strategic change, which was of direct interest to the IUCN conservation strategies.

The review committee recommended that CEC not be disbanded but continue as an advisory body. This recommendation was not followed by the IUCN General Assembly, which approved the CEC mandate for a full Commission, as proposed by the CEC Steering Committee.

Strategy Element	Stage 1 Reactive	Stage 2 Receptive	Stage 3 Constructive	Stage 4 Pro-active
Integrate	Extra curricular EE tools and activities in school programs	EE in curriculum of relevant subjects and in teacher training	School curriculum oriented towards sustainability	Culture of the autonomous school
Cooperate	EE and Biodiversity specialists	Curriculum developers and teacher trainers	Education authorities and suppliers of schools	Neighbourhood, private sector, NGO, parents
Generate	Ecological information	Environmental knowledge and attitudes	Conditions for change towards sustainability	Responsible citizens in a sustainable society

From	Towards
Facts	Perceptions
Science	Social change
Problems	Solutions
Publications	Actions towards change
Knowledge	Behavior
Silos	Integration
Supply	Demand
Product	Market
Captive audiences	Intermediaries and networks
Top-down	Top-down and bottom-up
One-way communication	Two-way communication
Focus on didactics	Focus on learning by doing
Focus on process and activities	Focus on impact

Images that lead to the advice of the reviewers not to abolish CEC



Frits Hesselink, Publications Strategic Planning of Education and Communication, IUCN UNESCO Meeting on Strategic Planning for Education and Communication: Victor Kotchekov (UNESCO), Liz Hopkins (IUCN) Frits Hesselink, Peter Bos (Netherlands); Marc Wilke (European Commission) – photo by Wendy Goldstein

In the nineties components of IUCN focused increasingly on policy and capacity support for the Convention on Biological Diversity (CBD), Ramsar Convention on Wetlands, Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES), and the ecosystem approach (a strategy for the integrated management of land, water and living resources). This created tension with the traditional programmes such as forests, species and wetlands.

In 1994 Frits Hesselink was elected CEC Chair. He made an effort to bring CEC into the mainstream of IUCN, working closely with the Secretariat so that the functioning of the Programme and the Commission would be inseparable. He focused the CEC programme on support to the work of IUCN in national conservation strategies, believing that CEC could bring “added value” to IUCN. The Commission aimed to increase the impact of conservation policies and practices by integrating learning and communication. Frits looked to the environmental conventions, where governments commit themselves to invest in communication, education and public awareness⁴⁷—and where CEC expertise would be in demand.

CEC organized three regional conferences on strategic planning for environmental education and communication in Europe (1994), Latin America (1995) and Asia (1996). Much was learned about the role of education and communication in governmental conservation strategies. Governments used education and communication as part of the instrument mix to achieve environmental objectives. At this time, new and vibrant regional networks emerged. CEC actively engaged in capacity building to support this approach, not only within the context of the IUCN Programme, but also in the context of the Earth Summit and the environmental conventions. In Europe CEC started to play a major role in building communication capacity in countries engaged in accession to the European Union, in support of the Pan-European Biological and Landscape Diversity Strategy (PEBLDS) and the Natura 2000 networking programme.

Wider regional representation was deliberately sought for the CEC Steering Committee⁴⁸. Its membership was changing, as was that of the entire Commission. Frits opened up membership practices in CEC during the nineties, with the chair delegating approval of individual members to the regional chairs and the secretariat. Field experience became a more desired qualification than ‘academics’. No longer did CEC aspire to be the global network for conceptual discussion on environmental education⁴⁹. New members were recruited among communication and learning experts from IUCN state and NGO members.



Uganda wetlands communication training photo: Wendy Goldstein; SASEANEE Environmental Education training course, photo CEE India; PEBLDS & Natura 2000 communication capacity building program, European Union Accession countries 1998-2003, photo Wendy Goldstein.



Change from paper to electronic news letters, on line communities of practice and video reporting (CEC member Ricardo Carvalho interviewing Parvez Hassan for the closing video of the IUCN World Conservation Congress in Amman)

By the end of the nineties, the Internet became a major driver for change in the management of the CEC network⁵⁰. The printed newsletter “Nature Herald” made way for electronic versions. CEC developed its first website and regional list serves, and experimented with the first online debates, such as the 1999 ESDebate, the International Debate for Education on Sustainable Development. CEC introduced the concept of knowledge management into IUCN⁵¹. The 1999 external review⁵² recommended CEC to take the lead in IUCN in the field of knowledge management and organizational learning and start a virtual IUCN university.

By 2000 CEC had more than 600 members, up from 120 members in 1994⁵³. The Commission had achieved fair gender and regional balance. Yet, despite many changes, there was still no real functional connection between the CEC knowledge network and the IUCN Programme. Clearly, at least to CEC, our expertise was needed. Learning and communication expertise is needed to get conservation results. Generating and disseminating information does not lead to change in people’s behaviour. However, entering into IUCN processes was continuing to prove difficult. When CEC was asked for input, for example, too often it was at the end of a project or in effect a request to volunteer public relations services, not strategic advice.

2000s: Powering change for a more sustainable future

In 2000 the vision of “One Programme” was introduced throughout IUCN, meaning that Commission activities had to be part of the IUCN Programme. A much more coherent IUCN Programme focused on a small number of key result areas. New and innovative approaches were stimulated leading to IUCN initiatives on water, sustainable livelihoods and poverty.

From 2000 to 2005, the CEC Chair was Denise Hamú (Brazil, 1959), the first female Commission chair in IUCN. She was assisted by Susana Calvo (Spain)⁵⁴ as Deputy Chair. The focus was on impacting the policy environment. CEC became an important actor in the interpretation and realization of the Programme of Work on Communication, Education, and Public Awareness (CEPA) in the Convention on Biological Diversity (CBD)⁵⁵.



Denise Hamú; Susana Calvo; Sylvi Ofstad; CEC brochures to lobby the Environmental Conventions: Mainstreaming Biodiversity & Conservation Results by Managing Change.

CEC became recognized as the major CEPA knowledge network for the Secretariats of the Conventions and national governments⁵⁶. The Commission increased its profile in the inter-governmental sphere through active participation in the Conference of the Parties (COP) processes, on advisory committees and other major events to support the CBD and other environmental conventions. One of the events that illustrated the changing paradigms in CEC was a conference in Valsain in 2002, sponsored by the Spanish Government, and initiated by Susana Calvo. Its theme was “Communicating the Environmental Conventions”. This meeting positioned communication and education activities as change management instruments⁵⁷ to realize conservation results. For this meeting a case-study format was introduced as means to capture learning on the added value of communication in change processes⁵⁸.

It was also during this time that CEC demonstrated leadership in the area of Education for Sustainable Development (ESD). CEC established a Thematic Chair for ESD and coordinated a range of initiatives that built international momentum in this area. The Commission featured in major international dialogues leading to the World Summit on Sustainable Development (WSSD) in Johannesburg in 2002⁵⁹. CEC members mobilized support for the proposal to establish a United Nations Decade of Education for Sustainable Development (UNDESD). This energy resulted in UNESCO and other international organizations recognizing CEC as one of the most important ‘portals’ to the worldwide community of experts in ESD, environmental education and communication.

The United Nations General Assembly endorsed the UNDESD in 2003, which was to run 2005 to 2014. Early on, CEC members engaged in activities to help practitioners make sense of ESD in practice, and to develop processes to support the Decade. CEC successfully extended the ESD discourse beyond schooling to embrace informal learning, advocacy and communication activities⁶⁰. This was significant because most conservation and environmental decisions are made by adults who need support and opportunities to learn about sustainable development⁶¹.



Daniella Tilbury, Education and Sustainable Development; Engaging People in Sustainability, A Quick Guide to Develop National ESD Indicators

Through its higher profile, CEC was invited to sit at the table with other intergovernmental actors as they worked to affect policy at different levels. For example, CEC members were invited to shape the Tbilisi+30 conference, the 4th International Conference on Environmental Education (Ahmedabad, India, 2007). CEC worked through its Steering Committee and played an active role in a variety of workshops. CEC also provided input into the final declaration, the Ahmedabad Declaration.

In the Ahmedabad Declaration, human production and consumption are seen as the drivers of environmental degradation; quality of life for some means deprivation and conflict for others. Approaches towards solutions are seen prevention and resolution of conflicts, respect for cultural diversity, the creation of a caring society and respect for the earth and its life support systems. The role of education is seen as a lifelong holistic and inclusive process of partnerships, sharing and ‘living the change’.

In Latin America, CEC members took leadership roles in the Global Environmental Citizenship Project, a project with UNEP and UNESCO and other partners. The project promotes understanding of the global environmental conventions.



Ana Puyol; Marco Encalada; Marta Andelman, Public Participation in Argentina, Environmental Citizenship Project.

CEC decided to capitalize on new technology and the second generation of interactive web utility, moving past static information-based web pages. Working through existing members, the Commission developed an initiative to build a new sub-constituency of CEC members who are educators based in higher education institutions and universities. The World Conservation Learning Network (WCLN) was launched through this growing internal group, using new interactive online learning opportunities available globally for learning and professional updating⁶². In 2006 IUCN and the United Nations University agreed to create a new Institute within the WCLN. The WCLN Institute will develop and deliver a series of certificate courses structured to meet the career-development requirements of conservation and sustainability practitioners worldwide.



Bill Jackson, Yolanda Kakabadse, Denise Hamú, Brad Smith, Huguette Labelle and Keith Wheeler at the launch of the World Conservation Learning Network Bangkok 2004 (photo by Wendy Goldstein), On-line course on Environmental Flow; Latin American version of the course; CEC Portal.



CEC starting to impact the IUCN Program: Adult learning approach and Training Manual for ITTO Guidelines on Forest Landscape Restoration, Professional updating on Communicating Biodiversity to Private Forest Owners, Demand Articulation for Forest Landscape Restoration Handbook, Web based Training Needs Assessment on Island Ecosystems, Focus group with hotel managers to develop Biodiversity Guidelines (photo ACCOR).

Beyond a website, CEC created an interactive portal tailored to the needs of users and equipped with tools for online surveys and other knowledge management features. These successful efforts were soon replicated by other parts of IUCN. In the same way, tools and techniques showcased by CEC in areas of expertise such as training, demand articulation, surveys, and facilitation have increasingly made their way into IUCN programmes⁶³. More and more, IUCN programmes are starting to use CEC expertise.

Since the middle of the decade, IUCN attention has returned again to communication and learning, valuing the contributions of these disciplines as in its first World Conservation Strategy. This time, the focus is on their role in creating behaviour change; such change is needed if people are actually to use the information and knowledge available and take action for a more sustainable future.

Keith Wheeler, who stepped up from CEC Deputy Chair to Chair in 2006, is taking the development of CEC to the next level. He is focusing on change processes and the realization that facilitating partnerships is vital to cope with change. Since mid-2005 the Commission has been supported by a Secretariat⁶⁴ headed by Gillian Martin-Mehers (USA, 1963).



Keith Wheeler, Gillian Martin-Mehers, International Workshop Exploring Deep Change Processes, 2006; Exploring New Modalities of Web Based Learning for the Arab Region, Alexandria, 2007.

In today's fast-paced, dynamic environment, CEC positions itself as the knowledge network for creating strategic communication platforms, leveraging new learning for professional development and facilitating the co-creation of sustainable solutions.

The current CEC strategic plan sees unsustainable practices, conflicts, disasters and inequity as the cause of environmental degradation. Approaches towards solutions are based on the creation of a climate for change by overcoming silo-thinking, facilitating participation processes and addressing inadequate access to relevant professional knowledge. The role of education and communication is to facilitate the co-creation of sustainable solutions; to create strategic communication platforms; and to leverage new learning for professional development.

The focus is on new interactive technologies, the next phase and operation of the World Conservation Learning Network, and on dialogue and consensus-building processes that help stakeholders move past knowledge to action. CEC continues to evolve responding to the changing world and the strengths that its chairs, governance committees and members bring to the Commission. CEC seeks to contribute to the work of IUCN as it works towards achieving its vision: "A just world that values and conserves nature".

Epilogue

CEC is a global network powering change for a more sustainable future through learning, strategic communication and knowledge management. Since 1948, CEC has strengthened efforts by the IUCN Global Programme, members, commissions and partners to build public support for positive change in conservation and sustainable development. CEC brings to the conservation community tools and approaches that are facilitated, participatory, culturally responsive and targeted.

In our 60-year history, CEC has developed in three distinct phases. First we were a formal advisory body to the IUCN Council on conservation awareness. Later we became a scientific and Northern-dominated network focused on developing and elaborating conceptual frameworks for environmental education. Most recently, CEC functions as a global knowledge network on social instruments for change: learning, strategic communication and knowledge management. Writing this history three questions arise. What is the value of a Commission? What is the value of CEC in particular? What are lessons for the future?

A Commission network enables the IUCN Programme to have a direct impact on the daily professional activities of thousands of committed individual experts in a range of disciplines all over the world. In doing so it multiplies the IUCN vision, mission and programmatic messages far beyond the reach of the IUCN formal communication to its organizational members and the public. In return, the IUCN Programme gains access to relevant peer-reviewed knowledge, at a level impossible to achieve through online networking or informal professional knowledge networks. For Commission members, there are opportunities to gain

inspiration from others, new ideas and new learning. Knowledge products and activities of a Commission benefit IUCN and the wider conservation community.

CEC brings vital knowledge to IUCN. Technical and scientific information alone does not lead to change, and transformational change is needed at many levels in society to contribute to the conservation and sustainable use of biodiversity. To be relevant for IUCN, CEC is increasingly exploring the 'chemistry' of such change: how to frame the discourse; how to facilitate partnerships; and how to manage individual, organizational and social learning processes.

Strategic planning of a Commission's mandate prevents a Commission from becoming an 'old boys network' and a bureaucracy in itself. Strategic planning works best when the Commission's leadership carries out the appropriate changes in Commission membership and programmatic focus. Much can be gained when knowledge can stream directly between CEC, component programmes, other Commissions and IUCN members. Such knowledge can stream optimally only with sufficient support to the Commission, through engaging CEC early in strategic planning processes and by providing sufficient resources. In this way the IUCN Programme can benefit and can increase its impact. CEC has demonstrated that it is best-placed to experiment with new approaches to building social capital and new knowledge management modalities for conservation.

Utrecht – Prague, August 2008

Note from the editor: Your comments on this draft are appreciated. This detailed document has been through many rounds of revision. Some names and footnotes were omitted during editing that will be returned. A final version will be developed later this year following the IUCN World Conservation Congress. Kindly copy all comments to the editor at susan@sggwrites.com and to the authors at hesselink@hect.nl

¹ Sir Martin Holdgate, *The Green Web*, Earthscan, 1999, ISBN 1 85383 595 1; Jan Čeřovský, Notes on the history of CEC (IUCN CEC Archives), IUCN Bulletin, various issues, particularly the 1988 Special 40th Anniversary Edition (IUCN Library), IUCN Newsletter Central and Eastern Europe, vol. 1998 in particular, IUCN Yearbook 1966-1968, 1970 and WWF Yearbooks 968-1971/72, 1977/78, IUCN CEC Archives (IUCN Basement, approximately 6,5 meters of bookshelves with documentation, starting from 1960 unto today), IUCN EduC Archive of Johannes Goudswaard (4,5 meters of documentation from the late fifties until the late seventies in the International Institute for Social History, Amsterdam); Wendy Goldstein, *Departing Notes*, CEC Archives. We have tried to credit the sources of the photographs used. Not always we could trace them. Those who have knowledge of missing sources are requested to contact the authors.

² The authors wish to thank Andy Alm (USA), Bostjan Anko (Slovenia), Peter Bos (The Netherlands), Wolfgang Burhenne (Germany), Susana Calvo (Spain), Ricardo Carvalho (Brazil), Juanita Castaño (Colombia), Vladimir Galushin (Russia), Wendy Goldstein (Australia), Denise Hamú (Brazil), Branka Hlad (Slovenia), Shivani Jain (India), Chris Maas Geesteranus (The Netherlands), Anna Kalinowska (Poland), Gerald Liebermann (USA), Julia Marton-Lefèvre (Switzerland), Jeff McNeely (Switzerland), Gillian Martin Mehers (Switzerland), Cecilia Nizzola-Tabja (Switzerland), Mamata Pandya (India), M.A. Partha Sarathy (India), Franco Pedrotti (Italy), Ana Puyol (Ecuador), Kartikeya Sarabhai (India), Daniella Tilbury (UK), Peter Townsend (UK), and Keith Wheeler (USA) for their advice, input, corrections and suggestions.

³ For those interested in this type of information: on the CEC website we have – with the help of CEC member Andy Alm – made timelines with all CEC publications, events and other data that we have collected: <http://cec.wcln.org/index.php?module=pagesetter&func=viewpub&tid=11&pid=129>

⁴ For those readers who are not much acquainted with the worlds of conservation and education, we have provided in a short glossary and list of acronyms in Annex 1.

⁵ The history of IUCN is in much detail described by Sir Martin Holdgate in his work *The Green Web, A Union for World Conservation*, Earthscan, London, UK 1999.

⁶ In 1990 the General Assembly in Perth changed the Name of the Commission on Education into Commission on Education and Communication (CEC). To avoid unnecessary confusion for the reader the authors use the name CEC throughout the article, also for the period the Commission was called EduC.

⁷ For comparison: SSC the largest of the IUCN Commissions, that time called the Survival Service Commission, established in 1949 had initially 40 members. In 1970 SSC numbered 80 members from 25 countries, also in majority from Europe and North America. Today it has over 7000 members worldwide.

⁸ The population threat as main cause of environmental degradation, especially advocated by North Americans, was debated right from the start.

⁹ Holdgate 1999, p. 50

¹⁰ Although the Caracas General Assembly in 1952 adopted the Manifesto for Nature Protection, that called for an international awareness campaign, CEC never realized the up-scaling of the Italian pilot. UNESCO also was reluctant to continue financing IUPN activities and was of the opinion that IUPN should raise its own funds.

¹¹ In the words of Lee M. Talbot, Director General of IUCN (1980-1982), quoted in Holdgate 1999, p. 64

¹² From 1952 and throughout the decade, camps oriented at nature study and conservation were held in Austria, Belgium, Federal Republic of Germany, Finland, Italy, Netherlands, Sweden and UK.

¹³ Most other chairs were from North America or Western Europe. It seemed politically correct at that time to have a representative from the former USSR as CEC Chair. The long period that Shaposhnikov held office has only been equaled by Wolfgang Burhenne (Germany, 1928), Chair of the IUCN Law Commission.

¹⁴ With support from CEC the IYF now also organized for the first time Youth events in East Europe and in Africa (Kenya). Of a special interest was the International Youth Conference in Oxford, UK, attended by 150 participants. CEC members acted as keynote speakers.¹⁵

¹⁵ He was provided with secretarial assistance by the Venezuelan Gerardo Budowski (then programme specialist in the UNESCO Secretariat, later Director General of IUCN, 1970-1976 and today a long time CEC member).

¹⁶ One of the leading thinkers on education of the time was the Norwegian Professor Ove Arbo Høeg. He became the first NWECC Chairman.

¹⁷ Professor Tadeusz Szczecny of Poland as the first Chair of CEEC and Mária Lexová from the former Czechoslovakia its Secretary.

¹⁸ Conference on Conservation of Nature and Natural Resources in Tropical South-East Asia (Bangkok, Thailand (1965)

¹⁹ Latin American Conference on the Conservation of Renewable Natural Resources (1968)

²⁰ The North American Regional Committee of the IUCN EduC was inaugurated during a conference at The Conservation Foundation, Washington DC. in March 1968. Its first formal meeting was at the National Academy of Sciences with James L. Aldrich as first Chair and Martha T. Henderson as Secretary.

²¹ The Chair of the Latin American Committee was Arturo Eichled from Venezuela, author of the first university conservation textbook in Spanish.

²² Before this time - from the mid fifties and throughout most of the sixties - Johannes Goudswaard (Netherlands) served CEC as Honorary Secretary, in a voluntary capacity.

²³ See also Holdgate 1999, p. 158

²⁴ The meeting was hosted by the Foresta Institute for Ocean and Mountain Studies, and chaired by its Director Richard G. Miller, member of CEC.

²⁵ The conference was attended by 109 representatives of 21 European countries and 9 international organizations, and 13 observers from countries outside Europe – a large event for the time.

²⁶ Robert N. Saveland, *Handbook of Environmental Education, with International Case Studies*, Wiley & Sons Inc., 1976.

²⁷ In an interview with one of the authors, Chris Maas Geesteranus recalled: "We actually did not want to have anything to do with just conservation but with people's critical view on society. We were against an instrumental use of education (for policy-making objectives); for us that was too close to propaganda and indoctrination."

²⁸ Their contributions were coordinated by James L. Aldrich, Chair, CEC North American Regional Committee.

²⁹ See Holdgate, page 143. Don Aldridge's many publications included a Guide to Interpretation and an entertaining illustrated Monster Book of Environmental Education for the Council of Europe.

³⁰ See Holdgate, page 143.

³¹ Naseeb Dajani (Jordan) supported the Commission in the Secretariat until 1984. He was the first Commission support staff in IUCN from the South. For some contested reasons, Naseeb Dajani was fired in 1984. This awoke a wave of protests against the IUCN leadership, not only among the CEC membership, see Holdgate, page 184. CEC was supported briefly by Salvano Briceño (Venezuela) and Dart Thalman (USA). CEC worked without support from the central IUCN Secretariat from the mid-1980s until 1991.

³² Chris Maas Geesteranus remembers: "He once quoted a (former) rector of Harvard University before a company of government officials, saying: 'If you think education is expensive, try ignorance'. In 1983 he invited the Prime Minister of India Mrs. Indira Gandhi to be Honorary Chairperson of the CEC which she has accepted."

³³ IUCN: World Conservation Strategy, Living Resource Conservation for Sustainable Development. IUCN, Gland, Switzerland, 1980."

³⁴ See Holdgate page 171 and 184.

³⁵ The declining East Europe Committee enjoyed a vigorous revival in 1982. During the remaining years of the cold war the CEEC served as an IUCN stronghold in this part of the world, and together with the CLP's (Commission for Landscape Planning) Committee on Ecological Development of Cultural Landscapes (CECL) based in Central and Eastern Europe, played a vital role in the new IUCN East Europe Programme (EEP).

³⁶ Chris Maas Geesteranus remembers the atmosphere of the last years of the cold war: "The country was seen by both parties as neutral. The meeting was friendly and professionally useful. Our Eastern counterparts [wanted] to have a formal final declaration of the meeting that referred to progress and world peace."

³⁷ 1986 in Kecskemét, Hungary (education in protected areas), 1988 in Bø, Norway (education for sustainable development), 1990 in Møen, Denmark (environmental education in agricultural environments), 1992 Kransjka Gora, Slovenia (Sustainable Tourism). Key players in the European networks were John Baines, Jan Čeřovský, Jaan Eilart, Chris Maas Geesteranus, John Smyth, Claus Hellweg Oveson from Denmark, Jiří Svoboda (IUCN Regional Councillor 1984-1988) and Enikő Szalay-Marzsó (Chair of EEC from 1990, IUCN Regional Councillor 1990-1994).

³⁸ In one of his reports Naseeb Dajani, Education Officer in the Secretariat in 1983, mentions CEC National Committees in Australia, Argentine, Canada, Ireland, India, Nepal, China, Oman and Costa-Rica. In the beginning of the nineties substantial CEC activities could be found in North America, East and South Africa and Europe. The North American Committee was led by Nancy Anderson. This Committee provided support to set up an East African Environmental Network, providing funds for a regional meeting each year. Nathaniel Arap Chumo was one of the key leaders in this network.

³⁹ Partha writes about this: "At a meeting of the IUCN Board, when Partha Sarathy reported the progress made in CEC, Dr. Jaap Pieters from the Netherlands, a senior member of the Board appeared impressed and offered to fund the CEC, if Partha immediately could produce a programme for the triennium with funding needs. This was done and approved by the Dutch Ministry of Agriculture, Nature and Fisheries. And shortly thereafter the CEC Secretariat was moved back to Gland."

⁴⁰ Joanna Boddens Hosang (Netherlands, 1958), assistant at the IUCN communication division, functioned initially as part time CEC coordinator at IUCN Headquarters from June 1991 until June 1992. She remembers that it was during this time that the CEC Newsletter Nature Herald was launched.

⁴¹ Key support from the Netherlands was offered by Jaap Pieters in the Ministry Agriculture, Nature and Fisheries and his staff member Chris Maas Geesteranus. Today Peter Bos continues the Ministry's interest in education and communication for conservation.

⁴² SASEANEE was launched in 1993 through a workshop attended by over 200 professionals from 16 countries. It was set up as a network of agencies involved in or interested in networking, initiating or supporting environmental education programmes. Major activities included Information Servicing, Capacity Building and Material Development. A biannual newsletter of SASEANEE was published with an aim to facilitate information sharing on significant EE events in the region. During 1993-2003, nine volumes, with over 18 editions of the newsletter were published.

⁴³ Ueli Nagel, Monica Lieschke, Susana Calvo and Libby Grundy lead the transition in Europe to the new paradigms of the knowledge areas of strategic communication and education for sustainable development (ESD).

⁴⁴ In the first years of funding the majority of the Dutch funds were used to fund activities that had little to do with the education program, e.g. the IUCN library, part of the salary of the director overseeing the education program, and the total budget of the Commission Operation Funds (for all Commissions). This was one of the reasons for the Dutch government to seek for changes in CEC funding.

⁴⁵ The Committee consisted of former IUCN Director General David Munroe, former CEC Deputy Chair Julia Marton-Lefèvre and outgoing CEC Chair M.A. Partha Sarathy.

⁴⁶ One of the authors remembers how surprised David Munroe was, when he visited the author's Institute. He had expected to witness activities for children and listen to conceptual education jargon. Instead he met with more than two dozen consultants working with curriculum developers, schoolbook publishers and suppliers, the National Examination Board and six Ministries to bring about change towards sustainability in the formal education system. He was particularly impressed with the change management strategy behind the program ("Sustainability as a Second Nature"). This strategy was i.e. summarized in some slides used at a CEC workshop during UNCED in Rio in 1992 and published as an article ("Strategic planning of environmental education and communication") in the CEC newsletter Nature Herald, 1993-II, page 6-7.

⁴⁷ Rio Declaration, Article 13 CBD, Article 6 UNFCCC etc.), where governments commit themselves to invest in communication, education and public awareness. CEC Steering Committee Member Jean Perras (Canada, 1946) formulated the mission of CEC with the words: Championing the strategic use of education and communication.

⁴⁸ In practice this cultural change meant that for six years the CEC Steering Committee did not include any native speaker of English. From North America there was only one French speaking member (Jean Perras, Canada, 1945). Europe was represented by the Chair and one member from Spain (Susana Calvo).

⁴⁹ In fact already in the eighties this role was more or less taken over by the NAAEE and the International Conferences on Environmental Education in Moscow, Thessaloniki and Ahmedabad or more recently initiatives such as the World Environmental Education Conferences.

⁵⁰ One of the authors remembers how revolutionary this was compared to the traditional ways of communicating in earlier decades. "In a meeting in Nevada 1970 we desperately needed to contact a missing delegate from Pakistan. The secretariat of the meeting had to ask NASA [National Aeronautics and Space Administration] to facilitate a 'phone talk over their satellite! It took two days, but the delegate did arrive!"

⁵¹ CEC offered a workshop on knowledge management during the Second World Conservation Congress, Amman 2000. The 1999 CEC review recommended CEC to take the lead in IUCN in the field of knowledge management and organizational learning and start a virtual IUCN university. This idea was later elaborated by Keith Wheeler (USA, 1952) and Brad Smith (USA, 1945) into the World Conservation Learning Network (WCLN).

⁵² Bart Romijn, AidEnvironment, Amsterdam 1999

⁵³ The CEC network was managed for over 14 years by Wendy Goldstein (Australia, 1945), until her return to Australia, and with the help of Cecilia Nizzola-Tabja (Peru), who continues to support CEC today in Gland. Both were (and are) excellent network managers, tirelessly supporting the emerging voluntary networks and the CEC Steering Committee on its new course of regionalization and strategic planning for education and communication.

⁵⁴ Susana Calvo has been a CEC Steering Committee Member since 1991 and is Chair of the Spanish National Committee for CEC, which has existed since the late eighties. She was a Vice Chair for the Southern European Committee for CEC, which functioned between 1991 and 1993. Her Ministry has sponsored many CEC activities for Spanish-speaking countries.

⁵⁵ Special mention is made of a small group of CEC members who worked tirelessly to negotiate (in a series of meetings from the end of the nineties) with SCBD and UNESCO on the formulation of a work programme for Communication, Education and Public Awareness (CEPA): Peter Bos, Susana Calvo, Kelin Elsley, Wendy Goldstein, Frits Hesselink, Sylvi Ofstad. Especially Peter Bos, Susana Calvo and Sylvi Ofstad played an important role, as they could speak on behalf of their governments on CEPA during official meetings and were able to influence decisions of COPs.

⁵⁶ With the input of over 100 members, CEC developed for the CBD Secretariat a CEPA Toolkit in 2007.

⁵⁷ In a special brochure Conservation Results by Managing Change, the role of communication, education and public awareness, CEC tried to spread this vision.

⁵⁸ It was introduced by CEC members Dr. Miro Kline (Slovenia, 1946) and Frits Hesselink, and was based on their experience with communicating Natura 2000 in Slovenia and other accession countries. This format was used in the CEC publication Achieving Environmental Objectives and is still one of the most visited postings on the blog "The Art of Positive Change" (<http://cepatoolkit.blogspot.com>). The format has since been used in other CEC publications and training workshops.

⁵⁹ Shortly afterwards IUCN CEC became partner in the UBUNTO Alliance through an MoU with the United Nations University. Daniella Tilbury (UK, 1967) was the first Thematic Chair for ESD.

⁶⁰ In 2003, CEC released 'Engaging People in Sustainability' (Tilbury and Wortman), which became CEC's most popular and sought-after IUCN publication to date. The text is considered a core text in Education for Sustainable Development and features in wikipedia as a defining publication. Independent data shows that this is one of the most downloaded published texts on ESD and most cited in governmental policies as well as academic papers.

⁶¹ CEC members engaged in ESD were focused on making a difference through ESD practice. In the mid 90s, CEC members took part in developing frameworks for tracking progress at the regional level. A joint UNESCO IUCN publication was realized in 2007 which helped government stakeholders take steps to advance sustainability in policy and practice and assess whether their efforts were actually making a difference. This document which offered indicators for monitoring and evaluating progress during the Decade was translated into Spanish and Japanese.

⁶² CEC introduced IUCN to the concept of e-learning through a course on environmental flow (WANI). In 2005 Keith Wheeler, Frits Hesselink and Corli Pretorius, CEC focal point at the time, wrote a white paper for the Secretariat 'Redefining Capacity Building for the 21st century, as the guiding vision for IUCN on capacity building and learning for greater impact and change.

⁶³ At the 2004 Bangkok WCC CEC members helped structure and facilitate workshops and meetings of other Commissions and programmes. Other IUCN component programmes, e.g. forest, water, ecosystems, business asked CEC members and support staff to advise on the learning or communication aspects of their projects. As the capacity building approach of CEC always has been one of 'learning by doing', the immediate credits of this support to projects and publications never went to CEC. The CEC influence undoubtedly has been a success factor for these IUCN programmes. At the same time the absence of such credits often puts CEC in the position that it constantly has to prove its added value.

⁶⁴ Gillian Martin-Mehers is currently supported by Elisabeth Crudgington, Nicole Thonnard-Voillat and Cecilia Nizzola-Tabja. Gillian was previously a CEC Vice Chair for Europe and has been a CEC member since the early nineties. Since 1996 she has played an important role in helping to facilitate CEC strategic planning meetings.