

The 2019 Earth Day Survey Report

EVST-PSTD 215 Environmental Policy

Lafayette College

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Introduction

Policies are a way to address problems; they articulate goals, formal rules, or regulations (Vig and Craft 2016). Whether an issue is at a national scale or a college, the values of the people involved can be a cause and guidance for policy. Luckily, values can easily and quickly be measured through surveys such as the Earth Day Survey that was given at Lafayette College in the spring of 2019. (A. Baranovic)

Shared values and ethics are essential to a cohesive community. Per the Lafayette College website, some of our school’s values include diversity and inclusion, community outreach, and sustainability.¹ Reading this from an outsider’s perspective, it would appear that sustainability is a major part of the culture on the Lafayette campus. (S. Marumoto) To determine the environmental values of students, compare these values to the policies that are in place at Lafayette College, and to analyze what environmental policies students would support if they were to be implemented at Lafayette, we conducted the Earth Day Survey (A. Radovanovic)

Research questions

The goal of the Earth Day survey was to assess Lafayette College's student body on their environmental values and their preferences regarding environmental policy on campus. Overall, the main research question being examined was, how do the environmental values of the Lafayette College community relate to Lafayette College environmental policies? Students in the EVST-PSTD 215 class were placed into groups that were assigned one of eight environmental topics: biodiversity and ecology, the built environment, climate action, energy, food and farm, reuse and recycling, transportation, and water. Each group was tasked with developing items about their topic that were included in each of the three main questions laid out in the survey. (A. Baranovic) The questions were the following:

- Question 1: How important are key environmental topics to Lafayette College students?
- Question 2: To what extent do students support or oppose current environmental policies?
- Question 3: To what extent do students support or oppose potential environmental policies?

¹ Lafayette College, *Our Values*, (Easton: Lafayette College, 2019)

Methods

Our methods unfolded in two stages: Lafayette College policy analysis, followed by survey data collection.

Lafayette College policy analysis. For the policy analysis, student teams analyzed existing environmental policies² to identify the primary ways in which the College addresses their initiative area. Student teams presented their findings to the entire class. The class then developed a ranking of the environmental policy initiative areas based on the extent to which the policy was a “high”, “medium”, or “low” priority for the College. As a class, it was decided that the eight initiative areas are prioritized in College policy. Ranked from highest to lowest priority, these are the following: Energy, Built environment, Climate action, Food & Farm, Reuse & Recycling, Transportation, Water and Biodiversity & Ecology. (A. Doyle) (Table 1)

Survey methods. As a class, we constructed a survey instrument. The first question of the survey measured their sense of importance regarding the eight initiative areas. The second section asked students if they support or oppose current Lafayette College environmental policies, while the third section measured support or opposition regarding possible environmental policies that Lafayette could explore in the future. Finally, demographic information was collected at the end of the survey that included the students’ class year, political party, involvement in environmental groups on campus, and if they believe sustainability is part of Lafayette’s culture. (K. Rosenthal)

We surveyed the student body by using the intercept method. We used this method over a two days span in different locations across campus to involve representative sample of our diverse student body in the fastest amount of time. (J. Klein) Our data collection locations were the following: Skillman Library, Farinon Atrium, Marquis Dining, Simons Café, Upper Farinon. To distribute the survey to Lafayette College students, each initiative area group was assigned to two different locations around campus for a thirty-minute shift where iPads or paper surveys were utilized to distribute the survey to students. (A. Radovanovic)

In total, we collected data for 8 hours. We gathered a total of 419 responses, which is roughly 16% of the current student body. Respondent characteristics are summarized in Table 2)

Findings

Environmental priorities (Table 3). Lafayette students believe that most environmental initiative areas are ‘very important’. Other than two initiative areas (biodiversity and ecology, transportation), more than 50% of respondents indicated that the environmental topic was “very important.” (M. Harris)

The statement with the highest level of importance to Lafayette students was “high quality local food” (mean = 3.46 on a scale of 1 to 4), with 26% of respondents considering it “important” and 61.4%

² The Lafayette College environmental policies included in this assessment are as follows: Bat Protocol, 2018; Campus Energy Policy, no date; Climate Action Plan 2.0, 2019; Recycling and Trash Bin Standard, Working Draft 2019; Campus Master Plan, 2009

of respondents considering it “very important.” (H. Kerridge). This finding can most likely be explained by the direct impact food has on the daily student life at Lafayette (A. Doyle).

The second-most valued Lafayette policy was for sustainable and green buildings, (mean = 3.43, scale 1 to 4). (A. Radovanovic) Reuse and recycle. “diverting waste from landfills” was tied for second in terms of what the community felt was very important to the Lafayette campus (mean=3.38, scale 1 to 4). (E. Luing) Climate could have been considered less important to local food because students might feel that the College administration has to work towards climate and energy goals whereas students could take direct action regarding the food they eat (T. Goenka).

In the court of public opinion, the results are damning for the biodiversity and ecology initiative area. In ranking the importance of the general topics, biodiversity and ecology scored an average of 2.92 (scale 1 to 4), the lowest average on this question, meaning that on average the students of Lafayette ranked Biodiversity and Ecology between ‘a little important’ and ‘important’. (B. Wood)

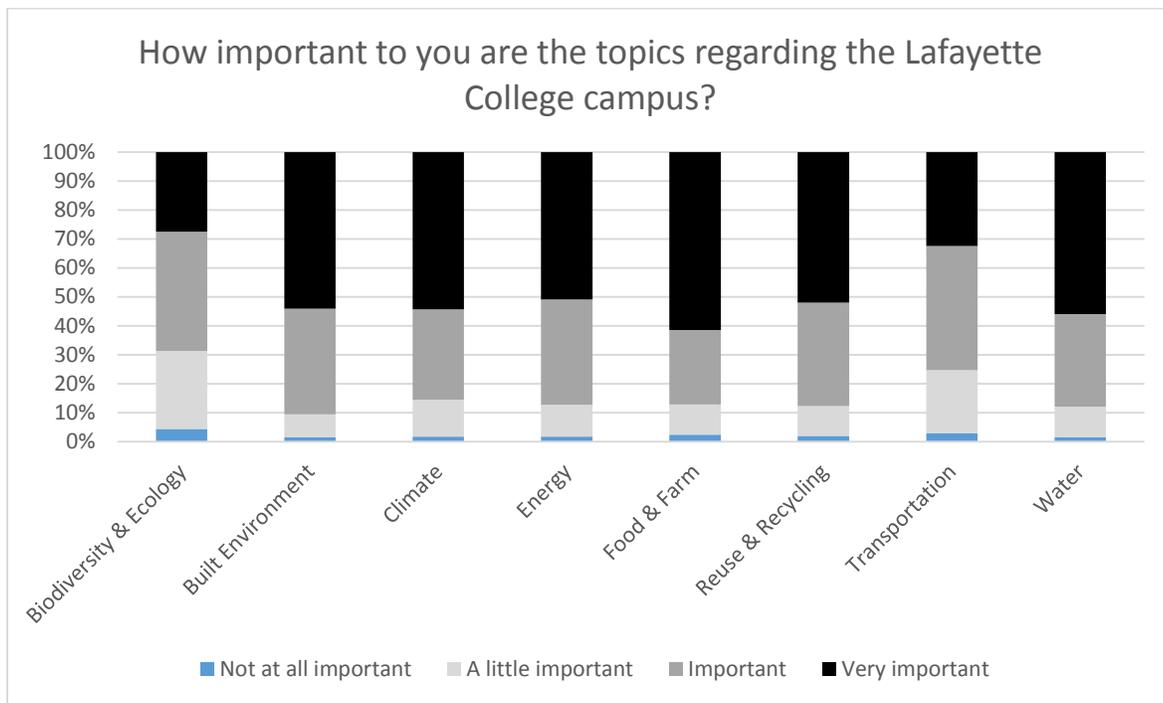
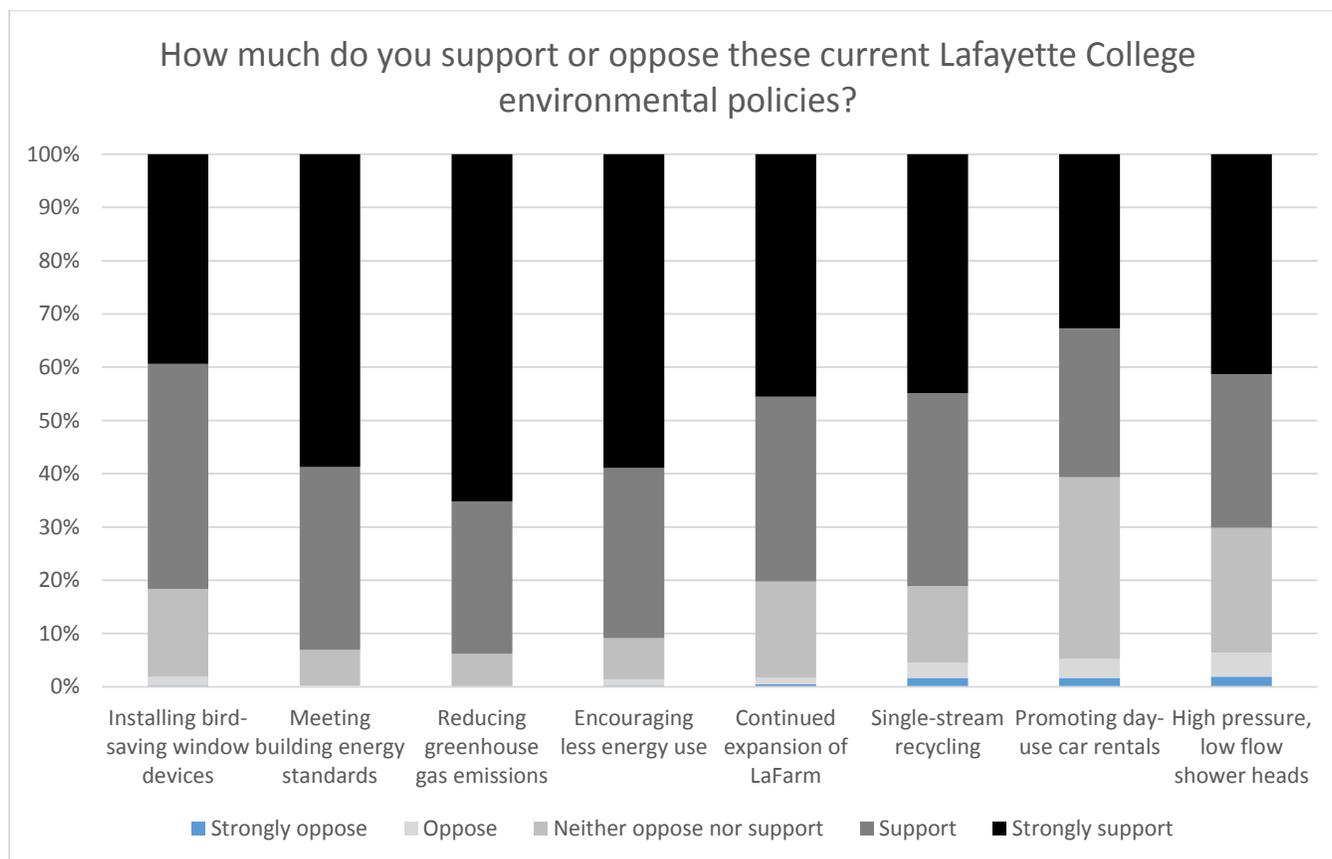


Figure 1. Student's priorities for eight environmental policy initiative areas. Please see the survey (Appendix 1) for exact item wording.

As observed in Figure 1, the prioritization of values observed among Lafayette College students is very different from our ranking of priority areas based on the class’ policy analysis. Compared to other initiative areas, students rated water as being more important than what is Lafayette policy. According to the survey, we found that improving water conservation and management was tied for the second-highest in rating among Lafayette students (mean = 3.43, scale 1 to 4) (A. Ender)

Support or opposition for current policies (Table 4). Currently, Lafayette’s policies place a high emphasis on energy, the built environment, and climate. (K. Ruggiero) Lafayette students overwhelmingly support current policies that reduce the college’s greenhouse gas emissions (93.8% agree or strongly agree), meet building energy standards (93.2% agree or strongly agree), or encourage less energy use (90.9% agree or strongly agree). Students also demonstrated strong support for bird-saving window devices (81% agree or strongly agree). The current environmental policy with the lowest level of student support was that of day-use car rentals (60.6% agree or strongly agree).



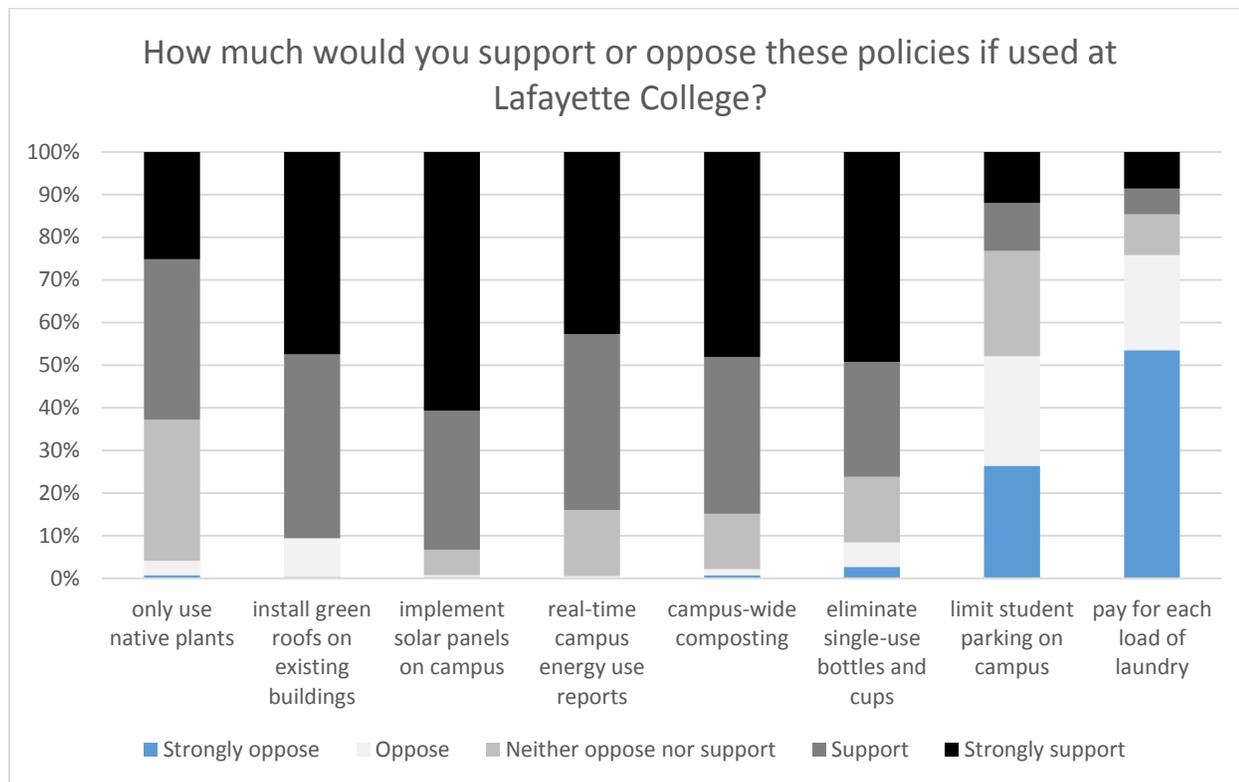
Support or opposition for potential policies (Table 5). Consistent with student support for current environmental policies, Lafayette students were most supportive of potential environmental policies that related to climate change mitigation. A vast majority of students want to see solar panels implemented on campus (93.3% support or strongly support), and 90.5% of students support or strongly support efforts to install green roofs on existing buildings. Eighty-four percent of students supported or strongly supported a real-time campus energy report.

Second to climate change efforts, campus-wide composting was rated as the second-most supported policy area: 84.9% support or strongly support campus-wide composting. (H. Kerridge; A. Heimbauer)

One dimension of climate change policy that was not supported by students related to campus transportation policy. Far fewer respondents either supported (11.3%) or strongly supported (12.0%)

reducing student parking on campus, while 52% of respondents either opposed (25.7%) or strongly opposed (26.4%) this hypothetical policy (E. Savage) This score was also recorded as being the second lowest among all of the propositions, falling right in front of the water initiative, who proposed the question of paying for each load of laundry. (R. O’Gorman)

Lastly, one potential policy to reduce water consumption, payment for each load of laundry, was strongly opposed by a majority (53.5%) of Lafayette students, while 14.6% of students supported or strongly supported this policy measure.



Discussion and Recommendations

In sum, the results show positive feedback from students on future and existing environmental policies. From this, we can conclude that students value sustainability in campus culture. (G. Kullby) Based on our survey results, we make the following recommendations:

Biodiversity: We recommend in the strongest possible terms that Lafayette College implements bird-saving window devices in all buildings, new and old, as it is on average supported or strongly supported by the student body. (B. Wood) We also note that having a wide variety of plant and animal species can be useful in creating green roofs, sequestering carbon, and creating riparian buffers to help improve local water quality. (S. Heins)

Built Environment: The student body wants to see more green spaces, like those that were proposed to the Lafayette Community in the 2009 Master Plan, such as the greening of March Field and Hamilton Street (50, Master Plan). Greening those spaces would be very expensive endeavors. Implementing green roofs on existing buildings on campus would be a much cheaper approach to bringing more green spaces on campus. (J. Klein)

Climate: The climate action seems to be a high priority and generally supported by students at Lafayette. Since the Lafayette College Climate Action Plan 2.0 does have more vague tendencies in its policies, our group would recommend that the College implement an updated version of the plan that sets more strict guidelines in hopes of achieving carbon neutrality by 2035, or perhaps even earlier. (A. Radovanovic)

Energy: I believe that in order for the students' priorities to match the major energy initiative that Lafayette is implementing, there needs to be something that would increase the awareness and engagement of students. To achieve this, I recommend that there should be a real-time report using the campus energy management system. It could show a real time campus energy use by building across campus, which could be displayed as a live dashboard. A live energy report dashboard would allow easy access to students, which may increase engagement and as a result make energy a top environmental topic for them because they are more aware and mindful of their energy use. This dashboard would have unlimited potential such as a topic of study in Lafayette classes, determining the highest energy buildings, locating where energy conservation is needed, and it even has the potential to average the energy used per person daily. This idea of an energy dashboard was used at Bowdoin and Dickinson Colleges. Both colleges were successful in using the dashboard to increase awareness and commitment to energy reduction across campus. (A. Doyle) By implementing the dashboard into the daily lives' of students, this will create more action on one's own contribution to energy usage on campus. (L. Rivas)

If the College would like to make energy a commitment on behalf of the student body, one recommendation I would make is to focus on energy projects that are both economically beneficial and tangible to the student body. If the effects of the energy efficiency and conservation are felt by the student body in a positive way, then that policy area will be viewed more positively and with more weight the next time this survey would circulate the community. This would benefit the College because the values of the community would align with the goals of the College regarding energy policy as a high commitment. (M. Allen)

Food and Farm: LaFarm is an important part of our campus sustainability efforts, one that students support. We strongly recommend that the College pursue campus-wide composting as a way to connect our food and farm efforts with waste reduction.

Reuse and Recycling: The survey findings suggest that a ban on single-use plastic cups and bottles would not be met with overwhelming student resistance, as nearly half of the respondents (49.3%) strongly supported this measure. We recommend that the OoS and the College strongly consider a ban on single-use plastic beverage containers.

Transport: Lafayette College's transportation policy clearly needs improving. I recommend to the Lafayette Office of Sustainability that they engage with students to find ways to increase the use of transportation other than personal vehicles on campus; however, I do not recommend that the college pursue removing student parking at this time.

Water: The Lafayette community values water conservation and management, but future policies that are established in this initiative area may face some opposition. Therefore, the OoS should emphasize how beneficial the established water policy is for the Lafayette community. (C. Murphy) Considering the fact that our survey indicates that water policies are of importance Lafayette's student body, it makes sense to make them a part of the college's commitment to sustainability. (S. Marumoto)

Conclusion

There is so much that Lafayette College can do in support of environmental policy initiatives, and as our data shows, many students will support these changes. (H. Davey) Only 18% of students are actually involved in environmental groups or organizations on campus. It is clear that the few students working towards a sustainable campus have made a big impact. However, the problem is not these involved, hyper-aware students, rather it is the average student who needs to be further informed and involved in understanding their impact. (G. Kullby) People clearly hold environmental values at Lafayette based on these survey results. In order for these values to carry into policy, which we truly believe they can, students need to know that the policy will not inconvenience them. With that information, environmental policies will garner much more support. Accessibility to information is everything. (E. Stierhoff)

Lastly, our recommendation to Lafayette College would be to make it a goal to have Lafayette's environmental policies genuinely reflect the values that we advertise.

Tables

Table 1: Lafayette College Prioritization of Environmental Policy. (K. Ruggiero)

Level of importance	Initiative Area
Most Important	Energy
	Built Environment
	Climate
	Food and Farm
	Reuse and Recycling
	Transportation
	Biodiversity
Least Important	Water

Table 2. Characteristics of survey respondents.

Question	Responses
Are you involved in any environmental groups on campus?	Yes: 18.2%; n=75 No: 81.9%; n = 340
Do you think that sustainability is art of Lafayette's culture?	Yes: 66.7%; n=276 No: 33.3%; n=138
What is your class year?	2019: 18.1%; n = 75 2020: 23.6%; n = 98 2021: 28.7%; n = 119 2022: 29.6%; n = 123
What is your political affiliation?	Democratic Party: 38.7%; n = 159 Leaning toward Democratic Party: 19.0%, n = 78 Could lean toward either party: 10.9%; n = 45 Leaning toward Republican Party: 6.6%; n = 27 Republican Party: 9.2%; n = 38 Other or no party affiliation: 15.6%; n = 64

**Table 3: Student prioritization of environmental policy initiative areas.
(K. Ruggiero)**

Level of importance	Initiative area	Mean*
Most Important	Food & Farm	3.46
	Built Environment	3.43
	Water	3.43
	Climate	3.38
	Reuse and Recycling	3.38
	Energy	3.37
	Transportation	3.05
Least Important	Biodiversity	2.92

*scale: 1 = not at all important; 4 = very important

Table 4. Percent responses to the question, “How important to you are the topics listed below regarding the Lafayette College campus?”

Items	Not at all important	A little important	Important	Very important
Biodiversity & Ecology: a wide variety of plant and animal species	4.3	27.0	41.2	27.5
Built Environment: sustainable and green buildings	1.4	7.9	36.5	54.1
Climate: working towards carbon neutrality	1.7	12.7	31.3	54.3
Energy: amount of energy used on campus	1.7	11.1	36.3	51.0
Food & Farm: high quality local food	2.4	10.4	25.8	61.4
Reuse & Recycling: diverting waste from landfills	1.9	10.4	35.7	52.0
Transportation: emissions from transportation	3.0	21.7	42.9	32.5
Water: improving water management and conservation	1.4	10.6	32.0	56.0

Table 5. Percent responses to the question, “How much do you support or oppose these current Lafayette College environmental policies?”

Items	Strongly oppose	Oppose	Neither oppose nor support	Support	Strongly support
Biodiversity & Ecology: installing bird-saving window devices	0.2	1.7	16.5	42.2	39.4
Built Environment: meeting building energy standards	0	0.2	6.7	34.4	58.7
Climate: reducing greenhouse gas emissions	0	0	6.2	28.6	65.2
Energy: encouraging less energy use	0.2	1.2	7.7	32.0	58.9
Food & Farm: continued expansion of LaFarm	0.5	1.2	18.1	34.7	45.5
Reuse & Recycling: single-stream recycling	1.7	2.9	14.4	36.2	44.8
Transportation: promoting day-use car rentals	1.7	3.6	34.1	27.9	32.7
Water: high pressure, low flow shower heads	1.9	4.5	23.4	28.9	41.3

Table 6. Percent responses to the question, “How much would you support or oppose these policies if used at Lafayette College?”

Items	Strongly oppose	Oppose	Neither oppose nor support	Support	Strongly support
Biodiversity & Ecology: only use native plants	0.7	3.4	33.1	37.6	25.2
Built Environment: install green roofs on existing buildings	0.2	9.1	0.0	43.2	47.5
Climate: implement solar panels on campus	0.2	0.5	6.0	32.6	60.7
Energy: real-time campus energy use reports	0.0	0.5	15.5	41.3	42.7
Food & Farm: campus-wide composting	0.7	1.4	13.0	36.8	48.1
Reuse & Recycling: eliminate single-use bottles and cups	2.6	5.8	15.4	26.9	49.3
Transportation: limit student parking on campus	26.4	25.7	24.7	11.3	12.0
Water: pay for each load of laundry	53.5	22.3	9.6	6.0	8.6