Guidelines on Accreditation of Forest Culture and Recreation

Ju-Hee Lee1* and Min-Ki Bae1

*Division of Tourism, Daegu University

Post Doc., Division of Tourism, Daegu University 15 Naeri, Jinryang,
Gyeongsan, Gyeongbuk, Korea, 712-714

Abstract: The purpose of this study was to provide necessary requirements on accreditation for forest culture and recreational interpretive programs in order to set up the enforcement regulations of the Forest Culture and Recreation Act. The intention of this study was to contribute to raising the qualitative standards of forest interpreters through the adoption of accreditation procedures for forest culture and recreational education programs, to establish detailed standards regarding the accreditation of forest interpreter training courses, and to provide materials and resources useful in creating forestry policies regarding forest interpreters and forest culture and recreation. This study examined five topics: 1) To establish conceptual understanding of the accreditation procedures for forest culture and recreation interpretive programs, 2) To understanding the present status of training programs and courses related to accreditation procedures for forest culture and recreation interpretive programs, and examining the status of current forest interpreter training courses, 3) To propose an operational scheme for accreditation procedures for forest culture and recreation programs, and develop the goal of an operation of the accreditation procedures for forest culture and recreation programs, 4) To propose an operational scheme for accreditation procedures for forest culture and recreational education programs, and the operational scheme for forest interpreter training courses, and 5) To establishing a commission to evaluate the accreditation procedures for forest culture and recreation programs and operating guidelines.

Key words: accreditation for forest culture and recreation, education programs, forest interpreter training course

Introduction

As people in Korea have more leisure time due to the implementation of a five-day workweek, establishing a variety of social infrastructures and building institutional devices to support these infrastructures became an urgent task in order to provide people with various opportunities to take pleasure in forest culture and recreational activities (Park et al., 2002). Improvements in people's standard of living have changed the perception of forests. Forests are no longer perceived in just economic terms, but also in terms of their cultural and recreational value (Lee et al., 2005). Current forest culture and recreational interpretive programs do not have clear developmental objectives and standards. There is a dearth of experts with professional knowledge of program development, and in some cases, there is no evaluation of the existing programs. Current programs are developed and implemented without a clear understanding of the concepts and technical strategies of forest interpreter and trail guide or nature walk guide programs. Training curricula and courses vary depending on the institution, training purpose, and training participants. As such, qualitative standards of these training courses and curricula cannot be assured. Establishing a federal law to address forest culture and recreation promotion would not only clarify the current concept of forest recreation activities, but also raise the qualitative standards of forest experts such as forest interpreters who support those forest recreation activities most preferred by society.

The purpose of this research is to present necessary, positive requirements on accreditation for forest culture and recreational interpretive programs. Five topics will be examined in this paper: 1) Conceptual understanding of the accreditation procedures for forest culture and recreational interpretive programs. This research established the conceptual foundation of the main terms related to the accreditation procedures for forest culture and recreational interpretive programs in order to clarify the procedures. 2) Understanding the present status of training programs and courses related to accreditation proce-

*Corresponding author E-mail: jhlee3@daegu.ac.kr dures for forest culture and recreational interpretive programs, and examining the status of current forest interpreter training courses. 3) Proposing an operation scheme for accreditation procedures for forest culture and recreation programs, and developing the goal of the operation of the accreditation procedures for forest culture and recreation programs, the target of the accreditation, the scale of the accreditation, the criteria of accreditation, and the screening procedures of the accreditation. 4) Proposing the operation scheme for accreditation procedures for forest culture and recreational education programs, and the operation scheme for forest interpreter training courses. 5) Establishing a commission to evaluate the accreditation procedures for forest culture and recreation programs and operating guidelines. This paper proposes an operational scheme for establishing a screening commission that will be in charge of the accreditation procedures for forest culture and recreation programs

The results of this research will hopefully increase awareness of the need to raise the qualitative standards of forest interpreters through the adoption of accreditation procedures for forest culture and recreational education programs, to establish detailed standards regarding the accreditation of forest interpreter training courses, and to provide materials and resources useful in creating forestry policies regarding forest interpreters and forest culture and recreation.

Concept and Significance of Accreditation Procedures for Forest Culture and Recreation Programs

The aims of implementing an accreditation procedure for forest culture and recreation interpretive programs are to raise the qualitative standard of forest interpreter training programs and courses, to guarantee the satisfaction and safety of peoples' forest and recreational activities, and to establish the reliability of training programs and courses and then to publicize these programs and courses. The accreditation procedure for forest culture and recreation programs is based on Chapter 3, Article 7 & 8 of the Forest Culture and Recreation Act. The accreditation procedures for forest culture and recreation programs will clarify the concepts of these programs according to accreditation procedures stated in federal law, and at the same time will create a system that focuses on the accreditation procedure for forest culture and recreation programs.

1. The concept and significance of the accreditation procedure for forest culture and recreation programs

In this study, the term 'accreditation (인증, 認證)'

refers to "an official institution which proves that particular activities and/or documents have been implemented through appropriate and approved procedures". (Minjung dictionary, 1992) In other words, accreditation means guaranteeing some level of qualitative standards based on relevant laws and regulations. The accreditation of forest culture and recreation programs will assist people who use the forest as a recreational and cultural space to understand the various attributes of the forest as well as to provide them with educational activities that prevent the destruction of the forest. In addition, accreditation is necessary to verify training programs and courses in order to raise the qualification of forest interpreters and hiking guides who help in maximizing various forest experiences.

2. Accreditation of forest culture and recreational education programs

Forest culture and recreation is defined as an overall lifestyle built upon the interaction between humans and the forest environment as well as the physical and mental relaxation and treatment within the forest (Forest Culture and Recreation Act, Article 2). The forest culture and recreational education programs will accredit the qualitative standards of the programs and can be used as a tool for forest interpreters who support people's forest culture and recreational activities in terms of educating people about the forest. Forest culture and recreational education programs will help participants to develop ecological knowledge, and provide them with an opportunity to develop sound environmental sense. To do this, programs should be durable, dynamic and well-organized and should include all the possible subject areas pertaining to environmental fields.

3. Accreditation of forest interpreter training courses

Forest interpreters act as a translator and communication mediator between participants and the forest culture and recreational resources. This study defined forest interpreter as "a person with ecological attainments and ecological and cultural environmental knowledge of the forest". As such, this forest expert can plan, implement, and evaluate forest interpretations. Forest interpreters help people visiting forests to experience the forest efficiently and understand the forest correctly. To have these capabilities, forest interpreters must complete basic subjects as well as accredited forest culture and recreational education programs. Accreditation for forest interpreter training courses contains the basic subjects required for forest interpretation, forest culture and recreational education programs, and educational facilities and the standards for lecturers. The programs in the forest interpreter training course should be selected from within an accredited forest culture and recreational education program.

Current Trends in the Forest Interpretation

1. Activities of forest interpreters

In 1988, the Korea Forest Service designated Yoomyung Mountain near Seoul as the first Recreational Forest. Up to now, 97 Recreational Forests have been established in order to provide opportunities for recreational experience and natural/environmental education to the public. In 1999, a forest interpretation service was initiated by the Forest Service on a voluntary basis. This service has been expanded to the Recreational Forests, which up to now have been managed by local governments, the National Arboretum, and some visitor centers in some of Korea's national parks. The importance of forest interpretation has been recognized and there is now a demand to increase the number of forest interpretation training courses. In response, programs have been developed by some NGOs. Interpreters assist visitors to forests in their understanding, appreciation and enjoyment of the forest ecology in all its various aspects. This will lead the visitors to understand the function of forests and to develop humans' responsibilities towards forests. Many forest interpreters have had academic backgrounds in forestry, biology and environmental education, etc. Retirees and housewives who held teaching positions previously, have sought to become forest interpreters on

a paid basis. Since 1998, many NGOs have developed interpreter training courses. Now, approximately 110 interpretive training courses are offered and, to date, have turned out more than 1,000 trained interpreters. However, the level of their interpretive skills varies as it depends on the intensity and quality of the training curriculum.

2. Outlines of curriculum for forest interpreters

The Forest Interpreter's Association has provided two training sessions a year composed of 40 lectures during 15 weeks including eight field studies. Participants from the Academy of Forest Ecology developed by the Institute for Forest Studies receive 62 lectures a year: 29 classroom lectures of 58 hours and 33 field studies sessions of 157 hours. Forest for Life, a government affiliated organization certifies trainees who have completed 24 lectures during a 12-week training course: classroom lectures and field studies. These three training courses have fairly similar curricula, however the contents and depth of the lectures may vary.

To set up the accreditation process of the Forest Culture and Recreation in Korea, it may be worthwhile to review the certification systems of environmental Education in the U.S. (Table 2). Since theses standards serve as models and provide guidelines for the Korea Forest Service to utilize in developing the curriculum for Forest Culture and Recreation (PLT Operating Committee, 1993; NAAEE, 1992; NAAEE, 1995; NAAEE, 1997; NCDENR, 1999; Song, 2005).

Table 1. Statistics for Forest Interpretation Services.

(unit: man)

Categories	year	2000	2001	2002	2003	2004
Recreational Forest (Forest Service)	Participants	5,827	9,152	18,868	13,573	14,188
	Interpreters	-	400	464	474	448
Nat'l Arboretum	Participants	18,907	28,294	21,763	17,185	3600
	Interpreters	393	589	622	384	240
Forest Trip Sponsored by Seoul City	Participants	50	3,120	7,267	10,174	19,534
	Interpreters	5	155	435	778	1,148
Forest for Life	Participants	1,148	1,463	1,092	828	1,460
	Interpreters	32	37	60	30	32
Nat'l Forestry Cooperative Foundation	Participants	1.560	5,203	1,742	838	-
	Interpreters	18	177	33	27	-
Other Forests	Participants	1,861	2,031	10,531	24,027	7,910
	Interpreters	68	110	414	1,164	404
Lectures and Trainings	Participants		*	803	1,037	268
	Interpreters			26	30	5
Total	Participants	29.343	49,261	62,066	69,024	47,948
	Interpreters		1,468	2,059	2,963	2,335

Table 2. The certification systems of environmental education in USA.

	North Carolina	Georgia	Missouri	Utah	Alaska
Certifying Organization	Department of Environ- ment & Natural Resources in North Carolina	Georgia Project for Excellence in Environmental Education	Missouri Environmental Education Associa- tion	USEE Program Advisory Council	Anchorage Committee for Resource Education
Qualification procedures	4 years from the enrollment date to complete the process	3 years from the enrollment date to complete the process	4 years from the enrollment date to complete the process	Utah Environmental Education Certification, competency rubrics, mentor's recommen- dation, Professional references.	Completion of requirements listed in the certification standards
Eligibility criteria	Min. 70 hours of instructiona workshop, Min. 50 hours of field experience, 30 hours of seminar/conference/facility visits Knowledge of Environmental Education and facilities (min. of 30 hours) Teaching (min. of 30 hours) Action partnership (min. 20 hours)	Environmental literacy (20 hours), Foundations of environmental education (20 hours), Professional responsibilities of environmental educator (20 hours) Planning and implementation Environmental education program (min. of 20 hours) Fostering Learning (20 hours) Assessment and evaluation (20 hours) Final project (min. of 40 hours)	70 hours of Instructional workshops, Environmental Educational Experiences in the Outdoors, Knowledge of Environmental Education and facilities, Teaching (min. of 30 hours), Action partner-ship(min. 20 hours)	_	Introductory Workshop Education, knowledge and techniques, Scientific knowledge, Instructional experience of stewardship project, Teaching experience, Implementation of mandatory project, Knowledge of local natural resources and facilities
Program provided organization	Selected organization	Selected organization	Selected organization		
Evaluation methods	Submit portfolio	Submission of required materials	Submission of documentation for completion core of courses	Letter of Recommendation for Applicant's qualification & documents	mentation for com-
Evaluator	Certification Review Committee	Certification Review Committee	Certification Review Committee	Certification Review Board	-
Recertifica-		Minimum 100 hours of training for every 5 years		Renew certification every 5 years	

The Survey on Forest Culture and Recreational Education Programs

During the months of May to August 2005, forest interpreters who worked in Seoul, Gwangju, Chungbuk, and Kyungbuk provinces, including the National Arboretum and the Daegu Arboretum, were sampled for the survey. On-site interviews and questionnaires were employed. Data on the survey subjects' careers, topics and programs used, their issues about training curriculum, etc. were collected to in order to develop an overall picture of the survey subjects (Table 3, 4). 285 on-site interviews were used for data analysis. Based on the sur-

vey data, descriptive analyses were done on the subjects' careers, frequency in offering interpretive services, numbers of participants per session, and on issues pertaining to the training curriculum on forest interpretation.

Accreditation Criteria

1. Evaluation of accreditation for forest culture and recreational education programs

1) In order to be successfully accredited, candidates submitting the application form and other required documents must prove that they are adhering to the accreditation criteria in terms of the program overview,

Table 3. Results of questionnaire about the experience of forest interpretation.

Questions	Summary or main answer	Note	
Career length as an interpreter	Average: 2.64 years		
Frequency on-the-job	Average: 40 times a year		
Number of participants	Average: 20 persons per session		
Major participants	Children (34.4%) Families/Teenage groups/Work Col		
Session length	Average: 100 minutes per session		
Work site	Natural forest (27.8%)	Arboretum(26.3%)/National parks/Urban parks/ Nature observation centers	
Major objective for the interpreter	To help participants to understand the role of humans in the natural ecosystem (39.7%)		
Focus of interpretation	Experience of participants (59.3%)	Conversation with participants (26.1%), Development of interpretation theme (7.2%), Give information about forest through inter- pretation (5.9%)	
Obstacles	The development of interpretation materials and programs (43.5%)	Indifference of participants (26.1%), Various needs of participants (17.4%), Lack of experience and knowledge (11.6%)	
Reason for becoming an interpreter	Fond of nature (71.0%)	To continue satisfying work after retirement (18.8%)	

Table 4. Results of questionnaire about the curriculum of forest interpretation.

Questions	Summary or main answer	Note		
Is the survey subject certified?	Yes (89.9%)			
Number of training hours to obtain certification.	Average: 101 hours per curriculum			
The degree of suitability as an interpreter.	3.65 points (out of 5 points)			
The most useful subject for interpretive service?	Field practice and experience programs	Knowledge of ecosystems such as for birds, insects, wild flowers, and so on./ Environmental ethics		
Suggestions for improving the curriculum.	Increase training time for in-the- field study			
Major problem in forest interpretation.	No clear definitions about concepts, skills, and education programs for forest interpretation (43.5%)	Ability as forest interpreter is not assessed properly (20.3%)./ The contents of education programs are scanty		

program operating hours, experiential elements, and participant-based program efficiency evaluation. The following documents are required to apply for program accreditation: program overview, program contents (including activities), program evaluation form, and list of all materials to be used in the operation of the program. These materials will be sent to the Accreditation Evaluation Commission for examination. If the program is approved for accreditation, the submitted materials will be stored in the Korea Forest Service's archives for accreditation programs (Figure 1).

2) The application form and required documents for accreditation of forest culture and recreational education programs must be submitted 30 days prior to the com-

mencement of the Accreditation Evaluation Commission session. These sessions are held two times annually.

- 3) The decision of the Accreditation Evaluation Commission will come within three months from the closing date of applications. During this period, the Commission may request interviews with applicants.
- 4) A list of the accredited forest culture and recreational education programs will be posted on the Korea Forest Service homepage within two weeks of the Commission having issued accreditation.
- 5) Forest culture and recreational education programs should satisfy all the following criteria:
 - a. The forest culture and recreational education program states clear objectives

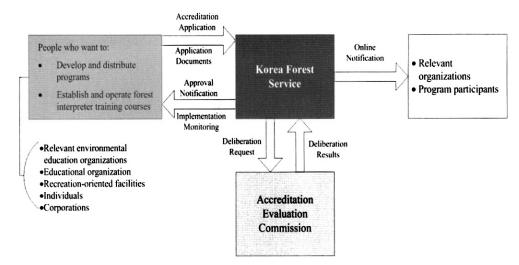


Figure 1. Structure of accreditation procedure for forest culture and recreational education programs.

- b. The forest culture and recreational education program should contain at least 10 hours of course instruction. Optionally, a six-hour forest culture and recreational education program supplemented with four hours of assignments is acceptable.
- c. Forest culture and recreational education programs must include experiential courses for participants.
- d. Forest culture and recreational education programs must include evaluative methods so that participants can examine the efficiency of the education program they have completed.
- e. Each forest culture and recreational education program should include the following six educational themes. Within each of the themes, at least one detailed item must be included:
- i) Developing knowledge of how nature helps in terms of human beings' sensitivity.
 - Environmental awareness
 - Respect for nature
 - Connection and interdependence to nature
 - Concern for negative human impacts
 - Understanding of preservation and development of nature
 - Understanding value of nature
- ii) Developing knowledge of natural ecological systems.
 - Understanding of individuals, populations and communities of nature
 - Understanding of energy flow and biogeochemical cycling of Ecosystem
 - Understanding of ecosystems and biodiversity
 - Understanding of human natural resource dependence
 - Understanding of humans as an ecological variable
 - Understanding of ecosystem related issues

- iii) Developing knowledge of how humans' lives and socio-cultural systems influence the environment.
 - Understanding of wide range of aspects of environmental issues
 - Understanding of what shapes individual and group behavior toward the environment
 - Understanding of different cultures' relationship with the environment
 - Understanding of human cultural activities and their environmental influence
 - Understanding of societal developments and their environmental impacts
 - Understanding of environmental laws enacted by governments
- iv) Developing knowledge of the examination and analysis of the quality of the environment (targeting water quality, air quality, waste, and habitats for rare plants and animals).
 - Identifying a range of issues (air quality, water quality, wildlife habitat, waste, etc.)
 - Defining natural environmental issues and understanding their impacts
 - Investigating natural environmental issues
 - Understanding analytical bias based on different locations and time
 - Understanding problem-solving skills in math and science
 - Understanding implications of natural environmental issues
- v) Developing knowledge of humans' responsibilities towards forests.
 - Understanding citizens' responsibilities on forests
 - Understanding citizens' rights on forests
 - Understanding the need for citizen action on forests

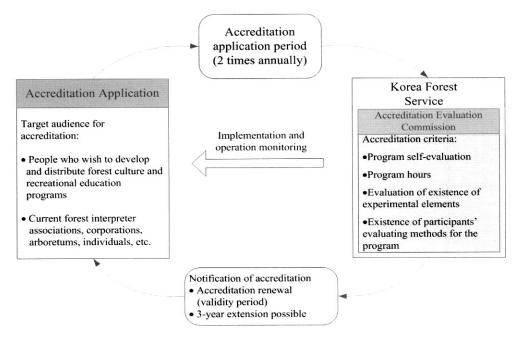


Figure 2. Accreditation procedure of forest culture and recreational education programs.

- Understanding recognition of forest efficacy
- Understanding humans' tolerance for forests
- vi) Developing knowledge of how to understand conflicts between people with differing perspectives of environmental problems and how to develop problemsolving strategies.
 - Understanding different points of view
 - Formulating and evaluating personal positions
 - Generalizing and evaluating alternative solutions
 - Finding realistic solutions
 - Forecasting outcomes on certain circumstances
 - Evaluating strategies and developing skill for communication

Accreditation Procedure for Forest Interpreter Training Courses

The Accrediting organization is Korea Forest Service. And potential accreditation applicants are candidates wishing to establish and operate forest interpreter training courses. The accreditation procedures for forest interpreter training courses can be described as follows: a) Candidates submit all the required application materials for accreditation to the Korea Forest service within the application period, b) The Korea Forest Service submits the applications to the Accreditation Evaluation Commission, c) After all the necessary screening processes, the Accreditation Evaluation Commission notifies the Korea Forest Service with the results of their deliberation, and d) The Korea Forest Service will notify candidates if accreditation has been granted or not. Accreditation is

valid for three years. In order to maintain the quality of training courses, the Accreditation Evaluation Commission will continue to monitor training courses even after accreditation has been issued (Figure 2).

- 1) Forest interpreter training courses must prove not only that they meet the basic subjects of forest culture and recreational education programs, but also that they meet the accreditation criteria in terms of facilities, level of program instructors, and participant-based evaluation of the program.
- 2) In order to be successfully accredited, forest interpreter training program candidates must submit an application form and other required documents for accreditation of their training courses. The following documents are required to apply for program accreditation: a) A list of basic subjects and their contents, b) An overview of the education program, c) An overview of the venues where theoretical and practical educations will be held, d) Resumes of the instructors who give lessons, and e) Forest interpreting educational experiences of the people or organizations seeking accreditation. These materials will be sent to the Accreditation Evaluation Commission for examination. If the program is approved for accreditation, the submitted materials will be stored in the Korea Forest Service's archives for accreditation programs.
- 3) The application form and required documents for accreditation of education programs must be submitted 30 days prior to the commencement of the Accreditation Evaluation Commission session. These sessions are held twice annually.
- 4) The decision of the Accreditation Evaluation Commission will come within three months from the closing

date of applications. During this period, the Commission may request interviews with applicants as well as conduct field investigations.

- 5) The Accreditation Evaluation Commission's methods of evaluation will be discussed at a later time. A list of accredited education programs will be posted on the Korea Forest Service homepage within two weeks of the Commission having issued the accreditation.
- 6) Education program seeking accreditation must meet all the following criteria:
- (1) Consist of the following basic subjects: Forest ecology (30 hours), Introduction to forest interpretation (including pedagogy, program projects & operational methods, and forest games) (40 hours), Environmental ethics (6 hours), History and culture of forests (12 hours), Basic first aid (basic level of the Korea National Red Cross first aid program 12 hours), and Wildlife zoology (herbage, arbor, animal, and aquatic organisms) (48 hours). Each subject consists of theoretical lessons and practical lessons. Four subjects consisting of five hours of instruction will make 20 hours of course instruction. Each theoretical and practical subject must have enough course hours to cover all the contents. Soil and wet land instruction may be offered as elective subjects. (2) Each training course must contain at least four accredited programs. Through attending accredited programs, program participants will come to understand program operational methods and will be qualified to develop and operate their own programs. (3) Fullyequipped educational facilities for the course must already be in place. If these facilities cannot be established, candidates must state where courses will be held. (4) Instructors who can manage both the curriculum and program operation must already be in place. (5) Curricula must include evaluation methods for measuring objective obtainment of program participants.

Operation of the Accreditation Evaluation Commission

1. Function of the accreditation evaluation commission

The establishment of an evaluation commission is essential to the successful implementation of forest culture and recreational program accreditation. In particular, outlining the function, role, and organizational structure of the commission is of primary importance as the commission will be responsible for the overall operation of the accreditation program.

2. Characteristics of the accreditation evaluation commission

The evaluation commission, itself an accredited organization, will be established and operated by the Korea

Forest Service with a mandate to operate the accreditation procedures for forest culture and recreation programs on the basis of Article 8 in the act regarding forest culture and recreation.

3. Roles and rights of the accreditation evaluation commission

The commission evaluates the possibility of accrediting forest culture and recreational education programs, forest interpreter training courses, and training programs for nature walk guides. The commission reports its findings to the Korea Forest Service. When members of the commission are acting in a capacity outside the commission, (i.e., with non-accreditation related matters), these dealings should not affect the findings of the commission which are related to accreditation matters.

4. Organization of the accreditation evaluation commission

Evaluative affairs are implemented independently without any interference. The Korea Forest Service is responsible for all administrative support systems necessary for the Accreditation Evaluation Commission to implement all accreditation affairs smoothly. The Accreditation Evaluation Commission is to be comprised of seven members: two from the Korea Forest Service, three from associated organizations, and two academics. In order for the duties and affairs related to accreditation to be implemented smoothly, the Accreditation Evaluation Commission should be comprised of people with abundant knowledge of forest culture and recreation, and have experience in those areas, as well as having professional experience in evaluating field programs.

5. Future management of the accreditation procedures for forest culture and recreation programs

The term of validity of the accreditation is three years from the date the accreditation is issued. When a previously accredited candidate wishes to extend the accreditation validity, applications must be made 30 days in advance of the current accreditation expiry date. The Accreditation Evaluation Commission has the authority to continuously monitor successfully accredited candidates in order to ascertain if they are implementing accredited items faithfully. In addition, the commission is authorized to conduct field studies, hold interviews with related personnel, and suggest enhancements and/or corrections to the accredited program. The Accreditation Evaluation Commission is authorized to order successfully accredited candidates to submit results of surveys given to program and course participants aimed at measuring their satisfaction with the accredited program and/ or training course. After receiving accreditation, any illegal or immoral acts committed by the successfully accredited candidate will result in the cancellation or revocation of the accreditation.

Conclusion

The results of this research will hopefully contribute to efforts to raise the qualitative standards of forest interpreters through the adoption of accreditation procedures for forest culture and recreational education programs, to help establish detailed standards regarding the accreditation of forest interpreter training courses, and to provide materials and resources useful in creating forestry policies regarding forest interpreters and forest culture and recreation. To be successful in the implementation of accreditation for forest culture and recreational education programs and interpreter training courses, first, it is necessary to provide opportunities for people who have knowledge and skills from accredited programs and training courses so they can offer interpretation services. Second, fiscal and administrative support for running interpretive programs and training courses needs to be provided. Third, specific interpretive programs which are integrated into the local situation should be developed. Fourth, it is necessary to implement different levels of interpretive programs and courses to maintain cutting edge skills and knowledge in the field of forest interpretation. Fifth, incentives should be created for individuals who want to be an interpretation professional and can expect to earn a salary commensurate with their training and ability. Finally, individuals should be assisted so they can acquire professional experience in order to be more competitive and to improve their chances of being hired as professional interpreters.

Literature Cited

1. Ju-Hee, Lee, Deog-Sun, Lee, Sang-Yoel, Han, Kyu-

- Won, Sim, and Kyoung-Duk, Woo 2005. Developing Monitoring System for the Recreational Forests in Korea. Journal of the Environmental Sciences 14(10): 929-935.
- 2. Minjungseolim. 1992. Minjung Korean Dictionary.
- 3. North American Association for Environmental Education (NAAEE). 1992. Preliminary Review Draft for the Report to Congress on the Status of Environmental Education in the United States, Washington, D.C.
- 4. NAAEE. 1995. North American Association for Environmental Education Annual Report. 15pp.
- NAAEE. 1997. Weaving Connections: Cultures and Environments. 26th Annual Conference North American Association for Environmental Education. Vancouver. 113pp.
- North Carolina Department of Environment and Natural Resources (NCDENR). 1999. The North Carolina Environmental Education Plan.
- Chong-Min, Park, Kyung-Soo, Jeon, Moon-Su, Park, and Ky-Wan, An. 2002. Analysis of Subjects for Interpretation Program in Recreational Forests. The Journal of Korean Institute of Forest Recreation 6(3): 19-29.
- PLT Operating Committee. 1993. Project Learning Tree (PLT) Environmental Education Activity Guide Pre K-8. American Forest Foundation. Washington, D.C. 402pp.
- The Watercourse and Western Regional Environmental Education Council. 1995. Project WET Curriculum & Activity Guide. The Watercourse and Western Regional Environmental Education Council. Montana. 516pp.
- Young-Eun, Song. 2005. The Certification System of Social Environmental Educator (unpublished).
- 11. http://www.moleg.go.kr
- 12. http://www.Hrdkorea.or.kr/
- 13. http://www.rbgkew.org.uk/
- 14. http://www.usna.usda.gov/
- 15. http://www.foresto.org/

(Received January 26, 2006; Accepted February 23, 2006)