



A FIRST YEAR AND COMMON READING RESOURCE GUIDE TO  
**EDWARD HUMES'**

**GARBBOLOGY**  
Our Dirty Love Affair with Trash

RESOURCE GUIDE WRITTEN BY  
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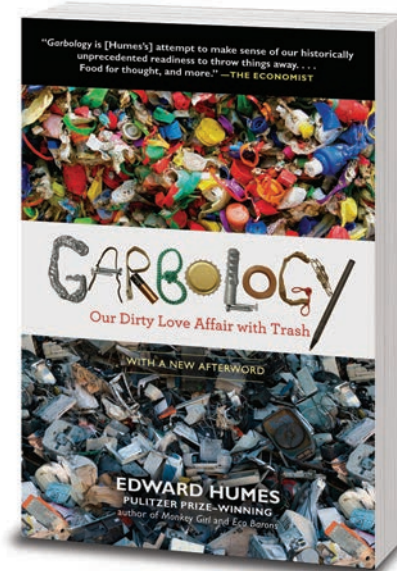


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# I. INTRODUCTION

Anthropologists have often discussed the importance of “making the familiar strange,” or of establishing cognitive distance from everyday experience so that the observer may critique it. In *Garbology: Our Dirty Love Affair with Trash*, Ed Humes describes a common part of American life that remains largely unexamined: our waste. When considering the average American’s 102 ton trash legacy, one could argue that it is imperative that we relentlessly expose and examine this tremendous, yet shrouded, facet of our collective experience. This guide is designed to support this very process. Through the questions, activities, and resources featured here, students are encouraged to adopt a critical view of both *Garbology* and related, personal experiences and cultural practices. This guide contains five sections: discussion questions, various classroom activities, research opportunities, service learning projects, and general resources for students, teachers, and programs. Each section is applicable to multiple curricular areas, and as such, this document has an interdisciplinary focus. Activities can also be easily modified and scaled, as they were constructed with flexibility in mind. Lastly, students are encouraged throughout to utilize technology and work collaboratively as they complete their First Year Experience (FYE); this guide should provoke meaningful reflection and inquiry, and it supports the overall purpose of the FYE: to fuse rigorous classroom study with immersive, communal learning experiences.



# II. DISCUSSION QUESTIONS

These questions can be posed to an entire class, given to small groups, used to initiate online discussions, etc.

1. “When the tide of garbage bound for the landfill grows from year to year, America’s leaders rejoice because, despite the economic and environmental cost of waste, it signals the welcome reality that more people and businesses are buying more stuff” (6). Does the growth of garbage truly represent progress, or is this view indicative of cultural delusion? Is economic growth ultimately compatible with environmental protection?
2. “Archaeologists long ago figured out that the real nature of human life isn’t that we are what we eat. They know we are best understood by what we throw away” (23). Considering the contents of our collective garbage, how do you think future archaeologists will understand our present society?
3. How does the historical discussion in chapter three, “Piggeries and Burn Piles: An American Trash Genesis,” inform our understanding of contemporary waste removal practices?
4. “The irony is that Big Mike’s domain, with its unrivaled ability to hide seamlessly all that waste, empowers even more wasting” (64). Do you agree or disagree with this statement? Have advances in waste technologies made trash less visible, and by extension, more abundant?
5. “We could kill, or at least blunt, two threats to our environment, security and prosperity with one elegant solution: waste-to-energy” (92). Do waste-to-energy approaches present an “elegant” way forward or a tremendous danger to be avoided?
6. “[C]hanging the way we live, removing disposable plastic from our daily lives. Shut off the supply, he says, and maybe the ocean can begin to heal” (118). Is the rejection of disposable plastics a realistic expectation? How can the public be encouraged to care more about a pollution site (the ocean) that is largely removed from daily reality?
7. “Plastic has gone so fast from zero to omnipresent that it’s slipped beneath conscious perception. Take a moment and scan the room you’re sitting in” (136). In your current location, how prevalent is plastic? How common is it in your everyday life?
8. “Recycling in particular has long served as a balm and a penance—a way of making it okay to waste...” (154). Does recycling inadvertently encourage wastefulness? How should we reconfigure our view of recycling, if at all?
9. Do words such as “trash” and “waste” provide accurate terminology? How do these words, and the connotations we assign to them, affect our perception of what and how we dispose?
10. “...the most intelligent, most-likely-to-succeed, long-term solution to waste is far simpler than any giant trash-burning generator, and far less costly, yet so much more difficult to achieve: a changed culture” (264). Is such a cultural change possible? How can this paradigm shift be facilitated?

### III. VARIOUS CLASSROOM ACTIVITIES

The following are short activities applicable to a variety of curricular areas.

#### 1. Self and Peer Assessment

One of the central problems with waste is that the act of disposal has become so frequent and familiar that it escapes conscious awareness.

As noted in *Garbology*, Bill Rathje once described trash as being “in sight, out of mind” (183). To help students lift the cognitive veil concealing their own behaviors, have them perform a self-assessment through a writing activity. Have them respond to the following questions:

- Would you describe yourself as a wasteful person? Why? Why not?
- Are you often consciously aware of the amount of trash you produce?
- What is one personal, wasteful habit you would like to change?

After each student responds individually, have him or her share the self-assessment with a close friend, roommate, or someone else who has knowledge of the student’s consumption and waste habits. The peer should judge the “accuracy” of the original responses. How does the self-assessment compare to the peer’s take? Have students compare and contrast the two perspectives to uncover what familiarity has likely obscured. To extend this activity, have students share their self-assessments via social media to elicit a variety of perspectives from those who know them best.



#### 2. Trash Blog

As another way to force students to confront and critique their own consumption and waste producing habits, have them maintain a trash diary for a period of time (at least a week). In this diary, students should compose daily entries detailing what their consumption and disposal habits were. These entries can exist in paper form (such as in a spiral notebook), or students could maintain a Trash Blog by using a free blog service such as <http://www.blogger.com> or <http://wordpress.com>. One

advantage of digital composition is that students write for an authentic, interactive audience, and instructors may find that this provides extended discussion and reflection during the activity. Additionally, digital composition allows students to integrate video and images.

At the assignment’s conclusion, have students review their entries to identify personal trends. Were they consistently buying disposable products, for example? Did their recycling habits vary from day to day, or were they consistent? How much food waste did they typically produce? Have students share these findings verbally in class, or have them explore them in video form through software such as iMovie or Windows Movie Maker. Students could even produce op-docs (short, opinionated documentaries...great examples found here: <http://www.nytimes.com/video/op-docs/>) to record and share their reflections with others.

#### 3. Waste Image Study

Ed Humes writes about the 102 ton trash legacy that the average American leaves behind.

In his portrait series, “7 Days of Garbage,” Gregg Segal provides a glimpse into this legacy through his photographs of various people surrounded by a week’s worth of their own garbage. The images, found here [http://www.slate.com/blogs/behold/2014/07/08/gregg\\_segal\\_photographs\\_people\\_with\\_a\\_week\\_s\\_worth\\_of\\_their\\_trash\\_in\\_his.html](http://www.slate.com/blogs/behold/2014/07/08/gregg_segal_photographs_people_with_a_week_s_worth_of_their_trash_in_his.html), provide powerful material for analysis and discussion.

- First, display an image and have students record initial impressions (what types of trash are most noticeable? What strikes you about the people in the shot?);
- Next, ask students to explore the relationship between the types of waste and the inferred socioeconomic class of the figures in the image (are certain types of waste traditionally associated with specific class stereotypes? Is this association apparent in the image? Is the assumption an accurate one?).
- Lastly, ask students to brainstorm ways to reduce waste in the chosen photograph (are there reusable products the person(s) in the image could substitute for what is observed here?). Also, have students compare and contrast several images; for example, have them compare the amount and types of waste generated by an entire family versus that produced by an individual.

After analyzing the images, have students collect a week’s worth of their own trash and photograph themselves with it; then, have them display these images via social media and/or project them in class. Ask them to reflect on what the experience revealed. Were they surprised? Disgusted? Did the experience move them to alter their own habits? When examining their classmates’ images, how did their amount of waste compare?



## 4. Food Waste Image Analysis

In one year, Americans throw away “no less than 28 billion pounds of food...about 25 percent of the American food supply” (16). To personalize this point, have students estimate the amount of food, on average, they discard in a week. Have them share this information in pairs and then with the entire class. Next, have them access the following resource:

<http://time.com/8515/hungry-planet-what-the-world-eats/>

Here, students will see a variety of photographs from Peter Menzel and Faith D’Aluisio depicting what different families, from various cultures, consume in a week. Have students view a number of the images, and ask them to respond to the following questions (this could also work well as a small-group activity):

- Which families seem likely to produce the most food waste? What evidence supports your assertions? (students may comment on the amount of packaging, etc.)
- Which families seem most capable of composting a majority of their food waste?
- What overall assumptions can you make about culture, consumption, and food waste?

Have students discuss their conclusions with the rest of the class.

## 5. Student Generated Questions (QAR)

When students are able to generate their own questions, they are typically more invested in the analytical process. Allow them to take ownership of inquiry and explore *Garbology* through this activity. QAR refers to Question-Answer Relationships and works well in terms of encouraging both close analysis and personal connections. The types of questions include:

- **Right there questions:** answers to these questions are found explicitly in the text.  
*(What exactly are “Nurdles”? Why are they so problematic?)*
- **Think and search questions:** answers lie in the text, but may only be found by examining several different sections and piecing them together.  
*(Why should Americans reduce their collective reliance on landfills? How can they?)*
- **Author and you:** answers require personal interpretation based on textual evidence.  
*(How prevalent is food waste in America? In your opinion, what are the best methods to decrease it?)*
- **On my own:** answers connect personal experience with themes of the text.  
*(What are several practices you can adopt to become less wasteful?)*

Have students work independently to generate one question per category for a specific chapter of the book. After these questions are generated, instructors have several options:

- Have students trade and answer each other’s questions in writing.
- Have students submit questions on notecards, and randomly select several for a formative assessment.
- Have students select one question to expand upon in an extended written response or brief presentation (“Right there” questions do not work well for this).

For more information, consult this resource:

<http://www.readingquest.org/strat/qar.html>

# IV. RESEARCH OPPORTUNITIES

The following topics are designed to provide students with opportunities for extended inquiry and analysis. In response to these, students could:

- Compose a research paper
  - Deliver a classroom presentation
  - Design a lesson plan and teach a class
  - Create a website (<http://www.weebly.com> is an excellent free resource for this)
1. Humes writes that an industry representative once “warned that all this fuss about zero waste would end up creating zero growth” (298). How would you respond to those who claim that eliminating waste will negate economic

growth? Examine the economic consequences of erasing waste by examining domestic policies and ideologies, but consider how other countries have reconciled economic concerns and environmental protections as well. Are there successful approaches that our country could adopt?

2. In chapter eight of *Garbology*, Humes discusses three different stages of evolution that every great civilization goes through: the Florescent Period, the Classical Period, and the Decadent Period (180). After carefully re-reading this section of the text and performing additional research as well, consider the following: based on our consumption and disposal habits, which stage of evolution do you believe America is currently in? What are the implications of your conclusion?



3. While discussing the abundance of plastic in the ocean, Humes states, “Nature’s fragile balance, its chains of prey, predator and symbiont, could be altered by the plastic tax service” (131). Choose a single location, a specific form of waste, and research not only how it disturbs the dynamics of that particular environment, but how this discord affects other ecosystems as well. What actions should be taken to control the damage?
4. “Our willingness to part with something before it is completely worn out is a phenomenon noticeable in no other society in history...It is soundly based on our economy of abundance. It must be further nurtured even though it runs

contrary to one of the oldest inbred laws of humanity, the law of thrift” (66). Explain how this quote relates to the contemporary “American Dream”; in addition, identify and discuss the primary societal forces, such as advertising, that promote consumption, excess, and wastefulness. What forms of “propaganda” sustain this consumerist ideology?

5. What are the most powerful, and feasible, behaviors the average American citizen should adopt to reduce waste? What evidence can you locate to justify your recommendations? How can citizens be encouraged or required to make these changes?

## V. SERVICE LEARNING PROJECTS

These projects are designed to connect students’ learning experiences with the larger community.

### 1. Become an Expert and Educator

Have students select a topic, or chapter, from *Garbology* to research in small groups. Some suggested topics include:

- The problem of the omnipresent plastic bag
- Nurdles and the trash-ocean interface
- Landfills and waste to energy technology
- American consumerism and the compulsion to discard

The purpose of this activity is for students to become experts on their topic so that they may effectively educate other members of the campus community. First, student groups should read and analyze the applicable sections of *Garbology* while performing secondary research as well. After students have sufficiently researched their topic, have them answer the following two questions:

- What is the essential information that others must know about my group’s topic?
- What are related, concrete changes people can make?

Finally, have students present their research to the campus community in such a way that it both informs and invites them to take action. Groups could:

- Staff an information booth (be sure to obtain permission first) in a visible area and distribute brochures, fliers, or other documents. Free web resources such as <https://www.lucidpress.com/pages/examples/free-brochure-maker-online> will work for this, or students could use programs such as Microsoft Publisher.
- Launch an online campaign through social media or a designed website. Encourage students to create captivating presentations through <http://www.prezi.com>, or have them

design and publish infographics. An infographic is a visual representation of information that features short sections of text and multiple charts, graphs, and other visuals. The digital medium offers students a unique way to package and represent knowledge while sharpening their digital literacy skills. Free resources for this include <http://piktochart.com> and <http://easel.ly>. Students could also have their audience pledge to act at <http://www.acespace.org/dot> after watching their presentation.



### 2. Campus Trash Sort/Waste Audit

A trash sort (or waste audit) involves students searching through garbage in order to analyze waste types and discover opportunities to divert waste from landfills. In order to proceed with this activity, students should obtain permission from the proper campus authorities to access and sort waste. Also, participants should acquire proper safety equipment and all necessary materials before beginning. Students should



work in groups and select a location for the trash sort. For example, groups could target a specific residence hall, cafeteria, laboratory, etc. Each group should then establish a goal(s) for the sort: is the purpose to document general waste habits or to also analyze the effectiveness of a new campus recycling/composting initiative? Or, perhaps specific types of food waste will be examined? Overall, students will sort trash, gather data, present their findings, and suggest appropriate actions.

Some guiding questions for this activity include:

- What is the purpose of this trash sort?
- From where will trash be collected?
- Where will waste be sorted/analyzed?
- What necessary permissions must first be obtained?
- What materials are required? If necessary, where will funding originate to purchase these materials?
- What are the responsibilities of individual group members?
- How will data be processed and recorded?
- How will our findings be accessible to the rest of the campus community (through blogs, presentations, panel discussions, etc.)?

Students should reference these resources before they begin:

- University of Washington Garbology Project's website: <http://uwgarbology.weebly.com/>.
- University of Oregon Campus Zero Waste Program's guide to waste audits: [http://zerowaste.uoregon.edu/waste\\_audit.htm](http://zerowaste.uoregon.edu/waste_audit.htm)
- Carleton College's Student Waste Monitoring page (also provides examples of how waste auditing results could be explored in different math courses): <http://apps.carleton.edu/sustainability/campus/waste/studentmonitoring/>

### 3. Reimagine Waste

In chapter nine of *Garbology*, Humes writes about the artist-in-residence program at the San Francisco dump; there, "the full-time artistic mission is to expose and exploit the endless uses and potential for the stuff we call garbage" (189). Students can also be taught to rethink the possibilities of trash and to ultimately question the value of a disposable lifestyle. The following two activities will provoke students to reimagine "waste":

- **Upcycling:** upcycling is the process of converting waste materials into something new and useful. Have students bring one-two items of trash to class to serve as the basis for this activity. Next, compile all trash and break students up into small groups; in their groups, they should select several waste items to be transformed into something new. Use the following two resources to provide students with ideas:

<http://www.upcyclethat.com/>

<http://www.viralnova.com/upcycled-products/>

They should work collaboratively to repurpose their items, and if necessary, allow them to scavenge campus garbage for additional materials. Have students present and display their work upon completion.

- **Art design:** have students emulate the trash-artists that Humes profiles in *Garbology*. Similar to the upcycle activity above, students should bring several items of trash to class. For this activity, though, these items should be reimagined in ways that are primarily aesthetically appealing as opposed to functional. Have students generate a pool of artistic materials from their trash, and invite them to create unique products to display to the larger campus community. If possible, situate their completed art projects in a display booth, and have students indicate what their original materials were. Additionally, take photos and videos of their work and publish them online.

Students can access this resource for inspiration:

<http://www.webdesignerdepot.com/2009/12/non-trashy-recycled-and-trash-art/>



### 4. Become a RecycleManiac

"RecycleMania" is a program that was started in 2001 to encourage recycling programs at universities across the country. From the website:

"RecycleMania is a friendly competition and benchmarking tool for college and university recycling programs to promote waste reduction activities to their campus communities. Over an 8-week period each spring, colleges across the United States and Canada report the amount of recycling and trash collected each week and are in turn ranked in various categories based on who recycles the most on a per capita basis, as well as which schools have the best recycling rate as a percentage of total waste and which schools generate the least amount of combined trash and recycling. With each week's updated ranking, participating schools follow their performance against other colleges and use the results to rally their campus to reduce and recycle more."

For more information, go here: <http://recyclemaniacs.org/>

## 5. Design and Implement a Compost Program

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Humes writes, “We still waste colossal amounts of food—the EPA pegs food waste in landfills as more than 14 percent of total landfill contents by weight” (179). Fortunately, composting presents a way to reduce this staggering amount of food waste. Composting requires the collection of organic materials such as food scraps and landscaping waste; these materials are then combined with water and oxygen, and over time they decompose and become fertile organic matter ideal for soil enhancement. To begin a composting program at your school, first ensure that students and other involved parties understand the basics of the process. A good primer on composting can be found here:

<http://www.epa.gov/composting/basic.htm>

A composting program could function on a smaller scale (in two wings of a dormitory, for example), or it could span multiple waste sites (numerous residence halls, cafeterias, administrative facilities, campus events, etc.). The scale of the program will depend on the number of volunteers, the availability of composting bins and other materials, and



funding, among other factors. Successful composting reduces waste and creates material that schools can utilize in a variety of locations such as campus gardens and flowerbeds.

Consult the following resources to learn more:

Appalachian State University Composting Program: <http://zerowaste.appstate.edu/special-programs/composting>

Wesleyan University Composting Program: <http://www.wesleyan.edu/sustainability/recycling/compost.html>

University of Oregon Composting Program: <http://darkwing.uoregon.edu/~recycle/Composting.htm>

## 6. Advocate for a Cause

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Have students work collaboratively to identify and analyze a waste-related campus or community need (for example, abundance of single-use plastics, ineffective recycling programs, public littering, etc.). Use the following questions to facilitate the activity:

- What is the need that you have identified? What related research (interviewing primary sources, distributing surveys, analyzing data, etc.) have you performed, and what did it reveal?
- What specific changes should occur?
- How can these changes be facilitated?

If this issue is unique to the college, have students write proposals to college administration, and/or have them make presentations to other students and faculty that outline recommended changes (for example, purchasing additional recycling bins, erecting signage to promote reusable water bottle use, etc.). Students could also form a club dedicated to their cause to educate and advocate over a period of time.

If the issue transcends the campus and involves the local community or other areas of the state, students could:

- Write op-eds to local newspapers
- Compose e-mails to local and state representatives
- Use social media to educate others
- Produce and upload a short documentary to YouTube
- Write petitions using a website such as <http://www.moveon.org>

## VI. RESOURCES FOR STUDENTS, TEACHERS, AND PROGRAMS

The following are mobile applications and web resources useful for extending a study of *Garbology*. Students could download several of the apps, utilize for a period of time, and reflect on how their behavior changed as a result.

### Mobile apps

- **iRecycle:** <http://www.earth911.com/tech/new-iphone-app-helps-you-recycle-on-the-go/> Locates recycling centers based on specific need.
- **PaperKarma:** <https://www.paperkarma.com/> Allows students to photograph junk mail and unsubscribe from mailing lists.
- **Marine Debris Tracker:** <http://www.marinedebris.engr.uga.edu/> Report marine debris and litter worldwide.
- **The EPA's Green Apps:** <http://www.epa.gov/mygreenapps/> An extensive list of mobile apps recommended by the Environmental Protection Agency.
- **Freecycle + trash nothing!:** <http://trashnothing.com/> Allows the user to both acquire and discard unwanted but reusable items (especially useful for student move-out days).
- **EPA's Individual Waste Reduction Model:** <http://m.epa.gov/apps/warm.html> Shows how much energy is created by recycling various items.
- **222 Million Tons:** <http://222milliontons.com/app/> Create meal plans and shopping lists to reduce food waste.
- **Rippl:** <http://www.oceanconservancy.org/do-your-part/rippl.html> Provides sustainable tips, reminders, and goals.
- **WeTap:** <http://wetap.org/take-action/wetap-app/> Locate drinking fountains for refillable water bottles.

- **Trash Backwards:** <http://blog.trashbackwards.com/web-app/> Provides ideas for upcycling.
- A list of recommended apps from the University of Oregon: <http://zerowaste.uoregon.edu/apps.htm>
- A fascinating look at what the University of Wisconsin-Madison is doing with a new sustainable, mobile app: <http://www.news.wisc.edu/22910>  
<http://mobile.wisc.edu/news/project-sustainable-u/>

### Web Resources

- An exhaustive Zero Waste guide from the University of Oregon: [http://zerowaste.uoregon.edu/PDFdocuments/ZeroWasteToolkit\\_printversion.pdf](http://zerowaste.uoregon.edu/PDFdocuments/ZeroWasteToolkit_printversion.pdf)
- California State Northridge's Freshman Common Reading *Garbology* Page: <http://www.csun.edu/afye/Archived-2013-2014-CommonRead-Garbology.html>
- An interview with Bea Johnson and a video tour of her home: <http://www.thewomenseye.com/2011/01/21/interview-bea-johnson/>
- Website for the MIT Trash Track program discussed in *Garbology*: <http://senseable.mit.edu/trashtrack/>
- The Artist in Residence Program at Recology San Francisco: <http://www.sunsetscavenger.com/index.php/about-air>
- An interview with Ed Humes on NPR: <http://www.npr.org/2012/04/26/150735732/following-garbage-long-journey-around-the-earth>
- *Garbology* Facebook page: <https://www.facebook.com/Garbology>
- The home page of the University of Washington's *Garbology* Project: <http://uwgarbology.weebly.com/>

## VII. ABOUT THE AUTHOR OF THIS GUIDE

Chris Gilbert has taught high school English for the past eight years in Asheville, North Carolina. He is also an avid writer. His work has appeared in the *Language Experience Forum Journal*, *The Washington Post's* education blog, "The Answer Sheet,"

NCTE's (National Council of Teachers of English) *English Journal*, and he has also written a Penguin Teacher's Guide for *Cyrano de Bergerac*. He is a 2013 recipient of NCTE's Paul and Kate Farmer Writing Award.

\*\*All cited quotes are from *Garbology*



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