

Claremont Colleges Sustainability Survey

Preliminary Report – August 2008

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Claremont

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Author's Note

The author and researchers of this report wish to thank the committees of the Claremont College Sustainability Initiative for their support of this project and their drives to promote ecological sustainability at the Claremont Colleges.

Raw data from this survey project may be useful for a variety of projects beyond this report. One or more of our researchers may be available to consult about collaborative research involving this data. Additionally, after completion of data collection, the raw data may be available for administrative or academic purposes by contacting our research team and showing IRB approval for its use.

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Introduction

This is a preliminary report of the Claremont Colleges Sustainability Survey (CCSS). The CCSS is a supplemental social survey for a project called the Urban Ecosystem Analysis (UEA). The UEA is a scientific inventory and analysis of the ecological impacts of trees on the Claremont Colleges, and was supported by the Claremont Colleges Sustainability Initiative (CCSI) for 2008. Results of the UEA will be used by the CCSI committee and the Claremont University Consortium to make decisions about landscape management on Claremont College campuses.

The CCSS report is meant as a stand-alone document to inform the UEA and other sustainability decisions made at the Claremont Colleges. The two main goals of the CCSS are 1) To provide a baseline of environmentalism at the Claremont Colleges in terms of current attitudes and behaviors, and 2) To obtain evaluations of current landscaping practices at the Claremont Colleges from the perspective of community members.

A baseline for environmentalism

Knowing levels of environmental attitudes and behaviors should be helpful in gauging whether Claremont College community members are interested and engaged in environmental issues in the first place, and potentially the extent that they will support and engage in environmental initiatives. This is important because while many environmental issues can be addressed through administrative policy and technological advances, it is individuals who must adapt their attitudes and behaviors to these changes, and ultimately it is individual choices and behavior that have the greatest impact on ecological sustainability (Oskamp, 2000a, 2000b; Oskamp & Schultz, 2006). A recycling program is a readily available anecdotal example of this. The program may be a boon to environmental sustainability on campus (as well as a potential economic one), but only to the extent that individuals are aware of it, interested in it, want it, and use it.

A variety of items from the CCSS should be of particular interest regarding the Claremont Colleges Sustainability Initiative, and are included in this report. In addition to a variety of “standard” environmental behaviors (e.g., recycling), the survey provides data about rates of attending or teaching environmentally focused classes, of volunteering for campus-based environmental groups, and a variety of other campus-specific items. The results, then, can be used to identify areas of sustainability that need improvement, including academic engagement and social action.

Landscape evaluations

The CCSS also includes items asking respondents to evaluate the campus landscape in terms of aesthetic, functional, and of course, sustainable character. The results of these items provide a fairly straightforward and practical contribution to the Claremont College sustainability by highlighting areas of landscape design and maintenance that may need improvement. More specifically, the report will provide data about whether individuals want to see more or less of a landscape feature (e.g., trees, pavement, buildings) on campus, and participant ratings of the sustainability of current sustainable practices.

Introduction

Why this is a “preliminary” report

This report is considered preliminary for a variety of reasons. Foremost among them is that the data collection is not complete, and will not be until near the end of the Fall 2008 semester. As such, readers should consider the results of this report informative, but tentative.

Because of this, and because this report is meant to be easily read and understood by a wide audience, this report focuses on descriptive analyses rather than comparative analyses, and interpretive statements are kept to a minimum. Nevertheless, the data is presented in a way so that it should speak for itself, and should be useful on many levels.

Brief description of materials and methods

The CCSS is an online survey consisting of approximately 150 items. These items cover a range of topics about environmental behaviors, values, and attitudes, knowledge about certain environmental practices, identification with the Claremont Colleges, evaluations of the Claremont College landscape, and various demographic items like gender and age.

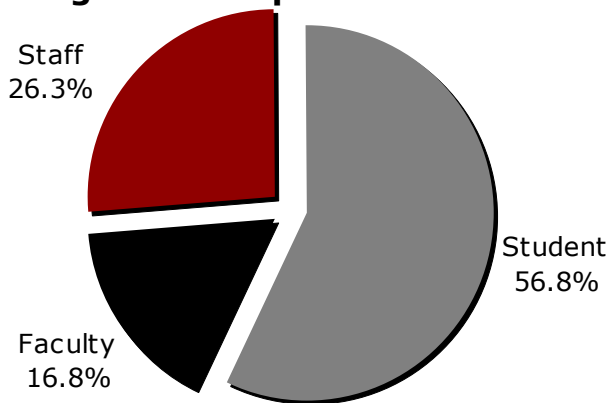
All adult student, faculty, and staff members of the Claremont Colleges are eligible to participate in the survey. Invitations are distributed through campus-based listservers, allowing potential respondents to self-select themselves into the survey by clicking a hyperlink. Upon clicking the link, respondents are directed to an informed consent form, and then on to the survey itself. Upon completing the survey, participants are offered an opportunity to participate in a raffle for one of twenty Target gift cards.

Participants

At present, invitations have been distributed to all members of Claremont Graduate University, and to faculty and staff at Pitzer College and Claremont McKenna College. The remaining data collection is scheduled for early in the Fall 2008 Semester. The sample size to date consists of 315 respondents. More detailed information about participants is presented in the *Sample Characteristics* section.

Sample Characteristics

Figure 1. Respondent Status



The preliminary sample included responses from 315 Claremont College community members. As shown in Figure 1, the majority of respondents were students (56.8%).

Figure 2 shows that the 315 respondents were primarily from CGU (54.9%), CMC (30.5%), and Pitzer College (12.4%), though this is expected to diversify as sampling continues.

Figure 2. Campus Affiliation

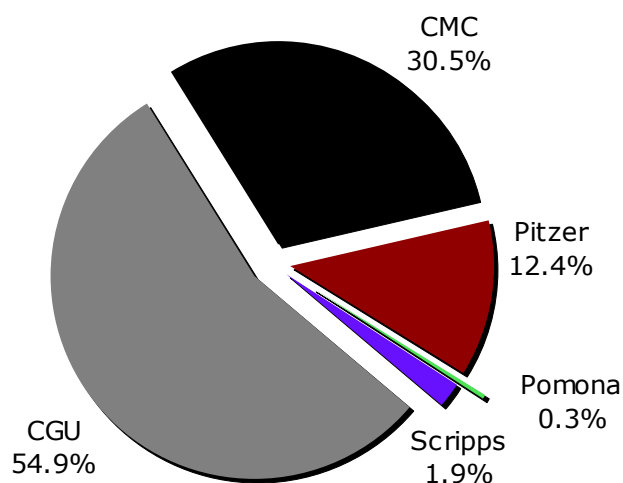
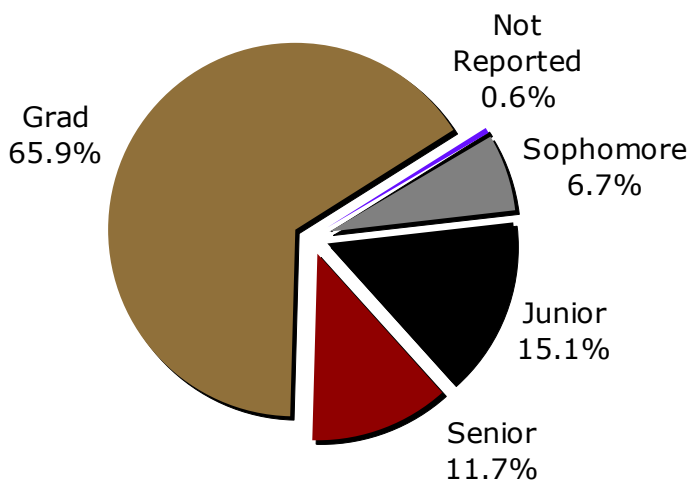


Figure 3. Student Status



As shown in Figure 3, of 179 student respondents, the majority (65.9%) reported status as a graduate student, followed by juniors (15.1%). No freshman have responded to the survey to date.

Sample Characteristics

Figure 4. Gender

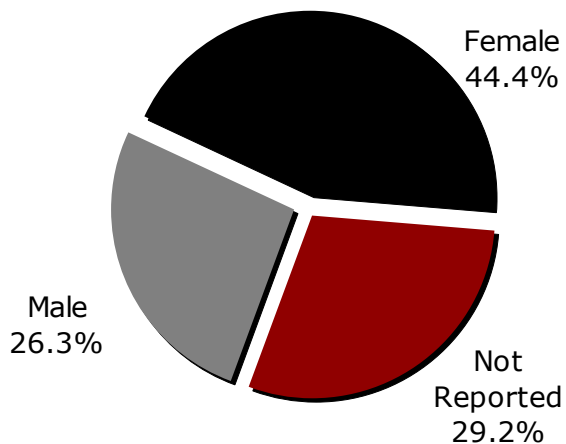
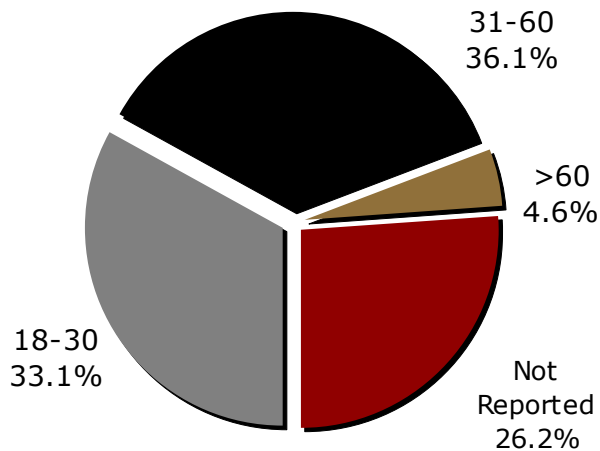


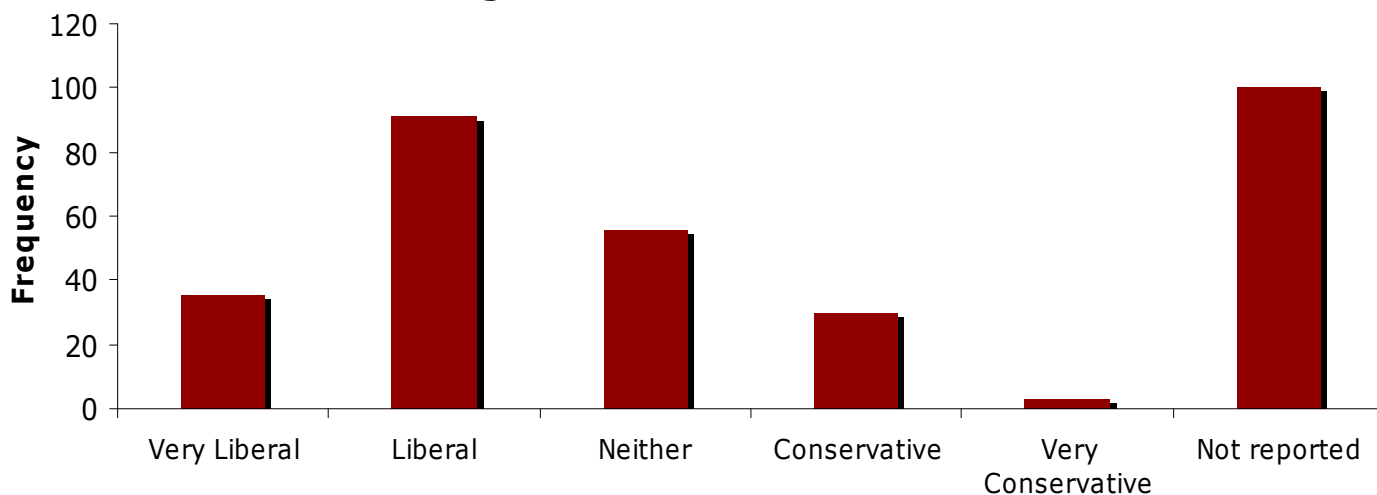
Figure 5. Age Groups



Figures 4 and 5 show breakdowns of gender and age (total $n = 315$). The greatest proportion of the sample (44.4%) reported that they were female, though a relatively large number (29.2%) did not provide any gender information, making it unclear who are the majority of respondents. As to age most of the sample (36.1%) reported that they were between the ages of 31 and 60. Note, because of the relatively small sample size, many of the age groups have

Political orientation of the survey respondents ($n = 315$) is shown in the chart below (Figure 6). Note that the majority of respondents who answered the question reported a “liberal” orientation. Though arguable, this is an important observation since those on the political left commonly report more positive environmental attitudes and behaviors (e.g., Van Liere and Dunlap, 1980).

Figure 6. Political Orientation



Environmental Action and Engagement

Respondents of the CCSS were asked a variety of questions about their environmental behaviors and engagement, both on and off campus. A set of questions asked student respondents ($n = 179$) whether they attended environmentally focused classes, faculty respondents ($n = 53$) whether they taught any environmentally focused classes, and staff ($n = 83$) whether their primary job functions were relevant to the environment or ecology on campus. Two additional questions asked all respondents ($n = 315$) whether they participated in campus-based environmental committees, and whether they engaged in research or writing activities geared towards environmental issues. Notably, around 18% of students attended environmentally focused classes, and about 15% of faculty taught such classes. Additionally, roughly 16% of all respondents engaged in research or writing activities about environmental issues. These data demonstrate that there is active academic interest and participation in environmental issues at the Claremont Colleges.

Figure 7. Percentage of Students who Attend Classes Focused on Environmental Issues

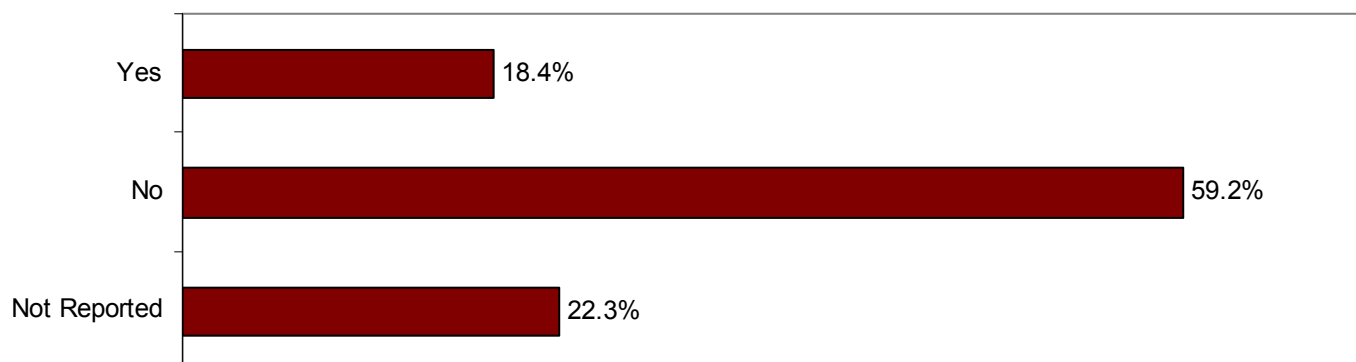
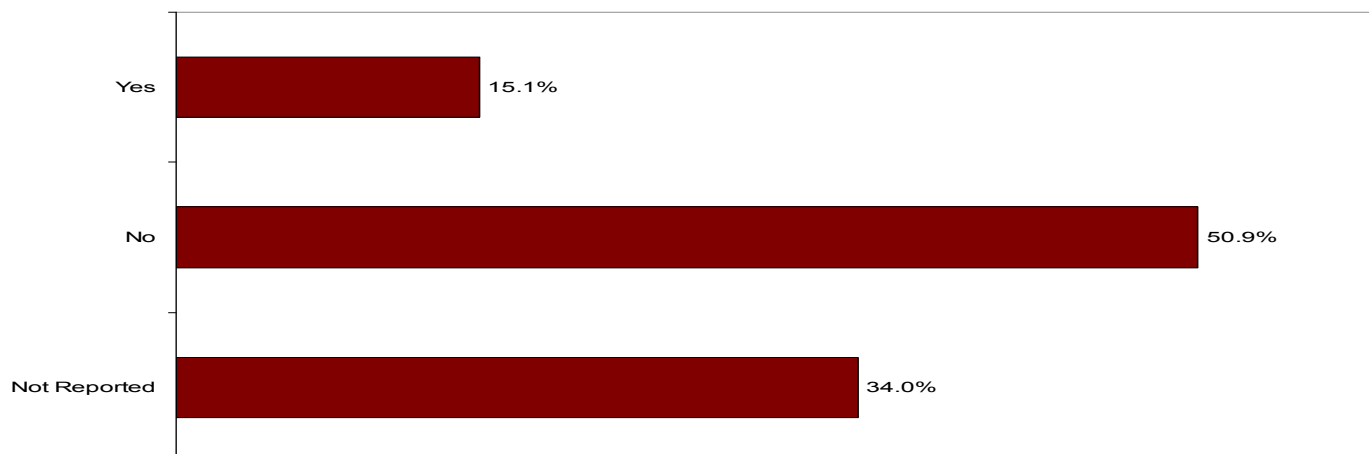


Figure 8. Percentage of Faculty who Teach Classes Focused on Environmental Issues



Environmental Action and Engagement

Figure 9. Percentage of Staff whose Primary Job Functions Relate to Environment and Ecological Sustainability

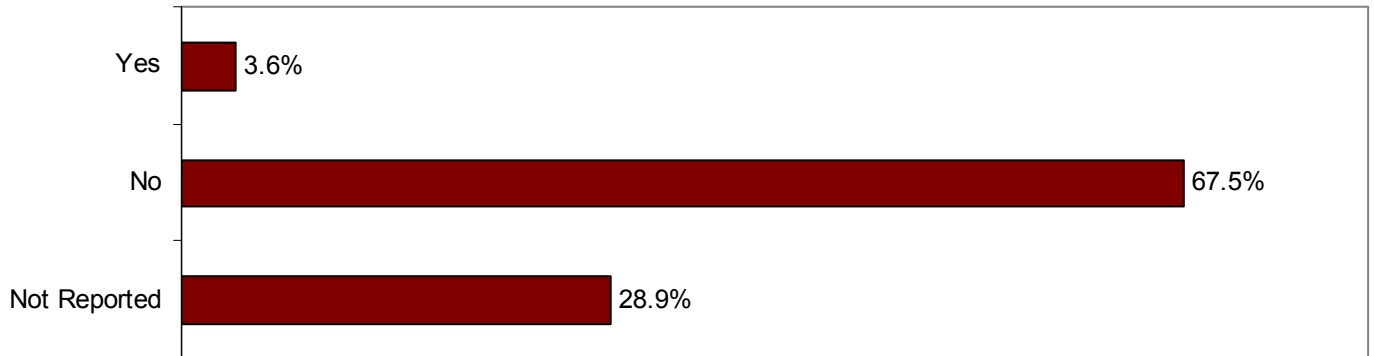


Figure 10. Percentage of Respondents who Participate in Committees that Address Campus Environmental Issues

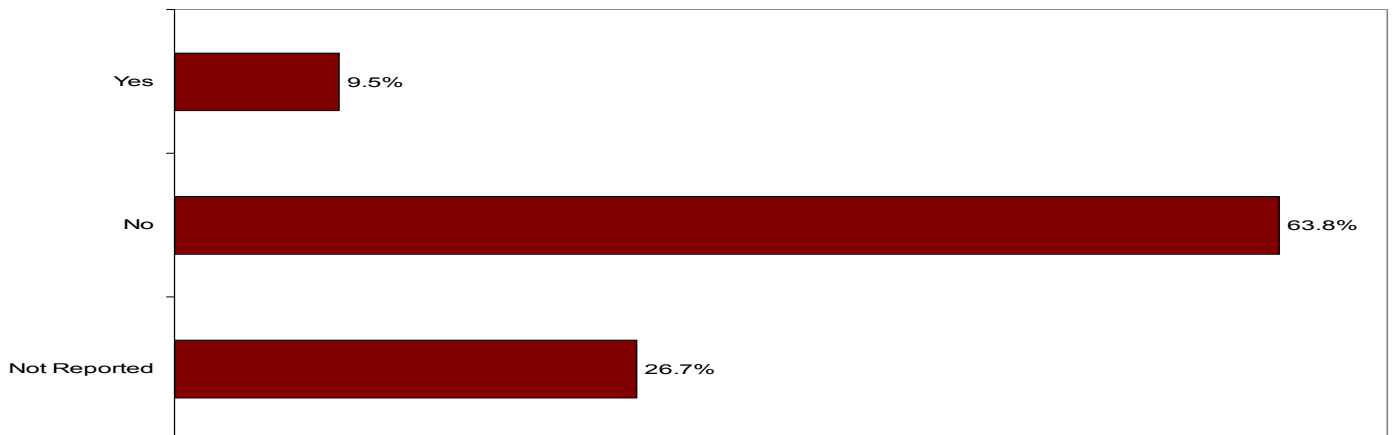
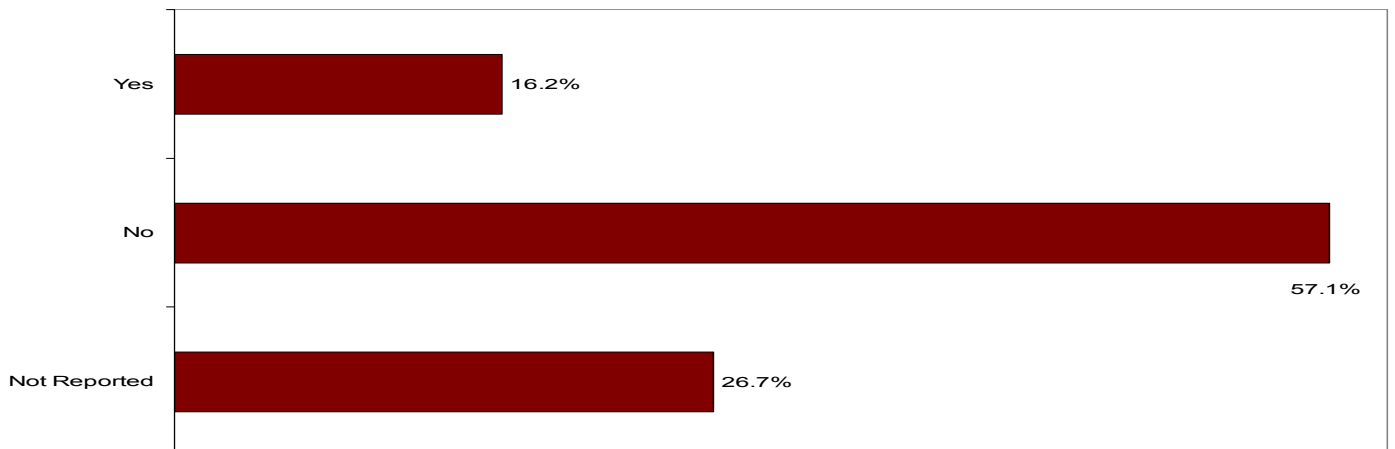


Figure 11. Percentage of Respondents who Conduct Research or Writing focused on Environmental Issues



Environmental Action and Engagement

Respondents were also asked how often they had engaged in a variety of environmentally relevant behaviors in the last year. Most of the items were adapted from an existing scale of environmental behavior (Schultz & Zelezny, 1998), though additional items were added to address social action at the Claremont Colleges specifically. The results from these items are displayed in Table 1. Each item was scored using a Likert-type scale ranging from 1 (*Never*) to 5 (*Often*).

Respondents reported relatively high engagement in the first five items in the scale (M range = 4.16–4.48). These items all reflected reuse and recycling of consumer products, and these high means are perhaps not surprising given the modern ease of access to recycling programs in many municipalities, organizations, and institutions (such as the Claremont Colleges). Compared to the other items, respondents also reported somewhat frequent rates of voting for candidates who support environmental issues, conserving fuel by walking or biking, and picking up litter (M range = 3.54–4.02). Respondents reported fairly low rates of composting food scraps, using public transportation as an alternative to driving, writing letters in support of environmental issues, and volunteering time for environmental or other social issues (M range = 1.79–2.88).

In sum, while these results do show a diversity of environmentally friendly activity among Claremont College members, they also highlight some potential areas for improvement, particularly in the areas of civic engagement and activism. Many of the low-scoring behaviors (e.g., volunteering on campus) can potentially be improved through campus-based interventions designed for that purpose.

Table 1. Rates of environmental activity within the last year

	Mean (SD)	n
1. Looked for ways to reuse things	4.41 (.84)	241
2. Recycled newspapers	4.48 (1.06)	223
3. Recycled cans or bottles	4.76 (.60)	240
4. Encouraged friends or family to recycle	4.16 (1.12)	241
5. Purchased products in reusable or recyclable containers	4.28 (.945)	241
6. Picked up litter that was not your own	4.02 (1.07)	241
7. Composted food scraps	2.31 (1.39)	240
8. Conserved gasoline by walking or bicycling	3.54 (1.31)	241
9. Used public transportation as an alternative to driving	2.88 (1.48)	239
10. Wrote a letter supporting an environmental candidate	1.94 (1.36)	241
11. Voted for a candidate who supported environmental issues	3.57 (1.49)	223
12. Volunteered time to help a <i>campus-based</i> environmental group, club, or project	1.79 (1.24)	238
13. Volunteered time to help an <i>off-campus</i> environmental group, club, or project	2.13 (1.45)	239
14. Volunteered time to help a <i>campus-based</i> group, club, or project that addresses social issues other than environmental ones	2.14 (1.48)	238
15. Volunteered time to help an <i>off-campus</i> group, club, or project that addresses social issues other than environmental ones	2.51 (1.59)	239

Note: Sample sizes (n) reflect missing responses ranging from 23.5% to 29.2% of each item.

Environmental Orientations

Environmental values and concerns are likely factors in motivating individuals' positive environmental activities, and their involvement in environmental issues. Two measures of environmental orientation were included in the CCSS, the New Ecological Paradigm (NEP, also known as the New Environmental Paradigm, Dunlap & Van Liere, 1978, 1984; Dunlap, Van Liere, Mertig, & Jones, 2000) and the Structure of Environmental Concern (SEC, Schultz, 2001).

The New Ecological Paradigm

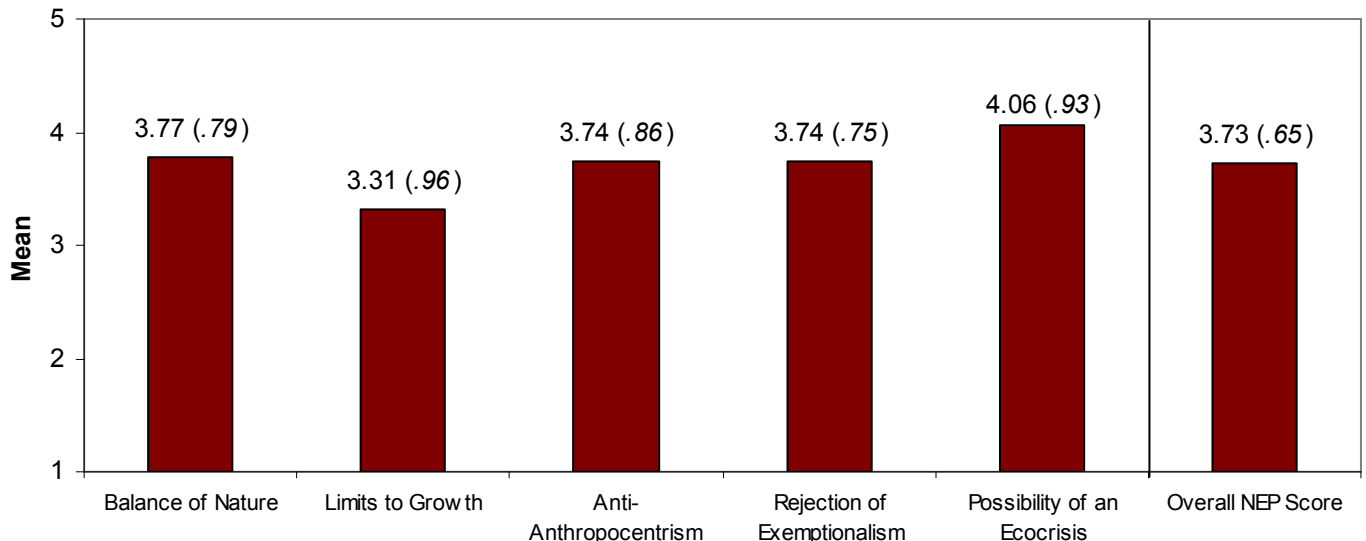
Though not necessarily superior, the NEP (Appendix A) is one of the oldest and most widely cited scales of environmental orientation, and arguably the most prominent. It has been used in sociological and psychological research as a benchmark for environmental values, though it is often referred to as an indicator of environmental concern as well. The NEP is designed to tap an environmental *worldview*. The worldview, for the most part, is derived from scientifically and socially approved ideas of environmentalism. Those who fit the model of the NEP (i.e., score highly on the NEP scale), generally hold beliefs of humans as an integral part of a broader ecological system, a part that relies symbiotically on the whole. Those who do not fit the model of the NEP (i.e., those who score lowly on the NEP scale) are said to fit a *dominant social paradigm*, or to hold a worldview where humans and humankind are superior to nature, able to adapt indefinitely to natural changes, able to produce technology that will combat all environmental threats to humanity, and ultimately able to control the natural world.

The NEP scale contains fifteen items designed to tap five separate components. These components are beliefs about humanity's ability to upset the fragile *balance of nature*, the acknowledgement that there are *limits to growth* in human society, beliefs against *anthropocentrism* (beliefs that humans are superior to the rest of nature), a *rejection of exemptionalism* that includes beliefs that humans are just as subject to the laws of nature as any other organism, and beliefs in the possibility of an *ecocrisis* should environmental issues go unaddressed. Each item was measured using a Likert-type scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Composites mean scores were computed for each component and for the overall scale. Note that four of the five components (*balance of nature*, *limits to growth*, *anthropocentrism*, and *rejection of exemptionalism*) retained fairly low reliability coefficients, *Cronbach's alpha* = .58–.69. The overall scale, however, was reasonably reliable, *Cronbach's alpha* = .86.

As seen in Figure 12 on the next page, the results suggest that Claremont College respondents tend to favor the NEP, as opposed to the dominant social paradigm. The components ranged from $M = 3.31$, $SD = .96$ for beliefs in the *limits to growth* in human society to $M = 4.06$, $SD = .93$ for beliefs in the possibility of an *ecocrisis*. The overall score of the NEP for respondents was $M = 3.73$, $SD = .65$.

Environmental Orientations

Figure 12. The New Ecological Paradigm at the Claremont Colleges



Note: Sample sizes range from 269 to 271. Means are shown for each category with standard deviations in parentheses.

The Structure of Environmental Concern

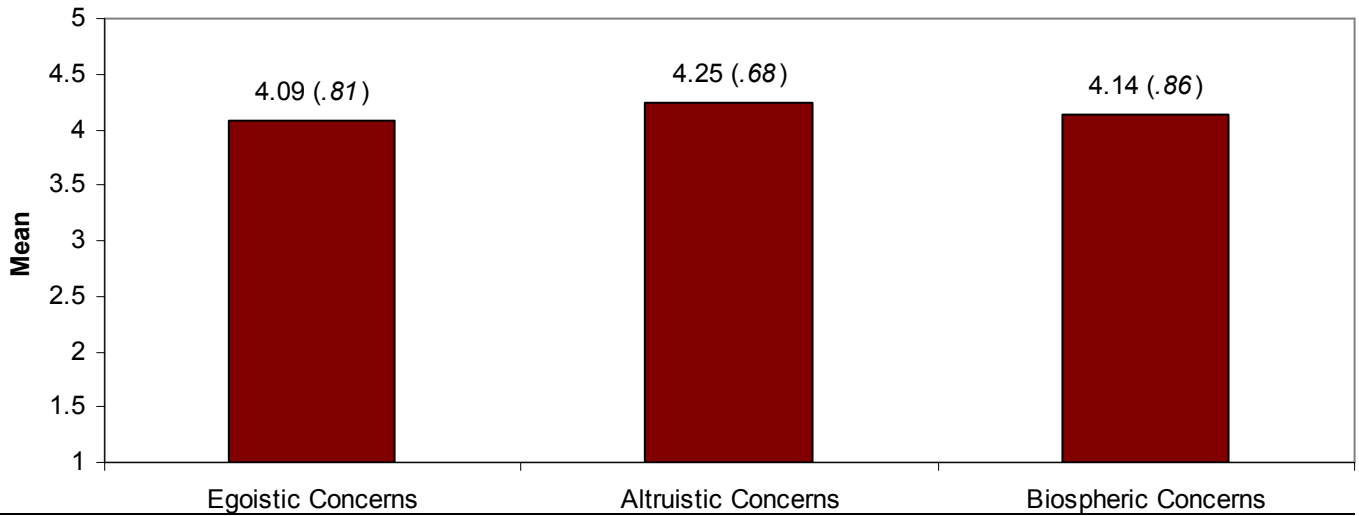
The SEC (also known as the *Motivations for Environmental Concern* scale) is designed to capture three types of motivations for attention to environmental issues. These are *egoistic* concerns about the effects environmental problems have on the self (e.g., one's health and lifestyle), *altruistic* concerns about the effects of environmental problems on other humans (e.g., one's community), and *biospheric* concerns about the effects environmental problems have on nature and ecology at large (e.g., plants and birds).

The SEC (Appendix A) is composed of 12 separate items tapping these three components. Respondents used a Likert-type scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*) to respond to the statements contained in the scale. Each component retained satisfactory internal reliability ranging from *Cronbach's alpha* = .86 to .94.

As shown in Figure 13, respondents scored $M = 4.08$, $SD = .81$ for egoistic concerns, $M = 4.25$, $SD = .68$ for altruistic concerns, and $M = 4.14$, $SD = .86$ for biospheric concerns. In summary, Claremont College respondents were somewhat highly concerned about the environment at multiple levels.

Environmental Orientations

Figure 13. The Structure of Environmental Concern at the Claremont Colleges



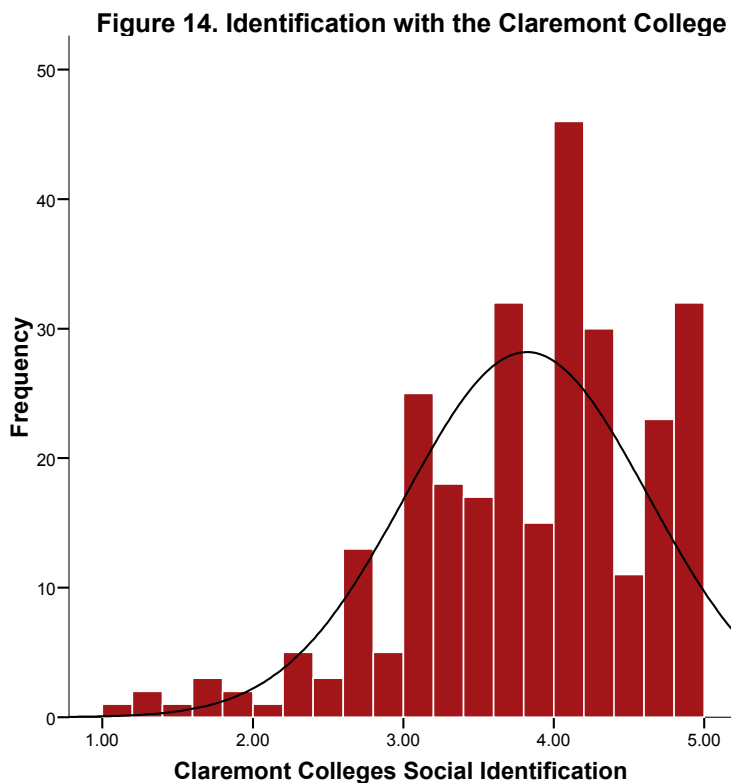
Note: Sample sizes range from 243 to 245. Means are shown for each category with standard deviations in parentheses.

Social Identification

The extent that respondents socially identify with their Claremont College is potentially important for a variety of reasons. Hypothetically, the more respondents identify with their Claremont College community, the more likely they will be to show concern for its environmental condition, to adhere to policies and procedures like recycling, to get involved in campus issues (both environmental and non-environmental), and a variety of other benefits.

An eight-item measure of social identification (Appendix A) was included in the CCSS to measure social identification at the Claremont Colleges. It was a fairly common measure of identification adapted from CGU's Professor Michael Hogg (e.g., Hogg & Haines, 1996, 1998; Hogg, Sherman, Dierselhuis, Maitner, & Moffitt, 2007). The items measured such features as liking being a member of a Claremont College community, connections to others in the community, and a sense of belonging within the community. The items were measured using a Likert-type scale ranging from 1 (*Strongly disagree*) to 5 (*Strongly agree*). Greater agreement with each item indicated more social identification with the college community. As a note, respondents were directed to consider identification with their *specific* college (e.g., Pitzer, CMC). Their combined responses have been used here to form a composite of identification at the colleges overall.

The composite measure was highly reliable, *Cronbach's alpha* = .92. As can be seen in Figure 14 below, respondents showed a positive identification with the college community, $M = 3.82$, $SD = .81$, $n = 285$.



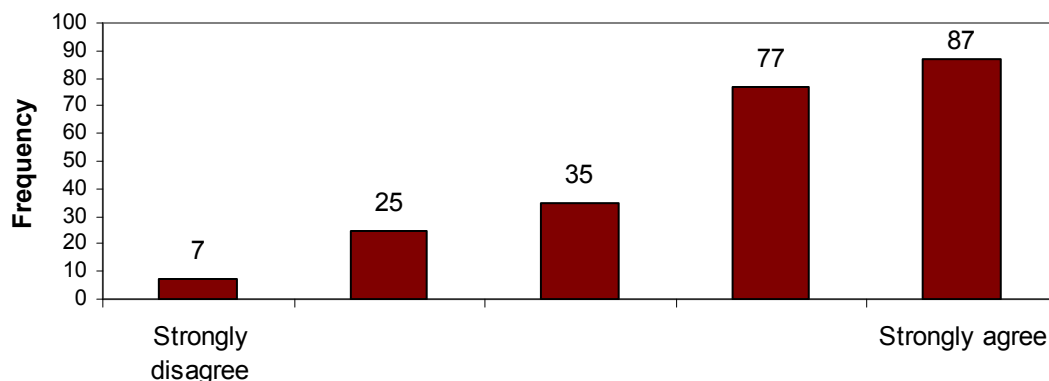
Claremont College Landscape Evaluations

The second broad goal of the CCSS was to obtain respondent evaluations of the Claremont Colleges landscape. This was done in a variety of ways to measure perceptions about the aesthetic and functional qualities of the landscape, as well as ecological ones. The measures included a two item rating of the aesthetic and ecological character of the campus, several items measuring desires to see more or less of various landscaping features (e.g., trees), and a measure asking participants to grade the sustainability of current landscaping practices.

Two Item Evaluation of Aesthetic and Ecological Qualities of the Landscape

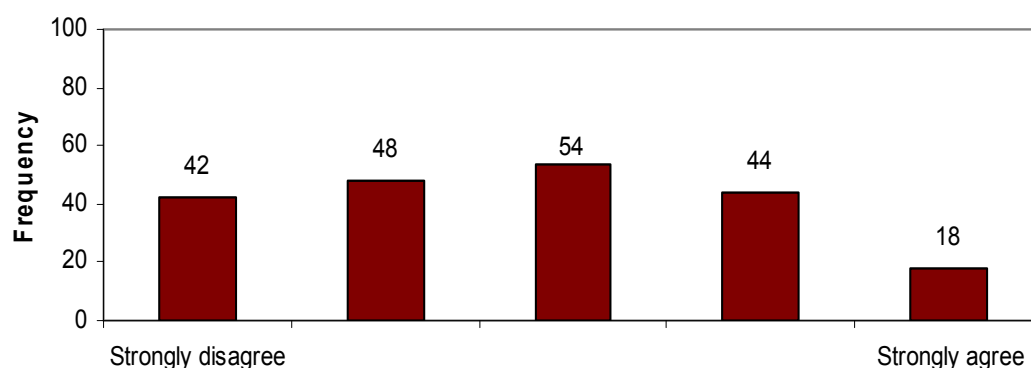
Two items asked respondents to agree with statements about the aesthetic and ecological character of the campus. These items were rated using a Likert-type scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

Figure 15. Agreement with the Statement "My College's Landscape is Aesthetically Pleasing"



As seen in Figure 15, respondents, for the most part, found their campus landscape aesthetically pleasing, $M = 3.92$, $SD = 1.11$, $n = 231$.

Figure 16. Agreement with the Statement "My College's Landscape is Environmentally Friendly"



Perceptions of sustainability are less positive. As shown in Figure 16, a relatively large number of respondents disagreed that the landscape was environmentally friendly, $M = 2.75$, $SD = 1.25$, $n = 206$.

Claremont College Landscape Evaluations

Landscaping Features

Participants were presented a set of thirteen campus landscape features and asked to report if they would like to see more or less of each in response to the following scenario:

Think for a moment about the function and utility of various landscaping features on campus. Imagine that you are in charge of landscape planning at the Claremont Colleges, and that you can add or remove various features and facilities in the landscape at will. What will you do? For each of the following, please rate whether you would like to see more or less of the feature, or if you think it is appropriate as is.

Responses are shown in Table 2, and select items are shown in the figures on the next two pages to demonstrate their range. Notably, a large majority of between 57.1% and 58.7% respondents wanted to see more native trees, plants, shrubs, and drought resistant vegetation. A relatively large proportion of respondents also wanted to see more outdoor classrooms (41.6%) and more specialized outdoor areas like the organic farm and the arboretum (45.7%). A large proportion of respondents also reported a desire to see less pavement on campuses (34.9%), though a similar proportion thought it should be left alone (33.3%).

Table 2. Desires to see more or less landscaping features on campus

	Less/Fewer	Leave As Is	More/Greater
1. Trees that are native to the local area	0.6%	12.1%	57.1%
2. All trees (including native and non-native)	2.9%	31.1%	34.9%
3. Plants and shrubs that are native to the local area	0.3%	12.1%	58.7%
4. All plants and shrubs (including native and non-native)	4.4%	34.3%	29.2%
5. Drought resistant vegetation	0.6%	11.4%	57.1%
6. Open grassy-areas (excluding sports fields)	19.0%	30.2%	22.2%
7. Sports and fitness fields	9.2%	45.1%	14.6%
8. Recreation areas like picnic sites	3.2%	33.3%	34.3%
9. Outdoor entertainment areas where I can see theatre and concerts	2.2%	28.9%	38.1%
10. Pavement	34.9%	33.3%	1.9%
11. Outdoor classrooms	4.1%	22.5%	41.6%
12. Specialized outdoor areas like the organic farm and the arboretum	2.5%	21.0%	45.7%
13. Buildings	5.7%	49.8%	12.1%

Note: Sample sizes (n) range from 213 to 225. Row totals will not equal 100% due to a missing response rate of 28.6% to 32.4% of each item.

Claremont College Landscape Evaluations

Figure 17. Trees that are Native to the Local Area

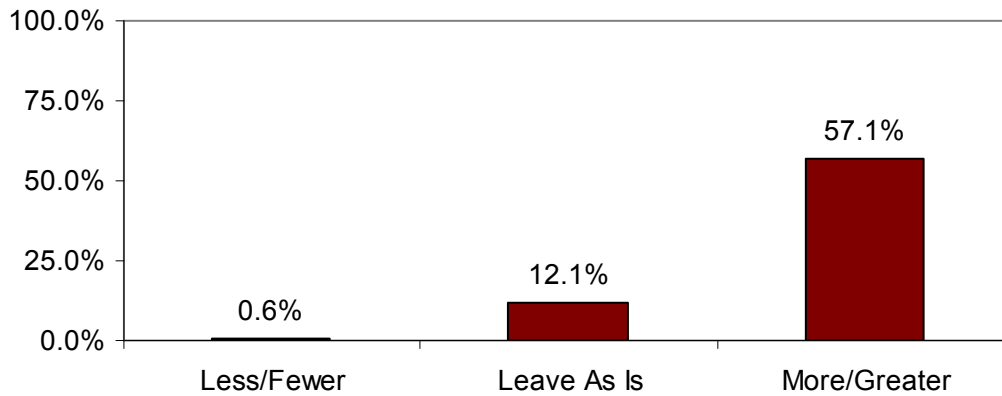


Figure 18. Plants and Shrubs that are Native to the Local Area

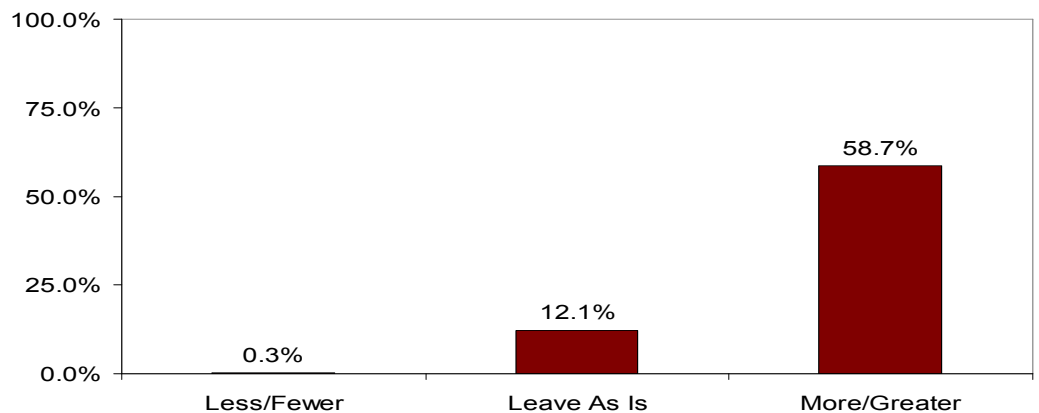
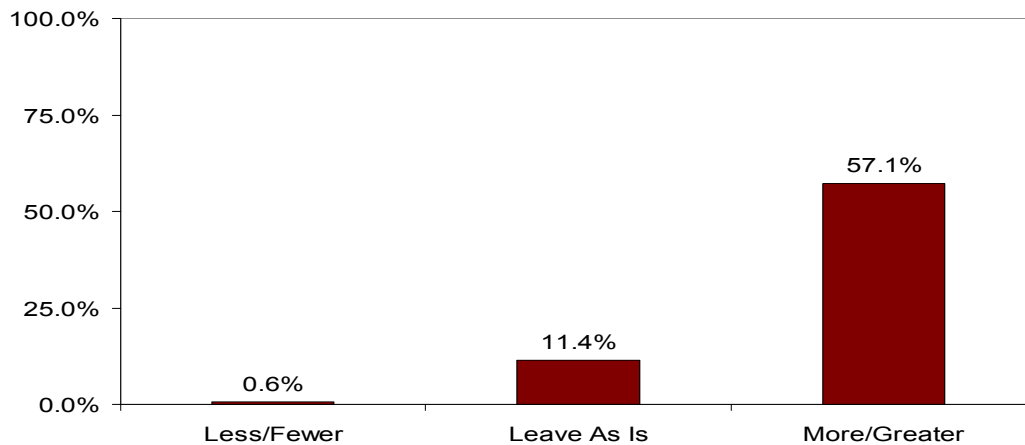


Figure 19. Drought Resistant Vegetation



Claremont College Landscape Evaluations

Figure 20. Pavement

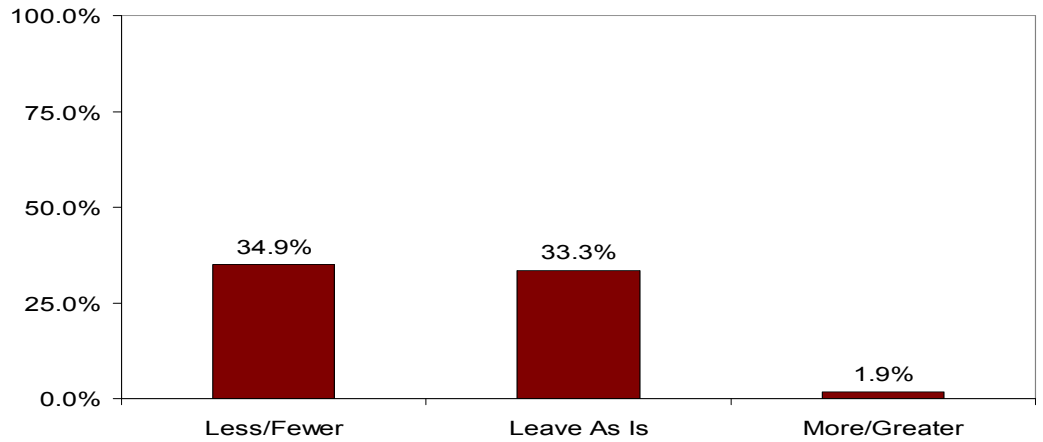


Figure 21. Outdoor Classrooms

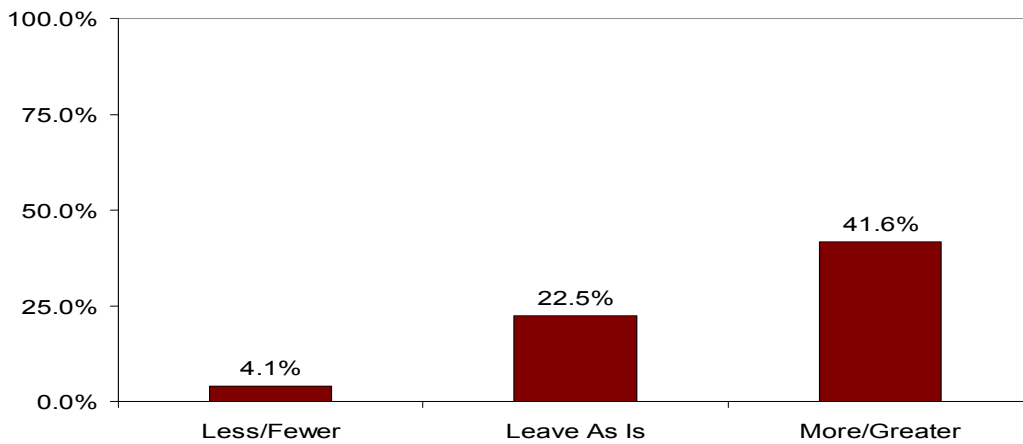
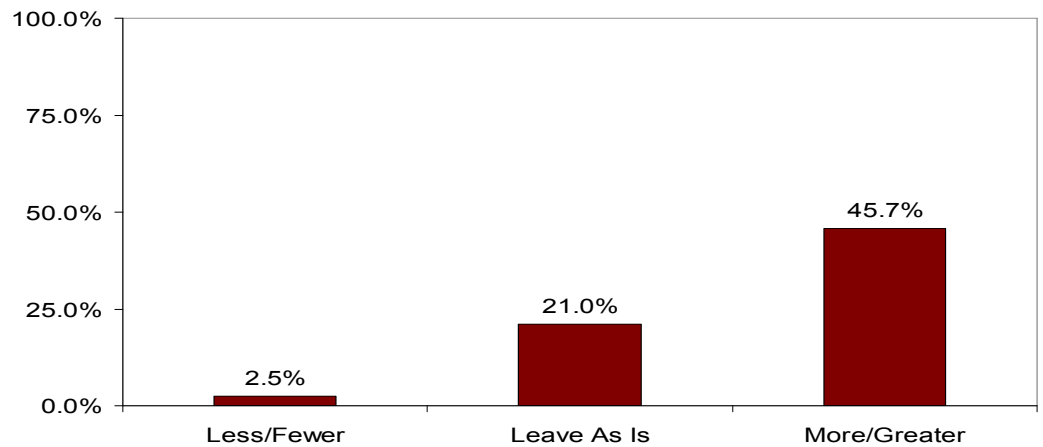


Figure 22. Specialized Outdoor Areas



Claremont College Landscape Evaluations

Grading of Campus Ecological Sustainability

Respondents were presented a set of nine conservation practices at the Claremont Colleges, and asked to grade them using a traditional letter grade. These were coded such that 1 was equal to a *failing* grade (F), 2 was equal to *needs improvement* (D), and so on to 5, *as good as possible* (A).

Note that respondents only awarded between a D and C average in all content areas, suggesting that they feel there is marked room for improvement. The lowest grade was awarded to composting practices, $M = 2.21$, $SD = 1.08$, followed by water usage for landscaping, $M = 2.38$, $SD = 1.11$. The highest grades were awarded to water consumption for purposes besides landscaping, $M = 2.77$, $SD = .91$, and eco-friendly landscaping practices, $M = 2.82$, $SD = 1.08$, though as noted, there is still quite a bit of room for improvement.

Table 3. Respondent grading of ecological sustainability at the Claremont Colleges

	Mean (SD)	n
1. Water usage for <i>landscaping specifically</i>	2.38 (1.11)	194
2. Water consumption for <i>any purpose besides landscaping</i>	2.77 (.91)	194
3. Power consumption	2.54 (.96)	208
4. Resource conservation (e.g., active attempts to use less water, power, or other resources)	2.62 (1.02)	206
5. Ecological conservation in general	2.65 (.97)	200
6. Ecological awareness and education (e.g., active attempts to promote environmentally friendly behavior on campus)	2.55 (1.05)	213
7. Waste management (e.g., trash and recycling)	2.68 (1.08)	213
8. Composting	2.21 (1.08)	171
9. Eco-friendly landscaping practices (e.g., mowing and trimming)	2.82 (1.08)	190

Note: Sample sizes (n) reflect missing responses ranging from 32.4% to 45.7% of each item.

Landscape Recommendations

Respondents were asked to provide recommendations to improve the campus landscape. Specifically, they were presented three open response items asking them to make a recommendation to improve the *aesthetics* of the landscape, the *sustainability* of the landscape, and the *function and utility* of the landscape.

Over 400 suggestions were collected from the respondents, as well as a variety of general observations and complaints. For the purposes of this report, and due to the ongoing data collection only the most obvious major themes are discussed here, rather than a comprehensive set of suggestions. Representative samples of the comments are included in Appendix B.

Across each domain (aesthetic, sustainability, and function and utility) three very overt themes arose from the comments. These suggestions were, for the most part, consistent with the landscape evaluations described earlier. These were suggestions to have less large grassy areas and to replace them with more environmentally friendly vegetation, to add more native, drought resistant trees and plants, and to focus heavily on using less water. It is important to note that many of these comments overlapped. For example, many participants suggested that replacing grass was a wonderful way to save water. Many other individuals reported frustration at seeing sprinklers that water at improper times of day (such as noon when a large part of the spray is evaporated), or at seeing poorly maintained sprinklers that soak streets and sidewalks rather than actual vegetation (a consistent problem at the Honnold Mudd Library among other places).

An additional observation is that the comments to improve the aesthetic qualities and the sustainable qualities of the landscape were remarkably similar. Both sets of responses contained suggestions to add drought resistant plants and to conserve water. In many ways, it seems as if the respondents believed that sustainable landscapes were also attractive. With this point made, it should be observed that a number of participants requesting lower water environments also suggested that the landscape should not be made to look like a desert (e.g., with lots of cactus and prickly shrubs). Rather, they reported that the most pleasing landscapes would include a lot of other low water vegetation, like succulents. A number of respondents also suggested that xeriscaping could be used to shape and form the landscape such that any water used can be redirected and recollected.

In terms of suggestions to improve the function and utility of the landscape, respondents most often requested more outdoor areas for study (including outdoor classrooms), relaxation, and socialization. However, they did not seem to want more *open* outdoor areas (like large grass quads). Rather, they seemed to be interested in planned areas with lots of shade, native vegetation, and places to sit (benches and picnic tables). Many respondents also suggested that the campuses need to be much more pedestrian friendly, and that there should be less focus on pavement and concrete.

Landscape Recommendations

Other major issues were fountains. Respondents often requested more fountains to improve the peaceful and serene quality of the landscapes. Other respondents suggested that the existing fountains needed to be better maintained. The Blaisdell fountain was a consistent artifact of this trend, perhaps because a large portion of the respondents to date are CGU members (the fountain was commonly referred to as “pathetic”). In fact, CGU in general was criticized as being somewhat cold and uninviting, while more favorable comments were made about the efforts of Pitzer, Claremont McKenna, and Scripps Colleges.

Though not necessarily an issue of landscaping, poor quality recycling programs were also a big issue for respondents. Many of them suggested that on any of the Claremont Colleges, the recycling procedures were unclear and inconsistent. Bins were not included in every room, and were often tough to find outside. A notable portion of respondents reported that they often observed janitorial staff at CGU combining recycling and trash, even after a concerted effort has been made to separate it. Suggestions to improve recycling at the Claremont Colleges included using better and more consistent signage, and creating a unified recycling (and composting) program for the entire consortium.

Also not necessarily a landscaping issue, conserving energy by installing solar panels, turning off lights at night, and reducing inefficient use of air conditioning were hot topics in the sample.

Finally, many respondents made comments in favor of improved outreach and education for environmental issues, by improving signage and documentation relating to environmental policies and initiatives, by adding academic programs focused on the issue, and by adding staff positions focused on promoting such outreach.

A number of other types of comments, though much fewer in number, are important to report here for contrast. First, a small but noticeable proportion of respondents reported being happy with the aesthetics of the landscape as they were. Other comments suggested that while it was important to focus on reducing the number of large grassy areas, outdoor sports fields should be retained.

Additionally, a small proportion of respondents included somewhat negative comments about the needlessness of focusing on environmental sustainability, comments reflecting disbelief in any actual environmental problems, and comments that pushing environmental sustainability at all was an unfortunate agenda.

Again, the actual quantity of these negative comments was very few. However, referring back to the importance of understanding environmental attitudes and behaviors, it is important to remember that environmentalism in general can often be a polarizing issue, both socially and politically. This should be considered as policies and programs geared towards increasing sustainability at the colleges are pursued.

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Appendix A – Select Survey Measures

The New Ecological Paradigm Scale

1. We are approaching the number of people the earth can support
 2. Humans have the right to modify the natural environment to suit their needs.
 3. When humans interfere with nature it often produces disastrous consequences.
 4. Human ingenuity will ensure that we do NOT make the earth unlivable.
 5. Humans are severely abusing the environment.
 6. The earth has plenty of natural resources if we just learn how to develop them.
 7. Plants and animals have as much right as humans to exist.
 8. The balance of nature is strong enough to cope with the impacts of modern industrial nations.
 9. Despite our special abilities, humans are still subject to the laws of nature.
 10. The so-called “ecological crisis” facing humankind has been greatly exaggerated.
 11. The earth is like a spaceship with very limited room and resources.
 12. Humans were meant to rule over the rest of nature.
 13. The balance of nature is very delicate and easily upset.
 14. Humans will eventually learn enough about how nature works to be able to control it.
 15. If things continue on their present course, we will soon experience a major ecological catastrophe.
-

Note: Even numbered items are reverse scored. Items 3, 8, and 13 reflect facets of *balance of nature*. Items 1, 6, and 11 reflect facets of *limits to growth*. Items 2, 7, and 12 reflect facets of *anthropocentrism*. Items 4, 9, and 14 reflect facets of *rejection of exemptionalism*. Items 5, 10, and 15 reflect facets of beliefs in the possibility of an *ecocrisis*.

The Structure of Environmental Concern

Instructions: People around the world are generally concerned about environmental problems because of the consequences that result from harming nature. However, people differ in the consequences that concern them the most. Please rate your concern for each item in response to the following statement:

“I am concerned about environmental problems because of the consequences for _____”

1. plants
 2. marine life
 3. birds
 4. animals
 5. me
 6. my lifestyle
 7. my health
 8. my future
 9. people in my community
 10. all people
 11. children
 12. future generations
-

Note: Items 1 to 4 reflect *biospheric* concerns. Items 5 to 8 reflect *egoistic* concerns. Items 9 to 12 reflect *altruistic* concerns.

Appendix A – Select Survey Measures

Identification with the Claremont Colleges

1. I like being a member of my college community
 2. I fit in with other people in my college community
 3. I feel strong ties towards other members of my college community
 4. My college community is important to me
 5. I identify with being a member of my college community
 6. I feel a sense of belonging with other members of college community
 7. I feel similar to other members of my college community
 8. I am a typical member of my college community
-

Appendix B – Representative Suggestions

- Encourage Recycling. I've worked at many other colleges in the past and I am astounded at the lack of recycling opportunities at CMC in particular. Education about water conservation is also an area that could be vastly improved.
- Create a central compost area for ALL colleges to place their compostables
- Waste, especially food waste, needs to be taken care of in a better way. Composting and recycling need to be more prominent, especially in the dining halls.
- WE NEED MORE RECYCLING BINS.
- Hire student gardeners who are interested in the environment and let them do "their thing."
- I am attending CGU for the summer and the A/C is so high (set at 68 degrees!) that the professors open the doors to let the warm air in. This is ridiculous and unacceptable given the energy issues we face.
- TURN DOWN THE A/C!!!!!!
- I think we need to find a way to mobilize staff, faculty and students to work together on making the Claremont Colleges more ecologically balanced. As of now, I don't feel there is much communication on this.
- Channel gray-water from showers and the dining hall into wetland, native-plant marshes, etc.
- The lacrosse field (aka. Parent's field) is often over-watered to the point that the ground will not take in the water, leaving big, muddy patches of land...it's wasteful, inconvenient, and not aesthetically pleasing
- Less watering of the landscape, and better maintenance of the irrigation systems we have.
- Use sprinklers that don't waste copious amounts of water on the SIDEWALKS
- Stop watering the pavement and roads.
- Stop watering the concrete
- Stop watering the sidewalks!
- Stop watering the grass and tearing up and planting new flowers so much.
- Re-adjust the watering system so it doesn't water the pavement and waste so much water
- Using less water, educating students (especially in dorms) about water use/conservation.
- WATER! WATER! WATER! Please use less, especially for landscaping.
- Remove sprinklers and incorporate a different type of watering system-like a drip system
- Reduce number of water-craving trees, shrubs, flowers, and especially grass. Campus landscaping presents a great opportunity to demonstrate how-to's and aesthetics of beautiful native, environmentally friendly plants.
- It's good for the utility for student use, but it could function better if there were more native species. Perhaps it should be modeled after Pitzer.
- Less open spaces, more outdoor shaded spaces. The sunken courtyard at Drucker is a step in the right direction design-wise.
- More landscaping like at the Drucker school patio - the terraces and plant choices are attractive and water conserving - at least I am guessing so!
- More areas where students/faculty & staff can congregate made from recycled eco-friendly products decreasing the grassy water dependent areas.
- Create outdoor seating/reading/teaching spaces using native plants (and tags that post information about them) - this will look gorgeous, as well as get people more in tune with the idea that native plants come in a large variety and are not all cactus!
- Outdoor classrooms should consider the needs of many courses- tables, noise relief, privacy, even an outdoor class with technology would be great.

Appendix B – Representative Suggestions

- Since places on the ground (grassy areas, etc.) are being removed, we need more benches, stumps, rock-clad seats to rest on.
- Expanses of grass, though easy to maintain, are not as pleasing to me as are rock features, variation in vertical landscaping, etc.
- More places to sit outside, preferably in the shade
- Outdoor areas that are shaded.
- More places to sit outdoor in the shade, which would probably mean planting more trees.
- More trees to shade walkways
- More trees to provide shade
- Plant more trees and other non-grass plants with more flowers and such like Scripps to create a cooler environment with more shade
- More trees in high sun areas to reduce cooling and water usage
- More walk/bike paths
- Perhaps more bike paths and bike locking areas for those of us who ride every day
- That fountain out in front of ACB building of CGU is pretty pathetic
- Replace the fountain in front of ACB
- CGU is pretty small, so I don't think we have much we can do... but seriously, that fountain sucks.
- Get rid of all the Marathon lawn! Wild grasses and flowers instead! Lawn is great for playing and sports fields but it is ridiculously wasteful to maintain and sucks up precious water.
- Less grass, more native landscaping.
- Less grass, more native plants
- Less grass, use recycled water
- Less grass and pavement, more native plants. The addition of native trees, sycamores and oaks among the most common on campus could be utilized as more attractive, and SHADY place for those who might want a place to go outside and relax/socialize. An improvement on the large grassy areas, or pavements which don't attract anyone outside.
- Less cacti, more native plants
- I love the native plants on the campus! I'm sure that some grassy areas could be replaced with more native landscaping.
- If native species replaced the large grassy areas (I would like to see that), there should be lots of native flowers planted to retain the campus' aesthetic appeal.
- Native, drought-resistant plants (a) to desperately conserve water and (b) to believe we really are in Southern California.
- More native plants
- More native plants and less grass.
- More indigenous shade plants and fruit trees
- More native landscaping

Appendix B – Representative Suggestions

- More plants... ANY kind of plants
- Instead of the grids of flowers, succulents would be pretty and less thirsty...
- Start with a plan to replace some of the more water-intensive plants with those more drought tolerant; then develop a time table to reach the goal.
- Get rid of the corporate, rectilinear, flat design; use xeriscaping to create more natural shapes, heights, and flow of people, birds, and plants. CMC looks like an outdated corporate park in the Midwest.
- CGU looks like a corporate head quarters. I wish it had more of a university aesthetic.
- Less talk about how sustainable we are with more action and administrative support for programming (sustainability coordinator; faculty, staff, student training annually)
- More widespread awareness of the current steps toward preservation and sustainability, and also awareness of ways which individuals can contribute to larger sustainability efforts.
- To keep all the environmentalist wackos from bugging the rest of us. Most of this study is rigged to give one answer ~ that of the greens.
- Not to worry too much about global warming. Fifty years ago we were concerned about global cooling. Besides, China and India are the biggest producers of greenhouse gas. All that the Claremont Colleges will be doing is appeasing our sense of liberal guilt.
- Leave us alone. Let us buy cheap energy and stop obsessing over global warming. It's not going to be the end of the world.
- I think the aesthetics are generally quite good, but I could imagine equally good landscaping that would be more environmentally friendly.
- Labels of plants and shrubs, so we know what we are looking at,
- I would like to have unnecessary pavements/cements removed on campus
- Less concrete. (We make the road by walking, not by laying slabs)
- Less pavement/cement
- More water fountains since they are so pleasing to be around and to listen to during pensive moments