

## TCS Career Survey Results and Analysis

During TCS 20, a survey was used to meet the needs of three different groups; a college-bound student completing a Senior Project with the goal of previewing a possible career involving the protection and improvement of the environment, an audience from the same school hoping to learn about possible career paths and educational opportunities, and The Coastal Society, a nonprofit organization of professionals and students committed to actively addressing emerging coastal issues and providing supplementary educational opportunities to its members through survey backed requests for seminars and forums.

This survey was intended to gather information and input from as many individuals from as many different fields as possible. A stack of surveys was placed in a box on the conference registration table in the hotel's main lobby for people to take and return. In addition, many surveys were handed out during breaks between sessions. 53 out of roughly 280 (19%) conference participants completed the survey and their time and thoughts are greatly appreciated. It should also be noted that the following data analysis does not reflect a significant response from the student portion of The Coastal Society membership, due to a lack of participation from that body. It is possible that these individuals did not feel that they could contribute much to the survey due to the presence of many questions directed towards professionals looking back on their educational paths. In future surveys, formats will be altered to more effectively advertise to and invite as many groups as possible to share their experiences, thus yielding a broader and more diverse feedback spectrum. Specific improvements would include creating either more distinctive categories, or a more open-ended format for response.

The following report, which discusses the responses of those individuals who participated in the survey, is divided into 6 questions that were centrally related to the topic of environmental careers. Beginning with a question asking the participant to share their current career field, the survey sought to obtain information on the genres and sources of knowledge important to the individual's job. Next, the participant was asked specifically about what undergraduate and graduate courses had helped to prepare them for their professional career. Following this, the individual was asked to use hindsight to determine what courses they wished they had taken. The final question dealt with solving this knowledge gap by opening up the space for requests for supplementary topics of environmental issues that could be incorporated into The Coastal Society's newsletter and future conference concurrent sessions.

In addition to shedding light on possible and unique environmental career paths, the survey showed the many interactions between the different entities within the overall environmental field. The diversity of organizations and individuals certainly aids in the unilateral effort of conservation and management, but at the same time, it may often hamper processes and makes decisions more complex. In order for optimal functionality and cooperation to be achieved, the individuals involved need to have a basic understanding of each other's position. While the following survey shows that job experience is considered the most important source of knowledge, confusion and policy disputes can be avoided by a well rounded education, where the student should aim to diversify his/her experience within the environmental theme. This track appears to be suggested by many of the surveyed individuals, as people involved in the two largest

fields, science and policy, expressed both regret in not taking more courses in the opposite field during college, and a strong desire to compensate by continuing to learn throughout their careers. Here, The Coastal Society plays a critical role in that process, by supplying supplementary information at their conferences, and serving to facilitate discussion between potential partners. Groups such as TCS play a critical role in providing information from both fields to environmental practitioners.

<b>1. What is your current occupation?</b>		
<b>Career</b>	<b>Number of Individuals</b>	<b>% of Total Responses</b>
<i>Local Government</i>	2	4
<i>State Government</i>	7	13
<i>Federal Government</i>	19	36
<i>Government Contractor</i>	6	11
<i>Environmental Advocate</i>	0	0
<i>Business</i>	3	6
<i>Teacher</i>	15	28
<i>Resource Manager</i>	3	6
<i>Elected/Appointed Official</i>	1	2
<i>Other</i>	11	21

<b>2. What fields of knowledge are important in preparation for your job?</b>		
<b>Field</b>	<b>Selections</b>	<b>% of Total Selections</b>
<i>General Sciences</i>	30	57
<i>Environmental Science</i>	37	70
<i>Environmental Studies</i>	35	66
<i>Human Studies</i>	31	59
<i>Management</i>	38	72
<i>Economics</i>	26	49
<i>Professional Certification</i>	13	25
<i>Personal Skill Building</i>	42	79
<i>Other</i>	19	36

<b>3. Where did you acquire this knowledge?</b>		
Type of Education	Total Individuals Who Listed As Important	% of Total Responses
<i>Undergraduate</i>	25	47
<i>Graduate</i>	44	83
<i>Job Training</i>	16	30
<i>Job Experience</i>	48	91
<i>Continuing Professional Education</i>	14	26
<i>Other</i>	9	17

\* The survey participants were asked to rank their top two sources of relevant knowledge, but only a dozen did so. Therefore, after considering this and the fact that more than two sources may have played major roles in training, the data was combined.

<b>4. What undergraduate or graduate courses helped you most in your current job?</b>		
<b>Topic</b>	<b>Number of Individuals</b>	<b>% of Total Response</b>
<i>Environmental Science</i>	6	11
<i>Environmental Studies</i>	2	4
<i>Environmental Law</i>	9	17
<i>Environmental Policy</i>	13	25
<i>Ecology</i>	11	21
<i>Oceanography</i>	4	8
<i>Biology</i>	9	17
<i>Physics</i>	5	9
<i>Social Sciences</i>	9	17
<i>Journalism/Writing</i>	11	21
<i>GIS</i>	8	15
<i>Marine/Coastal Management</i>	11	21
<i>Marine Engineering</i>	2	4
<i>Economics</i>	10	19
<i>Public Speaking</i>	5	9
<i>Business Management</i>	2	4
<i>Technology/Computer Skills</i>	3	4
<i>Statistics</i>	4	8
<i>Field Studies</i>	2	4
<i>Conflict Resolution</i>	2	4
<i>Education/Teaching</i>	2	4
<i>Research Techniques</i>	4	8

<b>5. What courses do you wish you had taken?</b>		
<b>Topic</b>	<b>Number of Individuals</b>	<b>% of Total Responses</b>
<i>Economics</i>	9	17
<i>Social Sciences</i>	13	25
<i>Oceanography</i>	5	9
<i>Ecology</i>	5	9
<i>Political Science</i>	3	6
<i>Environmental Science</i>	2	4
<i>Marine Biology</i>	4	8
<i>Coastal Processes</i>	2	4
<i>Statistics</i>	3	6
<i>Language</i>	2	4
<i>Environmental Policy</i>	8	15
<i>Environmental Management</i>	6	11
<i>Writing</i>	3	6
<i>Public Speaking</i>	3	6
<i>Land Use Planning</i>	4	8
<i>IT</i>	2	4
<i>Communications</i>	2	4
<i>Business Management</i>	2	4
<i>Law</i>	4	8
<i>Fisheries Science</i>	2	4
<i>GIS</i>	4	8
<i>Governmental Processes</i>	3	6

<b>6. What areas of information would you like The Coastal Society to cover through seminar and/or newsletter articles in the future?</b>		
<b>Topic</b>	<b>Requests</b>	<b>% of Total Response</b>
<i>Integration of Science, Law, &amp; Public Policy</i>	13	25
<i>Government Processes/Environmental Laws</i>	7	13
<i>Resource Management</i>	5	9
<i>GIS</i>	5	9
<i>Outreach</i>	5	9
<i>Regional Success Stories</i>	5	9
<i>Moral/Economic Conflict in Coastal Regions</i>	5	9
<i>Ecosystem Management</i>	4	8
<i>Conflict Resolution</i>	4	8
<i>Energy</i>	3	6
<i>Leadership Training</i>	2	4
<i>Career Development</i>	2	4
<i>Land Use Impact/Planning</i>	2	4
<i>Dredging</i>	1	2
<i>Climate Change</i>	1	2
<i>Shipping</i>	1	2
<i>Invasive Species</i>	1	2