

VOLUNTEERING FOR SEA TURTLES?

Characteristics and Motives of Volunteers Working with the Caribbean Conservation Corporation in Tortuguero, Costa Rica

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ABSTRACT Sea turtles attract volunteers who work for their conservation, but conservation volunteers in general have received little attention in the academic literature. Understanding the characteristics and motives of turtle volunteers adds to the general literature on volunteering and to our understanding of sea turtles as conservation flagships. This paper presents results of a case study of volunteers working with the Caribbean Conservation Corporation in Tortuguero, Costa Rica, based on in-depth interviews with volunteers (1999, 2000) and on an exit survey (1997-1999). Results suggest that CCC volunteers share some characteristics with volunteers working in other sectors. While turtles are a key-motivating factor for a majority of volunteers, there are subtle variations in the turtle motive, and it is one of many motives for volunteering. These results are contextualised in the general literature on volunteering and on the role of flagships in conservation.

Introduction

Sea turtles are one of many animals that enjoy the status of 'charismatic mega-fauna'. Due in part to their aesthetic appeal, these animals command attention in the media, have organisations devoted to their conservation, are the subject of popular as well as academic books, have fund-raising potential, and attract tourists and their dollars to nesting beaches and in-water habitat. Conservation organisations devoted to sea turtles offer a variety of means for the public to support conservation efforts including: 'adopting' a turtle, buying consumer products showing turtle images, and volunteering in field research/conservation efforts. For organisations working on more than turtles, money earned by the flagship turtle may be directed to other less media- and public-friendly projects.

This paper examines a group of sea turtle volunteers, individuals who support turtle conservation by providing financial and/or in-kind support for conservation efforts. While volunteers in other sectors, particularly health and social services, have been the subjects of study, conservation volunteers are relatively unrecognised in the academic literature, in spite of their importance. This importance is evident in sea turtle conservation and takes many forms. For example, in the southeastern part of the United States, contributions made by volunteers are primarily in-kind, with networks of volunteers patrolling sea turtle nesting beaches, monitoring nests, and supervising hatchlings at emergence (Smith *et al.* 2000; Bradford 2003; Godfrey and

Cluse in press). Seaturtle.org's¹ job/volunteer board showed that many conservation programmes seek in-kind and financial contributions from volunteers (October 17, 2003). Of thirty-four volunteer opportunities posted, sixteen required that volunteers pay to participate, eight paid a small stipend, nine offered no financial compensation (but various levels of in-kind support), and one did not specify. For the purposes of this paper, the first named opportunities are referred to as pay-to-volunteer programmes. Almost all positions with stipends were in the USA; alternatively, all but one of the opportunities in Latin America required payment from volunteers. The level of payment ranged from covering the costs of room and board to including a donation to the sponsoring organisation.² This suggests that in less developed countries where financing for conservation may be minimal, pay-to-volunteer programmes supplement activities by providing free labour and/or income. In Costa Rica, the case study country in this paper, almost all sea turtle nesting sites with formal conservation programmes use pay-to-volunteer programmes, although the structures of these programmes vary. In Tortuguero, the Caribbean Conservation Corporation (CCC), an environmental non-government organisation (ENGO), charges more than 1,000 US dollars per week for its pay-to-volunteer programme, a portion of which supports the CCC and is tax-deductible (CCC no date). In contrast, Association ANAI, an ENGO working in Gandoca-Manzanillo Wildlife Refuge, charges volunteers a flat fee of twenty-five US dollars to participate, but volunteers pay the costs of room and board directly to the local families that house them (Gray 2003).

In addition to potential income, there are many theoretical advantages to engaging volunteers. First, volunteers are a physical presence on turtle nesting beaches, thereby discouraging activities such as illegal take of turtles and eggs. Second, volunteers arguably contribute to research when their activities include collecting biological data on turtles. However, data collected by volunteers may be of inferior quality, as found in a conservation project in Scotland (Foster-Smith and Evans 2003) and for coral reef assessments in Belize (Mumby *et al.* 1995). Third, when volunteers travel to foreign countries, they become a specialised form of ecotourist (Wearing 2001), and in this role they may contribute to the socio-economic development of human communities living in proximately to protected areas for sea turtles. While some organisations see this as an additional, but external, benefit of volunteer programmes, others see it as central. For example, Association ANAI identifies the provision of socio-economic benefits to the local community as a primary purpose of its volunteer programme in Gandoca, Costa Rica, and has structured its programme to maximise these benefits (Gray 2003).³

In spite of their popularity and the theoretical benefits of volunteer programmes, there has been little research on conservation volunteers in general, or on sea turtle volunteers specifically. We know little about who the sea turtle volunteer is or what motivates him or her. Thus, this paper examines the characteristics and motives of a group of volunteers working for turtle conservation with the CCC in Tortuguero, Costa Rica. The CCC is US-based and one of the oldest ENGOs devoted to sea turtle conservation. While gathering such information is a first step in studying sea turtle volunteers, it is nonetheless an important one; knowing the characteristics of volunteers can assist in developing policies and plans for volunteer recruitment (Orsini 2000), and a volunteer's motivation influences his or her behaviour and experiences (Ilsley 1990). Such information can be of practical utility to the

CCC and other organisations hoping to use volunteers. From an academic perspective, understanding motives in particular can contribute to our understanding of turtles as conservation flagships; of the many motives that may influence volunteers, how important are sea turtles? Following a review of what is known about volunteer characteristics and motives in general, in conservation, and specifically in sea turtle conservation, the paper presents a case study of the CCC turtle volunteers.

Background on volunteerism

Research on volunteers and voluntary organisations emerged during the early 1970s, at a time when volunteerism was rapidly becoming an important means of providing social services (Schindler-Rainman and Lippitt 1971). This is a trend that has continued: ‘Voluntarist concern is wide and ever-widening’ (Harrison and Webb 2000:599), and the General Assembly of the United Nations declared 2001 as the International Year of the Volunteer (resolution 54/17).⁴ Volunteerism has spread beyond the social services sector, and the environmental sector has witnessed a significant increase in volunteer activity. For instance, during the 1980s in Britain, volunteers and voluntary organisations were hailed as the ‘midwives’ of the British conservation movement (Perring 1983). Likewise, volunteers play an increasing role in conservation in Australia (Thackway 1997). On a global scale, there are hundreds of thousands of individuals currently volunteering for environmental organisations,⁵ and volunteers are an increasingly important source of financial support and labour (Manzo and Weinstein 1987; Donald 1997; Powell 1997; Bildstein 1998). The Earthwatch Institute runs what is perhaps the most well known pay-to-volunteer programme in North America and operates hundreds of projects, covering every continent, and dealing with a variety of species and ecosystems (four of the sixteen pay-to-volunteer opportunities listed on seaturtle.org and discussed above were organised by Earthwatch).

Characteristics of Volunteers

Much of the existing research on volunteers across sectors focuses on demographic variables, such as age, nationality, level of education, level of income, and gender (Rohs 1986; Williams and Ortega 1986; Wandersman *et al.* 1987; Lackey and Dershem 1992; Smith 1994; Harrison, 1995; Donald 1997; Harrison and Webb 2000). Volunteers overall tend to be middle-aged and older, with post-secondary education and higher than average incomes (Smith 1983, 1994; Milbrath 1984; Donald 1997). With regards to gender, the literature reports mixed results. For example, a representative survey of 18,301 Canadians found that thirty-three per cent of women and twenty-nine per cent of men volunteer (Hall *et al.* 1998). Other studies have shown women to volunteer in larger numbers than men (Davis *et al.* 1999). Regardless of participation rates, there is evidence that men and women volunteer for different types of activities (Hall *et al.* 1998). Overall, Smith (1983, 1994) classifies volunteers as part of the ‘dominant status thread.’ That is, individuals who volunteer their time and money can generally afford to, and are more likely to hold positions and roles of power within society (Smith 1983, 1994).

Earthwatch claims that their ‘teams attracted men and women of all ages --

over the minimum age of sixteen -- from forty-six countries, and representing diverse educational, professional and cultural backgrounds'.⁶ Donald (1997) found that the majority of conservation volunteers involved in large British ENGOS were of western European descent and were not members of a visible minority. Some research suggests that conservation volunteers may be younger than volunteers in other sectors (Milbrath 1984; Donald 1997; Powell 1997). As with volunteerism in general, there are mixed results regarding gender. In a survey of British volunteers working with three ENGOS (British Trust for Conservation Volunteers, Wildlife Trusts and National Trust), 48.3 per cent were female and 51.7 per cent were male (Powell 1997). When analysed separately, the majority (seventy per cent) of National Trust volunteers was male, and conversely, the majority (67.5 per cent) of British Trust for Conservation Volunteers was female (Powell 1997). The Nature Conservancy -- Ohio Chapter attracts mostly men (King and Lynch 1998).

The existing and limited research on volunteers working for sea turtle conservation has been conducted in the USA. North Carolina's sea turtle project is dominated by women. Using three different measures, Godfrey and Cluse (in press) found an overall female bias of sixty-eight per cent among their volunteers (females in North Carolina are fifty-one per cent of the population). Bradford (2003) found the same female bias of sixty-eight per cent among sea turtle volunteers in Florida. Bradford also found sea turtle volunteers in Florida were more highly educated than the state average (twenty-seven per cent had completed a graduate or professional degree compared to eight per cent statewide), and less ethnically diverse (ninety-eight per cent of volunteers were white, compared with seventy-eight per cent of the state population). Nineteen per cent of Bradford's volunteers were over sixty-five (and sixty-four per cent were over the age of fifty), although this resembles demographics in Florida, where 17.6 per cent of the population is over sixty-five. Volunteers in Florida were relatively affluent, with forty-five per cent earning over 50,000 us dollars per year and eighteen per cent earning more than 100,000 us dollars per year (Bradford 2003).

Motives for Volunteering

Motives for volunteering can generally be categorised as intrinsic and extrinsic (Kidd 1977; Smith 1981; Abdennur 1987). Intrinsic motives are those that drive one to volunteer for often intangible gains, and are focused on assisting others (Kidd 1977). Some specific examples of intrinsic motives are: a desire to benefit people through direct interaction or assistance ('social service' volunteers); or a desire to contribute to a particular social issue because of a deep concern for it ('cause-oriented' volunteers) (Abdennur 1987). Perhaps the most common example of an intrinsic motive is altruism. Smith (1981:23) defines altruism, in the context of volunteerism, as:

...an aspect of human motivation that is present to the degree that the individual derives intrinsic satisfaction or psychic rewards from attempting to optimise the intrinsic satisfaction of one or more other persons without the conscious expectation of participating in an exchange relationship whereby those 'others' would be obligated to make similar/related satisfaction optimisation efforts in return.

This may seem an overly complex definition, but it adequately defines the equally complex notion of altruism. Altruistic actions provide a sense of personal satisfaction for a person performing an act that benefits others. Commonly referred to altruistic rewards include a positive contribution to one's self-image, or ego-enhancement (Smith 1981), and the opportunity to serve others while experiencing an emotional association with them (Schindler-Rainman and Lippitt 1971). These rewards are gained in place of more tangible benefits, such as monetary gain (Smith 1981).

Conversely, extrinsic motives are those more overtly related to tangible gains for the self (Kidd 1977). Examples of extrinsic motives are: a desire to enjoy oneself and/or express oneself personally, typically through involvement in community groups ('consummatory' volunteers); or the desire to enhance career opportunities, job status or economic power through gaining valuable experience ('occupational/economic self-interest' volunteers) (Abdennur 1987). Many volunteers are motivated to foster their personal growth, as well as expand their life experience, motives that can be considered extrinsic (Ilsley 1990). Recent research shows younger Canadian volunteers between fifteen and twenty-four years of age exhibited mostly extrinsic motives for volunteering, and were particularly interested in using their skills or improving employment opportunities (Hall *et al.* 1998).

Many volunteers exhibit a combination of intrinsic and extrinsic motives. For instance, someone might be motivated by the opportunity to learn something new and valuable and to help others (Smith 1981; Phillips 1982; Brudney 1990). This was evident for volunteers surveyed in the *Canadian National Survey of Giving, Volunteering and Participating*; the most frequently cited motive for volunteering was to support a meaningful cause and the second was to use skills and experiences and/or to gain experience (Hall *et al.* 1998). Social exchange theory may be applied to this give-receive notion. For instance, social exchange theory asserts that 'all interactions are based upon an exchange of costs (what one gives -- the altruistic aspect of volunteering) and rewards (what one receives -- the egoistic aspect of volunteering)' (Phillips 1982:118).

In conservation, three existing studies show motives for volunteering to be diverse. Sierra Club volunteers reported general interest in, or concern for, environmental issues rather than for a specific problem, and the majority was spurred to volunteer by the recommendations of others (Manzo and Wienstein 1987). Over seventy-nine per cent of volunteers participating with three large British ENGO programmes volunteered to gain experience for future occupational interests (Powell 1997). Finally, the majority of volunteers working to conserve the Don River Watershed in Toronto, Canada, was motivated by 'ideological' reasons (feeling a sense of responsibility for the environment) and by 'helping' reasons (they wanted to help solve specific environmental problems) (Donald 1997).

In her study of sea turtle conservation volunteers, Bradford (2003) adopted a Voluntary Functions Inventory (VFI) (from Clary *et al.* 1998) to measure volunteer motives. The VFI was originally developed for volunteers working with HIV patients, and Bradford (2003) adapted five of the forty-seven measures of functions, outcomes, and satisfactions used by Clary *et al.* (1998) to refer specifically to sea turtles. Bradford (2003) found Florida sea turtle volunteers had multiple motives, including a desire to help sea turtles, a need to live out deeply held values, and a sense that volunteering was the right thing to do. Social network or career enhancement were not

important motives for volunteering. Volunteers were satisfied with their experiences, primarily because they believed they were helping sea turtles (Bradford 2003).

As shown above, existing research on conservation volunteers, and more specifically on sea turtle volunteers, is limited. Also, the applicability of the more extensive data and theory related to volunteers working in other sectors is not always clear. While some volunteer characteristics (for example, income and education levels) are similar across sectors, others may not be (for example, age). Existing theories of social service volunteer motivation, which focus on a desire to help or interact with people, must be re-conceptualised for conservation volunteers; endangered animals or ecosystems replace needy people. In addition, the nature of pay-to-volunteer conservation programmes (that take people away from home for intensive but short term commitments) is different than many of the volunteer activities studied in general, and for conservation specifically. The Sierra Club, British ENGO, and Don Valley Watershed studies cited above, for example, dealt with long-term commitments by volunteers working in the areas in which they lived. Likewise, Bradford (2003) and Godfrey and Cluse (in press) were reporting on long-term volunteers whose work is part of their everyday lives. The case study of volunteers working for the CCC provides a contrast to these types of volunteers, in that CCC volunteers are people who travel away from their homes and make relatively short term volunteer commitments to turtle conservation in Tortuguero, Costa Rica.

Study Site Description and Methods

Study Site

The CCC advertises the longest running turtle tagging programme in the world (CCC n.d.). Conservation programmes for green (*Chelonia mydas*) and leatherback (*Dermochelys coriacea*) turtles are the focus of the organisation's operations in Tortuguero. Maintaining a nightly turtle tagging programme over the course of several months requires financial and labour resources. Over time, the CCC has adopted a variety of strategies for meeting its labour needs; in the past it employed both university students and visiting researchers, primarily from the USA, and local people. In the mid-1990s, it began a pay-to-volunteer programme to supplement both income and its labour pool. According to the CCC (no date), its pay-to-volunteer programme provides an opportunity for the public to witness, be directly involved in, and provide financial assistance to sea turtle conservation and research. People participating in this programme are Participant Researchers (PRS). In addition to its pay-to-volunteer programme, the CCC continues to recruit volunteer research assistants (RAS), and some of the differences between RAS and PRS are summarised in Table 1.

The CCC hosts RAS for two distinct research seasons. Approximately sixteen RAS are recruited for the green turtle nesting season, and eight for the leatherback nesting season. Individual RAS typically stay for half of the green turtle season (three of six months) and all of the leatherback specific season (four months), although there is variation among volunteers. They receive free room and board and return transportation from the capital city (San José) to Tortuguero, but are responsible for their round trip airfare to Costa Rica and any additional expenses. At the beginning of each season, RAS are trained by CCC staff to complete a multitude of tasks during

	Length of Stay	Responsibilities and Duties Performed	Financial Cost To Volunteer
RA	3-4 months	<ul style="list-style-type: none"> • Week-long training session • Responsible for completing all field-work/data collection procedures • Answers questions asked by tourists 	<ul style="list-style-type: none"> • Travel to San José • Any extras Conservative estimate: US\$1000 (3-4 month stay)
PR	1-3 weeks	<ul style="list-style-type: none"> • 1-hour, mini-training session • Assists the accompanying RA • Assists answering tourists' questions 	<ul style="list-style-type: none"> • Travel to San José • Participation fees • Any extras Conservative estimate: US\$2535 (2 week stay)

Table 1. *Distinguishing between Research Assistant (RA) and Participant Research (PR) volunteers (sources: researchers' field notes; CCC no date).*

each data collection shift. These tasks include: tagging (inserting a coded metal tag into the turtle's flipper), measuring, counting eggs, marking nests, and recording all data collected on beach patrols. Work is carried out every night of the season, during two four-hour shifts (8pm-12am and 12am-4am). In addition, RAS complete morning nest surveys and assist with maintaining nest inventories (7am-9am). When attending meetings and cleaning equipment are included, RAS work a minimum of eight hours per day. In this paper, RAS are considered traditional volunteers since they are unpaid (but receive in-kind support of room and board). Because they commit long periods of time to their work, they incur opportunity costs (that is, they forgo income they could earn in a paying job for that time period).

The majority of PRS joins the CCC for the green turtle season (approximately fifty PRS per green turtle season, and fifteen for the leatherback season, 2000 and 2001 data [CCC staff, pers. comm. 2002]). PRS generally stay at the station for one to three weeks and aid RAS in all of their tasks (with the exception of flipper tagging). Fees paid by individual PRS in 2001 were 1,360 US dollars for one week, 1,785 US dollars for two weeks, and 2,075 US dollars for three weeks. These fees cover room and board, round trip transportation to Tortuguero from San José, and some local sight-seeing excursions. Fees do not include the round trip fare to Costa Rica and some costs at the station, such as personal phone calls and tips for tour guides. PRS also pay for any extra foodstuffs purchased in Tortuguero, souvenirs, fees related to airport taxes, passport fees, and meals while in San José (before and after the CCC experience).

Methods

Data presented in this paper are derived from two sources: 1) in-depth semi-structured interviews with volunteers; and 2) a volunteer exit survey conducted by the CCC. Before these are described in detail, three caveats are discussed. First, the qualitative interviews were designed to probe individual views on volunteering, turtle conservation, environmentalism in general, and other topics related to the larger project examining the role of ENGOS and volunteer programmes in conservation and

development in rural Costa Rica. While approximately one-fourth of all turtle volunteers working with the CCC during the 1999 and 2000 seasons were interviewed, these were not randomly sampled, and results discussed in this paper are not statistically representative of all volunteers. Second, as discussed below, the CCC exit survey does not collect demographic data on volunteers. Thus, demographic data of the interviewed subset of volunteers is presented, though, again, these are derived from the non-random sample. Third, results are often presented separately for RAS and PRS, and then compared. The two groups have different responsibilities, are in Tortuguero for different periods of time, and absorb different costs of participating with the CCC, and this two-tiered structure allows for comparison of different types of volunteers. Results are also disaggregated by gender. Facilitating these comparisons has required some quantification of results, in which some of the rich detail of the qualitative interview data are lost. We deemed this approach necessary for this initial paper that lays the ground for further in-depth investigation of topics like volunteer values.

Interviews: A total of thirty-three volunteers were interviewed during thirty in-depth, semi-structured interviews (three double interviews with couples and/or friends were conducted). Demographic data on age, nationality, level of education, occupation, and gender were collected at the same time. Interviews took place over two field seasons for two and three weeks in July of 1999 (Campbell) and 2000 (Smith) respectively. Timing was based on information provided by the CCC head office suggesting that these were peak weeks for PR arrivals (the number of RAS at the station at any one time during the green turtle season is usually eight). While results may not be representative, we were concerned to have a sample size that would support some theorising and that would maximise the use of resources. All volunteers present at the station during both field seasons were invited to participate in interviews and none refused to do so. Interviews were conducted in either Spanish (with assistance of a translator) or English, and transcribed verbatim. Interviews ranged in length from thirty to sixty minutes. Two interviews from the 1999 season were unusable, one due to tape recorder failure and the second due to poor sound quality that prohibited translation. Thus, while demographic data from these two interviews are included in the discussion of volunteer characteristics, they are excluded in the analysis of motives.

Interviews were conducted using a topic guide that was flexible enough to allow respondents to introduce topics of their own interest, and we pursued these in detail when they were relevant to the overall goals of the project. Topics addressed that are relevant to this paper include: decision/motivation to participate (and the choice the Tortuguero project specifically); objectives of participating; and the importance of volunteering generally and specific to this case.

Primary data were analysed with a grounded theory approach (see Lofland and Lofland 1995; LeCompte and Schensul 1999; Charmaz 2001). The use of grounded theory implies that, in coding the qualitative data, we allowed the coding categories to flow from the data. For example, given the literature on volunteering, we did expect to find some volunteers motivated by their desire to gain experience. However, two unanticipated elements of 'gaining experience' arose in the analysis: the importance of the CCC's reputation and the specific desire of school teachers to develop ideas for lessons plans. Direct quotes appearing in this paper were chosen

as representative of a theme, unless otherwise specified. All responses are coded for anonymity.

Exit survey: On completion of their time in Tortuguero, PRS and RAS are asked to complete an exit survey, and the use of exit survey results allows for some triangulation of results derived from in-depth interviews. One hundred thirty-five surveys completed between the years 1997-1999 were provided by the CCC (the average response rate over the three years was seventy-four per cent). Questions on the survey covered a range of topics, most related to programme and facilities evaluation. As stated above, the CCC does not request demographic information in its exit survey, so there is little information on participant characteristics. Respondents did have the option of supplying their name, and for those who did so, gender was assigned where it was clearly distinguishable. Thirty-eight per cent of respondents (fifty-one of the total 135) could not be gender identified; thus, the discussion of results disaggregated by gender is based on the eighty-four questionnaires for which the respondent's gender could be assigned.

The exit survey question most pertinent to this paper asked volunteers to identify reasons for participating in the programme. Responses to this open-ended question reflect volunteer motivations and were coded according to the categories that arose from interview analysis. In addition, three new categories were created in this process (where existing interview categories were insufficient), and interviews were re-checked for evidence of the new themes.

One final methodological issue is related to double counting respondents who were both interviewees and who completed exit surveys in 1999. At least five of the fifteen interviewees also completed exit surveys; other interviewees may have also done so, but because they did not provide their names, it is impossible to tell from the exit survey data. Since there is little cumulative presentation of results (that is, results are discussed by methods groups), this double counting presents no major problems, but should be kept in mind when interpreting results.

Results

Who Are They? Characteristics of CCC Volunteers

The CCC attracts volunteers ranging from under twenty to over fifty years of age (Table 2). During this research, the majority of PRS was over the age of thirty and the majority of RAS was under the age of thirty, and while difference in age distribution of the two groups is not statistically significant, it is nonetheless interesting. The younger age of RAS likely results from the physical nature of the fieldwork, the cost of paying to participate as a PR, and the time commitment required for an RA position. For example, a one to three-week stay costing 2,075 US dollars (plus travel expenses) might be feasible for an employed person, but out of reach of a university student. Likewise, the lengthy time commitment of the RA programme is more conducive to the schedule of a student or recent graduate, but not feasible for most employed people. Thus, if not age, life-stage plays a role; while all volunteers were highly educated (only one PR and one RA lacked university education), all but one RA was either currently enrolled in university or very recently graduated and without other employment, while the majority of PRS was employed.

	Research Assistants	Participant Researchers	Total
Age Range			
19 and under	0	2	2
20-24	8	1	9
25-29	5	3	8
30-34	3	2	5
35-39	0	3	3
40-44	0	0	0
45-49	0	2	2
50 plus	0	4	4
All ages	16	17	33
Nationality			
USA/Canada	7	15	21
Other developed countries	0	2	2
Latin American	9	0	9
All nationalities	16	17	33
Education			
High school	0	2	2
University (undergraduate)	7	1	8
University (graduate)	0	1	1
Recent graduates* (unemployed)	8	0	8
Professional**	0	10	10
Non-professional	1	3	4
All educational levels	16	17	33

Table 2. Interviewee characteristics by participation status:

*Recently graduated from a post-secondary degree program;

**Professional employment that requires a university education, such as education, business, or health services.

Further contrasts were seen in nationality of interviewees, with 100 per cent of PRS originating from the USA or other developed nations. The group of interviewed RAS was more diverse (almost equal numbers of Latin and North Americans), but this ratio has been intentionally influenced by CCC efforts to increase the number of Latin American RAS and to reduce its historic reliance on students from the USA. While Latin American RAS have the advantage of speaking Spanish, the CCC also believes it has a responsibility to contribute to training people from the region in which it works (CCC staff, pers. comm. 1999).

Based on interview and exit survey data, it appears that more women

than men participate in CCC volunteer programmes. Of the eighty-four exit survey respondents who were assigned to a gender category, close to two-thirds were female (Table 3), for both RAs and PRs. While this gender bias was also evident among interviewees as a group, and especially pronounced among interviewed PRs (only twenty-four per cent male), it was not reflected among interviewed RAs for the combined 1999 and 2000 seasons. However, the recent gender balance among RAs is a result of CCC recruitment policy. Because of the nature of the work that has groups out on a dark, unlit beach late at night, the CCC has implemented a safety policy that requires all groups have at least one male present (CCC staff, pers. comm. 2000). While in the past the majority of RAs has been female, a balance allows the CCC to achieve its one male per group goal most easily. Therefore, the organisation has created an artificial gender trend for its RAs.

	Female		Male	
	(n)	(%)	(n)	(%)
Interviewees (n=33)	20	61	13	39
RAs (n=16)	7	44	9	56
PRs (n=17)	13	76	4	24
Exit survey respondents (n=84)*	52	62	32	38
RAs (n=22)**	13	59	9	41
PRs (n=58)**	36	62	22	38

Table 3. Gender of interviewees and exit survey respondents (number and percentage):

* includes only respondents from whose responses gender could be identified with confidence;

** number of RAs and PRs does not equal the total, as 4 individuals did not identify their participation status.

Why do they Volunteer? CCC Volunteer Motives

Five broad motive categories and several sub-categories were identified from CCC interviewee transcripts, and then applied to exit surveys (Table 4). The most frequently cited motive for both interviewees (sixty-five per cent) and survey respondents (thirty-four per cent) was a desire to observe nesting turtles in their natural habitat and contribute to their conservation (*turtle-specific* motive 'a'). One PR illustrated this commonly cited motivation:

My objectives were, I mean, really my objectives were just to see turtles and to just be involved in the turtle work. That was enough for me, to know I was coming to see turtles. And I mean, to have an interest in something for as long as I've had, and to never actually have seen a turtle in the wild was kind of crazy. (Female Participant 3, [FP 3])

A second *turtle-specific* motive (identified by nineteen per cent of interviewees and five per cent of survey respondents) was the desire to learn about turtles to fulfill some self or professional development goal (*turtle-specific* motive 'b'). Some interviewees identifying this motive were biologists wanting exposure to a new animal,

while FP 13, for example, had explicit objectives relating to her graduate research project:

The main purpose is just to learn more about sea turtles, learn more about migrations and more about the different temperature ranges of the various sea turtles. (FP 13)

In terms of *experience-specific* motives, the desire to gain biological or research-related field experience (*experience-specific* motive 'a') was the second most frequently identified motive by both interviewees (fifty-five per cent) and survey respondents (twenty-nine per cent). As the statements below from FP 4 and male research assistant 3 (MRA 3) illustrate, the experience was seen as critical to making important career decisions and as a resume builder:

But I also know that if I was ever going to do this for a career I'd have to start off by volunteering, get the experience. Even just decide for sure that this was what I wanted to do. I knew in my head, but I had to know that I was capable of the work. (FP 4)

It's still a job and it's still... I can put it on my CV as experience and it's going to help me probably get a future job. (MRA 3)

Often related directly to the desire for experience was the desire to work specifically with the CCC due to its reputation for data collection in the scientific community (*experience-specific* motive 'b', identified by twenty-nine per cent of interviewees, but only five per cent of survey respondents):

If I go back to [country] and I have volunteer experience on turtles, it's going to go over well. Especially with someone [sic] like the CCC, they've got the longest running programme in the world. They're fairly well recognised. And that was also another reason for choosing the CCC, ... the fact that they were well recognised and well respected scientifically. That the experience here was going to be valuable to put on my CV. I was recognised as doing good science. That, for me, was important in terms of me getting something out of the experience professionally. (FRA 4)

Six interviewees (nineteen per cent), all educators of children, expressed the specific desire to develop new material for classes (also identified by two per cent of survey respondents). Several had participated in other non-turtle projects for the same purpose, thus the turtle focus was secondary to the experience (and distinct from *turtle-specific* motive 'b', learning about turtles):

My specific -- the objective for me again is to work kind of with scientists -- see what currently is going on, and use that information in my classroom. Experience it and then, so it directly impacts my work with kids. (MP 2)

Three interviewees (ten per cent) expressed a desire to use their biological training. This code was one that arose from the survey responses (four per cent of survey respondents identified it) and was then applied to interviews. It is distinct from *experience-specific* motive 'a', in that use of acquired skills is emphasised rather than enhancing career options. However, all interviewees in this category also identified *experience-specific* motive 'a', and thus there was undoubtedly some overlap in these categories.

With all motives in the *experience-general* category, the specifics of the Tortuguero experience were secondary and the programme was one of many possible ways to meet volunteer objectives. In essence, these motives demonstrate the multi-faceted role of the PR OR RA as tourist as well as volunteer. Thirty-five per cent of interviewees and seventeen per cent of survey respondents were motivated by traveling and learning about a different culture, sometimes specifically Costa Rica (*experience-general* motive 'a'). When asked what motivated her to volunteer, one female RA explained that the turtles were not the major drawing card:

I mean, I guess the whole thing came about for me was that I finished my Ph.D. I'd worked for a while. I'd always promised myself that when I finished I was going to go overseas and travel. Forget about working, wasn't going to worry about the post-doc circuit. I was just going to pick up and leave for a while. (FRA 4)

Sixteen per cent of interviewees (and fifteen per cent of survey respondents) spoke about the total experience, and a desire to do something different (*experience-general* motive 'b'). MP 3, for example, described his desire to do 'something that's 180 degrees the opposite of what I do from day-to-day, that's kind of neat'. Ten per cent of interviewees and nine per cent of survey respondents were interested in general learning, that is, expanding their knowledge of the environment and conservation, not necessarily linked to turtles.

The volunteer aspect of the Tortuguero experience was also a motivator. Thirty-nine per cent of interviewees and fifteen per cent of survey respondents referred to the general desire to 'give something back' to a meaningful cause, *volunteer-related* motive 'a'. FP 12 talked about wanting to do 'something that mattered', and FP 6 stated that 'It's all very well to care about turtles, but then one wants to feel one's going to do something about the caring.' *Volunteer-related* motive 'b' (identified by twenty-nine per cent and five per cent of interviewees and survey respondents respectively) refers to being motivated to volunteer in order to achieve some kind of personal development:

I like helping people, and I mean, helping causes, and I really don't have to receive much. It's kind of good out of my own will, and my gratification is what I, what people get out of it, and what we can all get out of it as one. And, that's what keeps me motivated. (MRA 5)

The *other* category consists of several miscellaneous motives, each discussed by only one or two interviewees, and although they are not frequently mentioned, they represent unique objectives. For example, two interviewees were motivated to volunteer

for the CCC because they knew of the physical nature of the work and were seeking a physical challenge and/or exercise. Two interviewees were also motivated by religious or spiritual callings. Finding unique travel opportunities for special occasions (that is, honeymoon, father's birthday, et cetera) was also one of the *other* motives identified in the surveys (but absent in the interviews).

Differences in Interview and Exit Survey Response Groups

When comparing responses between interviewees and exit survey respondents, the ranking of motives, rather than the absolute number or percentage of persons identifying a motive, is more appropriate to consider (Tables 4-6). As a group, interviewees identified more motives than exit survey respondents, undoubtedly due to the different data collection techniques. Exit survey respondents had limited space to answer the one question related to motive, and hence, most (fifty-three per cent) cited only one motive. Conversely, the interview format allowed more 'space' to discuss motivations in-depth, and most interviewees (sixty per cent) cited three or four motives. For example, the *experience-general* category of motives ranked higher overall for exit survey respondents than for interviewees (Table 4), but this may reflect methods rather than substantive differences in motivation. If a survey respondent answered the question 'why did you want to participate in our programme?' with the response 'the whole experience', this was classified as *experience-general* motive 'b', as there is no reference to turtles, volunteering, or any specific factor. In an interview scenario, the respondent was asked to elaborate (and if they did so, they would have been recorded as identifying *experience general* motive 'b' and whatever motive(s) were identified in the elaboration).

In spite of these methodological differences, when rankings are considered, there is great similarity in the top ranked motives for both survey and interview respondents, with both groups ranking *turtle-specific 'a'*, *experience-specific 'a'*, *volunteer-related 'a'*, and *experience-general 'a'* in their top four motives, in almost the same order (Table 5).

Similarities and Differences Between PRS and RAS

When data are disaggregated by both research method and participation status, some similarity in motive ranking is retained (Table 5). For example, *turtle-specific 'a'*, *experience-specific 'a'* and *experience general 'a'* remain among the top four motives for all groups. *Volunteer-related* motive 'a' remains in the top four for all groups except surveyed RAS (for whom it ranks seventh). *Experience specific* motive 'b' is only ranked in the top four by interviewed RAS. Due to the difference in data collection methods, and the difficulties this poses for comparison, further similarities and differences will be discussed separately for each of the two method groups, that is, differences/similarities between interviewed RAS and PRS, and differences/similarities between surveyed RAS and PRS.

Interviewees: There were differences in the most frequently expressed motives of interviewed RAS and PRS (Table 5). A subtle, but interesting difference relates to *experience-specific* motive 'a'. While ranked second by interviewees as a group, it ranked fourth for PRS (tied with *volunteer-related* motive 'b' and therefore assigned a rank of 4.5) and first for RAS. All but two RAS identified this motive (eighty-seven per cent). While five interviewed PRS (thirty-one per cent), like FP 4 quoted above,

Motives	Interviewees (n = 31*)			Exit Survey Respondents (n = 135)		
	No.	%	Rank	No.	%	Rank
<i>Turtles-specific motives</i>						
A desire to:						
a: See turtles/help or contribute to turtle conservation	20	65	1	46	34	1
b: Learn about turtles/conservation for personal or professional reasons	6	19	7.5	7	5	7.5
<i>Category total and rank</i>	26		2	53		1
<i>Experience-specific motives</i>						
A desire to:						
a: Gain fieldwork/research experience	17	55	2	39	29	2
b: Work with a reputable/safe organization like the CCC	9	29	5.5	7	5	7.5
c: Learn and obtain new educational materials	6	19	7.5	3	2	10
d: Use training**	3	10	10.5	5	4	9
<i>Category total and rank</i>	35		1	45		3
<i>Experience-general motives</i>						
A desire to:						
a: Travel/learn about a culture	11	35	4	23	17	3
b: Total experience**	5	16	9	20	15	4.5
c: General learning**	3	10	10.5	12	9	6
<i>Category total and rank</i>	19		4	50		2
<i>Volunteer-related motives</i>						
A desire to:						
a: 'Give back' to a meaningful cause	12	39	3	20	15	4.5
b: Volunteer for the personal growth/development	9	29	5.5	7	5	7.5
<i>Category total and rank</i>	21		3	27		4
<i>Other: Various desires, for example, exercise, spirituality</i>	8			19		

Table 4. Motives of interviewees and exit survey respondents (number and percentage of respondents identifying each motive, and rank of motive overall for group; (top four categories in bold and italic font, with ties included):

* two of the thirty-three interviews from the 1999 season were unusable (see methods discussion);

** These codes were added after initial codes were applied to survey responses, and some responses could not be adequately accounted for using initial codes.

<i>Motive</i>	Interviewees' motives, ranked			Exit survey respondents' motives, ranked		
	RA (n=15)	PR (n=16)	All (n=31)	RA (n=30)	PR (n=101)	All* (n=131)
<i>Turtle-specific motive 'a'</i>	2	1	1	1	1	1
<i>Experience-specific motive 'a'</i>	1	4.5	2	2	2	2
<i>Experience-specific motive 'b'</i>	3	12	5.5	NA	7.5	8.5
<i>Experience-general motive 'a'</i>	5	3	4	3	4.5	3
<i>Experience-general motive 'b'</i>	10	8.5	10	4	4.5	4.5
<i>Volunteer-related motive 'a'</i>	5	2	3	7	3	4.5
<i>Volunteer-related motive 'b'</i>	5	4.5	5.5	7	9.5	8.5

Table 5. *Motives cited most frequently by interviewees and exit survey respondents, ranked order, by volunteer status (top four categories in bold and italic font, with ties included):*

* Four survey respondents failed to include their participation status, and are excluded from this analysis; their removal does not affect overall rankings, or rankings by RA and PR status.

were also seeking fieldwork experience, job related experience was more important to RAS. Related to this is the importance of working for the CCC (*experience-specific motive 'b'*), which ranked third for RAS (identified by forty-seven per cent) but twelfth for PRS (identified by thirteen per cent); given the interest of RAS in gaining job-related experience, the reputation of the organisation is understandably important. The importance of volunteering also differed. *Volunteer-related motive 'a'* was the second most frequently cited motive for PRS (identified by fifty per cent), and fourth for RAS (identified by twenty-seven per cent, and tied with two other motives and therefore assigned a rank score of five). This difference was expected; PRS pay considerable sums to participate and they may justify this expense as 'giving back to a good cause'. The costs to RAS, on the other hand, are mostly opportunity-based, and their tendency to treat their work as a job (one that will help them secure future employment) coincided with their tendency to downplay its volunteer aspects.

One motive that did not appear in the top four for interviewed PRS or RAS is *experience-specific motive 'c'*, the desire to acquire new educational material for teaching purposes. The six interviewees who cited this, four PRS and two RAS, were all teachers and several had received travel grants from school boards to participate with the CCC. These grants off-set the costs of the individual's participation and are an additional complicating factor for assessing the draw of turtles for these individuals; interviewees were not asked if they would have participated without support from their school boards. In total, seven of the thirty-three volunteers interviewed (twenty-one per cent) in 1999 and 2000 were teachers. With summer months away from the classroom and some financial support for such activities, teaching appears one profession well suited to participation.

Survey respondents: There was more consistency between RA and PR responses to the exit survey, with both groups agreeing on the top two motives. As with interviewees, however, survey respondents can be distinguished based on the importance they placed on volunteering. *Volunteer-related motive 'a'* was the third most frequently cited by PRS (nineteen per cent), while only one RA identified it (three per cent of RAS, with a corresponding ranking of seventh).

	Interviewees' motives, ranked			Exit survey respondents' motives, ranked		
	Female (n = 19)	Male (n = 12)	Total (n = 31)	Female (n = 52)	Male (n = 32)	Total (n = 84)
Turtle-specific motive 'a'	<i>1</i>	<i>1.5</i>	<i>1</i>	1	3	<i>1</i>
Experience-specific motive 'a'	<i>3</i>	<i>1.5</i>	<i>2</i>	2	1	<i>2</i>
Experience-specific motive 'b'	5.5	3.5	5.5	7.5	7.5	7
Experience-general motive 'a'	4	6	4	3	2	3
Experience-general motive 'b'	11.5	6	9.5	6	5	5
Volunteer-related motive 'a'	2	9	3	4	4	4
Volunteer-related motive 'b'	5.5	3.5	5.5	7.5	11	8.5

Table 6. Motives cited most frequently by interviewees and exit survey respondents, ranked order, by gender (top four categories in bold and italic font, with ties included).

Similarities and Difference across Gender

When data from surveys and interviews are disaggregated by gender, some similarity in motive ranking is maintained (Table 6). For all groups, *turtle-specific 'a'* and *experience-specific 'a'* remained ranked among the top four motives. *Experience-general 'a'* and *volunteer-related motive 'a'* appeared in the top four for all groups except interviewed males. As with PR and RA status, further discussion of gender differences will be restricted to method groups.

Interviewees: Male and female interviewees identified similar numbers of motivations (most males and females identified three motives). *Turtle-specific* motive 'a' was identified most frequently by both male and female respondents (although male interviewees identified *experience-specific* motive 'a' just as often, that is, these two motives tied for top ranking and are assigned a rank score of 1.5 in Table 6). Following this, however, the data suggest that men were motivated to gain work experience, while women were motivated to volunteer. Sixty-seven per cent of men versus forty-seven per cent of women refer to *experience-specific* motive 'a', and *experience-specific* motive 'b' ranked among the top four for male interviewees. Alternatively, fifty-three per cent of women identified the motive of giving back to a meaningful cause (*volunteer-related* motive 'a') as opposed to seventeen per cent of men. Interviewed men, on the other hand, were the only group to identify *volunteer-related* motive 'b', volunteering for self development and personal growth, in the top four of their ranked motives.

Exit survey respondents: Most men and women described one motive on the exit survey. While there were some differences between male and female responses, these were not as pronounced as for interviewees (Table 6). The two biggest differences occur with *turtle-specific* motive 'a', identified by forty-two per cent of women (rank one) and twenty-two per cent of men (rank three), and *experience-general* motive 'a', identified by fifteen per cent of women (rank three) and thirty-one per cent of men (rank two). As with interviewees, surveyed men valued work experience

more highly (*experience-specific* motive 'a' identified by thirty-four per cent of men versus twenty-four per cent of women), but an equal percentage of male and female respondents (thirteen per cent) described *volunteer-related* motive 'a'.

Discussion and Conclusions

A number of comparisons can be drawn between characteristics and motives of volunteers in general and those exhibited by the CCC volunteers involved in this study. Following this, the implications of these results for understanding turtles as conservation flagships are discussed.

Characteristics of CCC Volunteers

Given the lack of demographic data provided by the CCC exit survey, characteristic data (with the exception of gender) are drawn from interviewees only (n=thirty-three), and the wider applicability of results to CCC volunteers as a whole is uncertain. With that caveat in mind, several interesting characteristics are discussed here.

As pointed out by Bradford (2003), the results of individual case studies of conservation volunteers are difficult to extend to volunteers working for conservation in general, due to the relatively small number of participants and the varied activities they undertake. Nevertheless, the importance of individual activities has been stressed in the literature; given the wide range of conservation activities available to participate in, certain ones will attract specific types of individuals (Hall *et al.* 1998). Due to the differences in its RA and PR programmes, the CCC case study provides an opportunity to consider the links between activity and demographic variables in a single context. RAS and PRS are contributing to the same overall goal (sea turtle research and conservation) in the same place (Tortuguero, Costa Rica), but they do so under different circumstances. And in this case circumstances (primarily cost and length of stay), rather than the overall goal, divide the group into PRS and RAS. For example, the differing circumstances of the two participation opportunities appear attractive to, or compatible with, different age groups. Age is clearly not the only factor at work here, however, as disposable income, time available, and employment status also have an impact on the choice of a week-long PR experience or a three- to four-month RA tenure. However, almost all of these other variables can be linked to age. For example, participants had similar levels of education, but their time from graduation and associated time in the work force differed; recent, younger, graduates yet to be employed were able to commit long periods of time to the RA experience (FRA 1, for example, volunteered as an RA because she had failed to find full time employment in her chosen field). Employed PRS could not afford the long time away, because they either lacked the vacation time or had family commitments.

Specific policies of the CCC, namely to recruit both Latin American and male RAS, clearly affect conclusions regarding nationality and gender of volunteers. However, the interviewed group does offer some insight into nationality. First, Powell (1997) found the majority of conservation volunteers to be of so-called western decent. All of the PRS interviewed fulfill this characteristic, and while exit survey respondents were not asked to identify nationality, CCC staff (personal communica-

tion 2000) confirm that most PRS are from the USA; this is not surprising due to the high costs of participation for this group. Second, even though the high number of Latin American RAS is a result of specific recruitment policy, their participation requires consideration. While many of the Latin American RAS were relatively privileged in their home countries (all but one had or was undertaking post-secondary education), their participation either challenges what existing volunteer research tells us about nationality trends, or (and perhaps more likely) reflects that most existing volunteer research has been conducted on European and North American conservation organisations. This focus has undoubtedly contributed to the notion that environmental conservation is a 'northern' concern, a claim that should be critically evaluated via research on 'southern' environmental ENGOS and their supporters.⁷

Gender trends were also evident, with more women than men participating in the PR programme and, until the CCC began pursuing a gender balance among RAS, this female bias was also evident for that group (CCC staff, personal communication 2000). While there is no clear indication of gender bias in the literature on conservation volunteers, this finding does support studies finding women more likely to volunteer (Davis *et al.* 1999), and specifically for sea turtle conservation (Bradford 2003; Godfrey and Cluse in press). Thus, as a flagship, there is some evidence that sea turtles are more attractive to women than to men.

Overall, research findings indicate that the majority of CCC volunteers exhibit elements of the 'dominant status thread' discussed by Smith (1983, 1994). The vast majority of CCC interviewees were educated beyond the secondary level, and the number of PRS employed as professionals in fields such as business, education, and health services. This implies certain levels of income and social status (Table 2). Seven of the eight RAS from Latin American countries resided in capital cities, a finding that, when combined with their education levels, indicates a relatively high socio-economic status for their countries of origin. Also, the majority of interviewees were either students (when recent graduates are included in this category) or gainfully employed (most in professional occupations) and earning fixed incomes. These categories represent two affluent lifestyles; students have time-related freedom, and those income-earning professionals have the financial resources. With one exception (MRA 9, a rural fisherman and educator), CCC volunteers possess educational and financial power and have the resources to take time away from their everyday lives. As such, they exhibit the qualities of secure time-outers, as discussed by Fussell and Quarmby (1981).

Motives of CCC volunteers

Motives expressed by CCC volunteers can be categorised as intrinsic or extrinsic (following Kidd 1977; Smith 1981; Abdennur 1987). For example, *turtle-specific* motive 'a' (to see turtles and help/contribute to their conservation) can be classified as intrinsic,⁸ as can *volunteerism-related* motive 'a' (the desire to give back to a meaningful cause). Individuals citing these motives might be considered 'cause-oriented' volunteers (Abdennur 1987), since they are deeply concerned with assisting turtles and their conservation.

Conversely, *turtle-specific* motive 'b' (to learn about turtles/conservation for some personal or professional aims) and *volunteer-related* motive 'b' (a desire to vol-

unteer for the personal experience) are extrinsically driven. Likewise, all elements of the *experience-specific* and *experience-general* categories are extrinsically oriented; *experience-specific* motives 'a', 'b', and 'c' are all associated with the volunteer's need to develop his or her own skills and enhance his or her career. Those identifying these motives can be defined as 'occupational/economic self-interest' volunteers (Abdennur 1987). Similarly, the *experience-general* motive to travel and learn about a different culture is extrinsic because it is primarily about increasing personal life experience. The *other* motives category is also comprised of extrinsic motives (for example, a desire to get exercise or to enhance a personal spiritual connection to sea turtles). Individuals citing these types of extrinsic motives might be considered 'consummatory' volunteers (Abdennur 1987) because they are motivated primarily through seeking personal enjoyment or expression.

Most CCC volunteers who were interviewed discussed both extrinsic and intrinsic motives for volunteering; only six of the interviewees (all but one of them RAS) described only extrinsic motives, and one (a PR) discussed only intrinsic motives. Social exchange theory tells us to expect a combination of motives, and explains how altruistic motives, like wanting to give back to a meaningful cause, are often coupled with self-interest motives, like the need to learn new skills or gain knowledge (Smith 1981; Phillips 1982; Brudney 1990). This two-faceted altruistic/self-interest motive trend is evident for most CCC volunteers. Nevertheless, overall, volunteers expressed more extrinsic than intrinsic motives, a finding that is supported by research on the motivations of other conservation volunteers as well as younger volunteers in various sectors (Manzo and Weinstein 1987; Powell 1997; Hall *et al.* 1998).

Given the diverse motives described by CCC volunteers, isolating the role of sea turtles in attracting volunteers -- that is, acting as a flagship -- is challenging. Clearly, turtles are an important component of the equation; the desire to see turtles/help with their conservation (*turtle specific* motive 'a') was the most frequently identified motive by interviewees and exit survey respondents as a whole, by all but interviewed RAS when disaggregated by participant status, and by all but male survey respondents when disaggregated by gender. However, the importance of this motive to individual volunteers varied. For some volunteers, turtles were the primary motive, and underlay all others. For example, FP 3 was motivated primarily by her long held fascination with turtles, she was a long time supporter of the CCC's turtle work, and she wanted to learn information about turtles to integrate into her classroom teaching. For her, turtles clearly function as a flagship. FRA 4, on the other hand, was primarily motivated to take time out after completing her PhD. Many of her reasons for working with the CCC were practical, and turtles were not a key motivator. However, she was pleased to be working for a well-recognised organisation and to be using her skills as a biologist, and saw that experience as important for her future career goals.

PRS were expected to be highly motivated by the turtle aspect of their experience, given the costs of their participation. RAS were expected to be motivated primarily by the desire for field experience. To some extent this proved true, but there were exceptions and the role of turtles was not always clear. For example, most RAS did prioritise their need to gain field experience, sometimes specifically related to turtles (reinforcing the flagship role), but often for biological work in general. Furthermore, gaining field experience was also very important to some PRS, and not all

of them had a pre-conceived turtle goal. For some PRS, turtles were one means to make a contribution to conservation in general and the CCC's programme attracted them for other reasons (including cost, timing, and length of stay). Many PRS had volunteered on other projects in the past and were planning future volunteer work, with turtles (reinforcing the flagship role), but also with other species. Furthermore, while there are some methodological issues to consider, the importance placed on general experiences by interviewees and particularly by survey respondents, regardless of participant status, conforms to the categorisation of volunteers as a specialised kind of ecotourist (Wearing 2001). Some volunteers use Tortuguero as a typical way of experiencing the tropics and Costa Rica.

Only four volunteers (two RAS and two PRS) talked about a love of, or fascination with, turtles as being *the* driving force in their participation. MRA 3, for example, claimed to be 'on a turtle trip'; and FP 9 said simply: 'turtles do it for me.' However, understanding volunteer motives is only one means for assessing the importance of turtles as flagships. While few volunteers explained their participation in terms of an existing attraction to turtles, others clearly reinforced or developed such an attraction through participation (Smith 2002). As a result, the flagship status of sea turtles may be enhanced as a result of participation, even for volunteers who were not motivated to participate by turtles initially.

Further Research on Sea Turtles as Flagships

This paper describes the characteristics and motives of turtle conservation volunteers working in a specific context and is a first step to better understanding the role of volunteers in conservation. As such, it raises as many questions as it answers. For example, while most volunteers are drawn to some extent by the turtle flagship, the specific appeal of turtles is unexplored here. Flagships are meant to draw people's attention, in this case to sea turtles, and generate support (and funding) for their conservation. Conserving the flagship's habitat is theoretically beneficially to other non-charismatic species (Johnsingh and Joshua 1994), and the public may be educated about related issues, for example, habitat degradation or overall environmental quality (Walpole and Leader-Williams 2002). However, there are criticisms of the flagship approach to conservation. One is that the redirection of public concern and interest to broader issues does not occur; the flagship appeals at an emotional or aesthetic level, and such responses remain disconnected from broader concern for environment. Furthermore, while protecting a flagship species with or without promoting environmental concern can arguably have benefits for other species that share the flagship's habitat, this is not always the case (Andelman and Fagan 2000; Williams, Burgess and Rahbek 2000). Sometimes, focusing on a flagship species can have negative repercussions, for example when the flagship's appeal is so strong that environments are managed for just its benefit, or its success is artificially manipulated; thus, the goal of wider ecosystem health and the utility of the flagship as an indicator of such health are compromised (Simberloff 1998). Thus, the link between concern for, and action on behalf of, a charismatic species with overall environmental concern and action is an important one to consider. Do such links exist? If not, how can they be created? While beyond the scope of this paper, these are important questions to ask, and hopefully answer.

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Notes

¹ Seaturtle.org, run by biologist Michael Coyne, is a key website for the sea turtle enthusiast and currently receives about 10,000 hits per day (Coyne, pers comm, January 2004).

² Sponsoring organisations may be government, non-government, or private.

³ Ecotourism has many goals, including those to generate income to support conservation efforts and to provide economic incentives for local communities to limit more extractive uses of resources (Ross and Wall 1999). However, ecotourism often falls short of expectations. Wearing (2001) and Gray (2003) argue that, because they contribute money and labour to conservation and sometimes pay money for food and lodgings directly to local families, volunteers may be the ideal ecotourist. The role of volunteers as ecotourists is not unproblematic and some potential repercussions are addressed by Gray (2003).

⁴ http://www.unv.org/infobase/articles/2002/02_10_04USA_SG_Report_final.pdf

⁵ See for example British Trust for Conservation Volunteers (<http://www.btcv.org/volops.html/>), Earthwatch Institute (<http://www.earthwatch.org/>), Frontiers (<http://www.frontier.ac.uk/>), Green Volunteers (<http://www.greenvol.com/>), Wildlife Trusts (<http://www.wildlifetrusts.org/>).

⁶ <http://www.earthwatch.org/>

⁷ Existing research on southern NGOs often portrays them as thinly veiled fronts for northern parent organisations (for example Meyer 1999). This type of research, focusing on the economic and political structures, fails to consider the incentives for individuals from southern countries to participate in such organisations.

⁸ In most cases, volunteers linked the desire to see and help turtles. Had they identified only the desire to see turtles, this motive would be classified as extrinsic.

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