

### \*\*\* organizational Plan for Argument (completed)

Exordium	introduction (one to several paragraphs)	Attention grabber - use data from a statistic that will increase the readers awareness of the issue.
Narratio		
Propositio		
Partitio		Explain Publix's produce operation and compare it to Whole Foods (critical-writer's thesis (claim) Publix should reengineer its produce operations.
Confirmatio	Presentation of writer's position	main body of essay why should Publix label their GM vegetables? consumers have the right to know what's in their foods, especially with products for which health concerns have been an issue. Mandatory labeling will allow consumers to identify and stay away from products that may be harmful. (resemblance) 21 countries and the European Union have established mandatory labeling. Make sure each reason is tied to a value or belief held by the audience
Confutatio	summary of opposing views	(1) Genetically modified vegetables should not be labeled because consumers who want to buy non-genetically modified vegetables have the option to purchase organic vegetables. (2) Labels on genetically modified foods imply a warning about health effects, where no difference has been recognized.

(3) Labeling would impose a cost  
on consumers.

Contutatio

Response to opposing views

Refutes or concedes

Peroratio

conclusion

sums up the argument  
use a hypothetical example, case  
and scenario to leave a long  
lasting impression.

If the Farm Fresh Factory does not complete certain criteria then they will lose the support of the Whole Foods Alliance.

The problem with Farm Fresh Factory is that they have no longer meeting the requirements sent in place their governing organization the Whole Foods Alliance. The criteria set in place are not being met, and if changes are not implemented then the Farm Fresh Factory will lose the partnership with the WFA.

There is a solution though, if the company is able to fix 2/3 of the missing criteria in the course of 90 days then the partnership will hesitantly remain. To become a full-fledged member again the Farm Fresh Factory must complete the missing criteria and be in full cooperation by the half year mark. If the proper conditions are not met by this time the company will be dropped by the WFA. Although if the time limit is too short they could also be reconsidered for the next year.

Criteria: Sanitary conditions, Smart business management, certification for all organic growing conditions, ability to produce quality products, reliable ship dates, high productivity/efficiency, low-cost/safe packaging methods, ability to maintain conditions at all farm locations, zero contamination and employee conditions.

Field research/Survey: Survey the 15 different locations owned by the FFF and each location was evaluated based on the above criteria. Of the 15 locations 7 were found missing more than 2 major criteria points, 4 were missing 1-2 and the rest received pleasing results.

Interviews: A sample of 2 employees were chosen at random from each location to be interviewed, and a cautionary amount of workers and complaints with how the company was run or their working conditions.

Testimony: An ex-employee who was suing the company for unsafe working conditions had his case looked into. He said that the FFF is liable for the debilitating back problems he had.

Statistics: Use data about crop production (decrease), amounts of missing criteria, profit, number of late/missed ship dates, etc.

Hypothetical/resemblance: Compare to a previous partner company of the WFA and show the consequences they received from not meeting the criteria.

Opposers may believe the criteria is too strict or harsh, but the WFA has a niche group of costumers and can only afford to partner with companies would are more than willing to fill the necessary requirements.

Recommended improvements include: To update organic certification (a few locations no longer meet certification requirements, and the 2 new locations have yet to be certified), improve shipments (both quality of product delivered and methods, create more organized management and facilitate better conditions for employees.

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## Introduction

-Exordium: (hook, choose 3)

- a. Statistic of profit loss
- b. number of customer complaints for the year
- c. injuries on the job

-Narratio: (assignment) The assignment was to evaluate the Farm Fresh Factory on specific criteria

-Propositio: (proposal) If the parameters of the WLA are met in an allotted time the partnership shall not be breeched.

-Partitio: (preview) Here are overall traits that were reviewed (business plan/minor grievances) but what needs to be focused on are these points (Serious stuff!: sanitation, employee safety, product quality)

-Confirmatio: (Criteria)

- a. Category 1: Sanitary Conditions, ability to produce quality products, employee safety, contamination
- b. Category 2: high productivity/efficiency, certification for all organic growing conditions
- c. Category3: enjoyable employee conditions, low-cost packaging, reliable ship dates, smart business management

-Confutatio: (summary) If they Category 1 infractions are not fixed within 6 months then the FFF with no longer be a partner of the WFA. To maintain connections with the WFA then the FFF is required to have all problems in the criteria implemented. If these tasks are not completed then the FFF will be dropped by the WFA and will not be reconsidered until the next year.

-Peroratio: (call for action) The poor conditions of the FFF must be fixed. Companies that do not meet the standards of the WFA are unacceptable to the organization and the customer. The customers deserve a quality product and through this evaluation is can be seem that the FFF is lacking this ability.

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Testimony: An ex-employee who was suing the company for unsafe working conditions had his case

## CAFOS AND FBCC SENTENCE OUTLINE

### 1. Introduction:

- a. **Exordium:** The livestock industry is vital to our national economy supplying meat, milk, eggs, and other animal products and providing employment in rural communities.
- b. **Narratio:**
  - i. Large CAFOs (confined animal feeding operations) now predominate livestock production.
  - ii. I was asked to evaluate the CAFOs in the Midwest by the EPA, specifically, the Four Bar Cattle Co.
- c. **Propositio:** EPA should consider shutting down CAFOs across the country because of numerous problems.
- d. **Partitio:** I will explain these problems, explain why they are malicious, and articulate what can be gained from shutting down the FBCC.

### 2. **Confirmatio 1:** One major problem with the FBCC is the lack of sanitation in and around the pens

- a. I saw at least 2 inches of manure on the ground, when only 1 inch or less can be on the ground at all times.
- b. Up to 70% of nitrogen manure can be lost to the atmosphere, which causes airborne ammonia.
- c. This causes harm to other environments and makes them inhabitable
- d. A survey reported that Iowans living within a 2-mile radius of the FBCC farm reported 40% more respiratory problems than a control group not living near the FBCC

### 3. **Confirmatio 2:** The FBCC farm is at least 1 square mile even though the EPA restrictions state that CAFOs can only be at or under ½ square mile.

- a. I interviewed past resident who said: “We all have cows. We all understand them, but these things need to be located out and away where they can’t affect people. These guys came in and wanted to put it right on top of us.”
- b. Though the farm is large, cattle were crammed into 20ft x 15ft stalls where they couldn’t move or turn around
- c. The manure being produced per year is between 1 and 1.6 million tons
- d. The manure combined with poor sanitation practices often affect ambient air quality in communities surrounding the farm

### 4. **Confirmatio 3:** The farm had a lot of insects (houseflies, mosquitoes, stable flies)

- a. Insects can agitate livestock and decrease animal health
- b. Insects have the potential for spreading bacteria and pathogens to humans
- c. FBCC give their livestock antimicrobial drugs and spray pesticides to deter bugs and other pathogens

- d. Former owner of the FBCC: “Yes we used antibiotics on our animals. We would give about one to two shots per week to keep the animals healthy. I wanted to be sure that our animals wouldn’t become sick”
- e. According to multiple veterinarians and general practitioners, the use of antimicrobial drugs contributes to the evolution of antibiotic-resistant bacteria, which transmit their resistance to humans typically but not only via contaminated food.

## 5. **Confutatio:**

- a. CAFOs can provide a low-cost source of meat, milk, and eggs due to efficient feeding and housing of animals, increased facility size, and animal specialization.
  - i. Cheap efficient meat is being produced while creating harmful by-products that completely overshadow the good CAFOs create.
- b. Some may say not all CAFOs are the same as the FBCC.
  - i. Reason to examine other CAFOs: The farms that do have problems can cause harm to the buyers of the meat and especially to the surrounding environment.
- c. Others wonder how Americans will get their meat if the EPA starts to close down imperative meat farms.
  - i. There are plenty of other methods to get meat to Americans: smaller meat farms, sustainable food production, cultured meat.
- d. Consumers may feel they are unaffected by the use of antibiotics on cattle
  - i. Overuse of antibiotics still has the potential to hurt you, if it hasn’t yet
  - ii. Each time you eat meat you are at risk of obtaining an antibiotic resistant pathogen
  - iii. Swine flu originated in a CAFO because of the overuse of antibiotics given to animals.
- e. You should care because CAFOs, not only the FBCC, produce more than 50% of our food animals.
- f. Will you start caring only if a loved one or yourself became affected?

## 6. **Peroratio:**

- a. The evaluation of the Four Bar Cattle Co brought up major flaws in the management of the farm: sanitation, pollution, shelter, treatment, and size.
- b. These flaws transpire into the local communities and environments where they will cause harm.
- c. Food animal production used to be integrated with crop production in a balanced way that was beneficial to society and the animals themselves.
- d. I recommend that the Four Bar Battle Co is shut down unless they move in the direction of sustainably produced foods.
- e. Sustainable food production offers profitable alternatives: grass-based, free range, pastured livestock and poultry.
- f. Market for sustainable meats is growing faster than the number of farmers willing to produce this type of food.
- g. The number of farmers’ markets has doubled in the past ten years.
- h. Sustainable livestock and poultry producers have opportunities through local and regional organizations not available to CAFO farmers.

- i. Sustainable food production will earn money, be safer, and cleaner in the long run.
- j. CAFOs represent agriculture of the past, not the agriculture of the future.



The livestock industry (including poultry) is vital to our national economy, supplying meat, milk, eggs, and other animal products and providing meaningful employment in rural communities. However, livestock production has undergone a transition where a small number of very large CAFOs (confined animal feeding operations) now predominate. Under the request of the EPA, I was asked to go and evaluate the CAFOs in the Midwest. I was asked to report for the EPA because of my knowledge and experience in the field. Understanding that there are copious amounts of CAFOs in the Midwest I evaluated one specific farm, the Four Bar Cattle Co., in order to get the ambience of how other CAFOs are governed. Given the particular evaluation of the farm, I come to conclusion that the EPA ought to shut down the Four Bar Cattle Co and consider doing the same for other CAFOs across the country. There are many problems associated with this farm that are the same for other CAFOs. I will explain these problems, express why they are malicious, and articulate what can be gained from shutting down the FBCC.

I evaluated an assortment of criteria at the FBCC like grazing room, fertility of the land, location of the farm, size of animals, yield per animal, and feeding techniques. These criteria are completely relevant but let us deliberate more about the treatment of animals, pollution caused by operation, sanitation, shelter, and ultimately the size of the farm.

One major problem associated with the FBCC is the lack of sanitation in and around the pens. Walking around I saw at least 2 inches of manure on the ground, when only 1 inch or less can be on the ground at all times. Up to 70 percent of nitrogen in CAFO manure can be lost to the atmosphere, causing airborne ammonia. Moreover, this

causes harm to other environments that can make them inhabitable. A survey by Harris Polls gave results that Iowans living within a 2-mile radius of the FBCC farm reported 40 percent more respiratory problems and other symptoms than a control group of Iowans not living near the FBCC.

Under restrictions of the EPA, a CAFO can only be at or under  $\frac{1}{2}$  square mile. The FBCC farm is at least 1 square mile, which is colossal for a CAFO. I interviewed a past resident near FBCC and he said, “We all have cows. We all understand them, but these things need to be located out and away where they can’t affect people. These guys came in and wanted to put it right on top of us.” In addition, the cattle were crammed into 20 ft. X 15 ft. stalls where they couldn’t move or even turn around. Truly healthy animals need space to graze, not just be stuck in a stall all day. Furthermore in this mammoth farm, the manure being produced per year is between 1 and 1.6 million tons. This combined with the sanitation practices stated above, the degrading manure along with livestock digestive processes produce air pollutants that often affect ambient air quality in communities surrounding this farm.

Evaluating the farm I noticed a good deal of insects including houseflies, stable flies, and mosquitoes. Flies are typically considered nuisances, although insects can agitate livestock and decrease animal health. Plus, insects have the potential for spreading bacteria and pathogens to humans. I did some research and found out that farmers of FBCC give their livestock antimicrobial drugs and spray pesticides to deter bugs and other pathogens. I talked to former owner of the FBCC and he said, “Yes we used antibiotics on our animals. We would give about one to two shots per week to keep the animals healthy. I wanted to be sure that our animals wouldn’t become sick.” This is a

serious problem though. I conducted a field study with multiple veterinarians and general practitioners determining that the use of antimicrobial drugs contributes to the evolution of antibiotic-resistant bacteria, which transmit their resistance to humans typically but not only via contaminated food.

Regardless, I know CAFOs can provide a low-cost source of meat, milk, and eggs, due to efficient feeding and housing of animals, increased facility size, and animal specialization. Even though this is true, the bad out-ways the good. True you're producing cheap efficient meat for consumers but the harmful by-products of CAFOs completely overshadow the good they create. Also, some may say not all CAFOs are the same as the FBCC. Some CAFOs don't have any problems at all, but that doesn't account for every other CAFO. The farms that do have problems can cause harm to the buyers of the meat and especially to the surrounding environment. This is the reason to examine other CAFOs. Furthermore, how will Americans get their meat if the EPA starts to close down imperative meat farms? Surely there are plenty of other methods to get meat to Americans such as smaller meat farms, sustainable food production, and possible cultured meat. And finally, the overuse of antibiotics hasn't hurt me yet. Why do I care if the FBCC or other major CAFOs do this? The overuse of antibiotics has the potential to hurt you, even if it hasn't yet. Each time you eat meat you are at risk of obtaining an antibiotic resistant pathogen. You should care because CAFOs, not only the FBCC, produce more than 50 percent of our food animals. Plus, swine flu originated in a CAFO because of the overuse of antibiotics given to animals. Imagine this happening again, but this time you or loved ones get the virus. Would you feel differently then?

In summation, the evaluation of the Four Bar Cattle Co brought up major flaws in the management of their farm. These flaws like sanitation, pollution, shelter, treatment, and size transpire into local communities and environments where they will cause harm. Until CAFOs, food animal production was integrated with crop production in a balanced way that was generally beneficial to farmers and society as a whole. This is why I recommend that the Four Bar Cattle Co be shut down based on safety regulations, as well as having the EPA take a look at other CAFOs across the country. Granted, the Four Bar Cattle Co can reopen if they move in the direction of sustainably produced foods. Sustainable food production offers profitable alternatives such as grass-based, free-range, and pastured livestock and poultry. The market for sustainable meats is growing far faster than the numbers of farmers willing to produce for this market. Plus, the number of farmers markets has doubled in the past ten years. Also, sustainable livestock and poultry producers have opportunities through local and regional organizations not available to CAFO farmers. Altogether, sustainable food production will earn more money, be safer, and cleaner in the long run. CAFOs represent agriculture of the past, not the agriculture of the future.

Within the last 40 years, extreme changes have transpired within our animal agricultural system. Because of the massive amounts of people within our society, there needs to be a way to feed everyone. The emergence of Confined Animal Feeding Operations (CAFOs) resulted because of the demand by the American people. Before, small cattle farms scattered around America used to supply the nations meat. Now, CAFOs are the economical necessity that this world requires for everyday life.

However, there are nuisances associated with CAFOs that are causing problems in today's society and surrounding environments. CAFOs pose a multitude of troubles such as antibiotic-resistant bacteria, insects, and unhealthy animals but the one problem that we will be focusing on is the by-product phosphorus in manure from swine.

CAFOs produce uncontrollable amounts of manure each year, creating water and air pollution. The manure from CAFOs contaminates nearby rivers and lakes because of the natural phosphorus and nitrogen found inside. This triggers "...fish kills, and contributed to oxygen depleted "dead zones"..." all across the United States ("The Hidden Costs", 2008). According to the Institute of Science, Technology, and Public Policy (2006), there were "...329 documented manure spills from livestock facilities from 1992 to 2002, killing over 2.6 million fish and contaminating groundwater" ("CAFOs", 2006). Phosphorus is a major nutrient enabling algal growth that is the leading cause of most fish kills resulting from anoxic conditions in river and lakes. Soil should normally have a phosphorus concentration lower than "...80 to 100 pound per acre" (Daniels, Daniel, Carmen, Morgan, Langston, and VanDevender, n.d.). Because CAFOs have thousands of animals located on an inadequately sized piece of land, the soil is super

saturated with phosphorus. This leads to phosphorus leaking into nearby waterways, causing catastrophic events as mentioned before.

The problems of excess phosphorus in manure extend far beyond just the surrounding environment. The social health of nearby rural communities is compromised because community members need to protect themselves from contaminated water and air coming from CAFOs (“CAFOs”, 2006). Homeowners have to worry about the integrity of their properties being harmed by contaminated river water entering fresh water wells or forming into acid rain.

A plethora of ideas have been proposed to attempt to ameliorate the manure problem that CAFOs have been initiating. Notions such as sustainable food production, manure-holding tanks, spreading, composting, and decreasing the supplemental phosphorous given to pigs have been attempted with little to no success. Phosphorus overload on CAFOs is becoming a serious problem. It affects families, ecosystems, and businesses. However, phosphorus pollution is solvable. Technology of today’s world has become so immense that anything can be solved. With that, I propose that the Enviropig should be implemented onto CAFOs all across the country. The Enviropig is essentially a genetically modified animal that was made to reduce the amount of naturally occurring phosphorus that is found in manure. Enviropig is a safe, smart, and an efficient solution to the ever-growing phosphorous glitch that swine create.

In 1995, a group of scientists from the University of Guelph started doing research into a genetically modified pig. The goal was to create a transgenic pig that lessened environmental pollution. The team created the first transgenic pig in 1999, calling it “Wayne” (“Who Created” and Owns “Enviropig”, 2013). Dr. Cecil Forsberg and two other scientists “...developed a transgene construct containing mouse DNA and genetic material from the e coli bacterium which was introduced into the pig chromosome by pronuclear microinjection, in a single site in the pig

genome” (“Enviropig”, 2009). This new gene sequence in the enviropig initiates perpetual secretion of the phytase enzyme in the pigs’ saliva glands (“Enviropig”, 2009). Now, the University of Guelph holds patents on the specific technology they use in the United States and Canada. Plus, Ontario Pork is a private, and only, investor of the Enviropig and holds the trademark name “Enviropig” (“Who Created” and Owns “Enviropig”, 2013). The enviropig cost millions of dollars to develop and test, but the official amount is not divulged to the public (“Who Created” and Owns “Enviropig”, 2013).

To begin, the enviropig is a feasible solution to the ever-growing phosphorus pollution across the nation. Enviropig is an efficient animal that neutralizes phosphorus in manure. Here is how the enviropig works; feed given to pigs naturally has an indigestible mineral called phytate, which does not break down in the stomach. The enviropig naturally has a perpetually secreting enzyme in the mouth called phytase that breaks down the phytate into phosphate in the stomach. This in turn allows the phosphate to be absorbed while traveling through the large intestine, resulting in manure that is low in phosphorus (“How the Enviropig Works”, n.d.). Essentially the enviropig “...excrete[s] as much as 75% less phosphorus in manure as compared to non transgenic pigs...” that are not given “supplemental phosphorus” (Forsberg, 2001, para. 7). The enviropig is very efficient at its job, synthesizing “...as much as 100,000 units per kilogram per feed consumed” (Forsberg, 2001, para. 5). Furthermore, farmers today add “fungal phytase” to feed in attempt to have pigs excrete manure with less phosphorus, however the enviropig is enormously more efficient as proven above. According to Dr. Cecil Forsberg, “They (Enviropigs) utilize practically all of the phosphorus present in soybean meal and do not require supplemental phosphate for growth on a standard diet...” (Forsberg, 2001, para. 8). Enviropig is an efficient solution that will solve phosphorus related contaminations across the nation.

Subsequently, enviropigs ameliorate expenditures that farmers have to pay. Dr. Cecil Forsberg proclaims that there is a "...saving[s] of \$1.14 per pig..." (Forsberg, 2001, para. 8). This doesn't seem like a lot, but when you are talking about over tens of millions of pigs the saving is enormous. Plus, substantial savings could happen especially in the United States and Canada, which could correlate to a price "reduction" for consumers (Chernoff, 2010, How is it labeled section, para. 9). The big picture here is the savings from the enviropig will allow farmers to focus on different parts of their business, more so on a way to increase environmental safety on farms. Pig farmers lost "...an estimated 3 billion (dollars) in 2012..." which is about "...an average loss of \$31.08 per pig..." (Waters, 2013, para. 6). Farmers don't have money to upgrade their farms and increase safety due to substantial losses in revenue. With the enviropig, farmers have money saved that is ready to use to upgrade their farms. Projects like water retention ditches, new composters, and new spreaders all alleviate the impact of phosphorus entering the environment. Granted, not all farmers will spend their saved money on these types of assets, but the many that do help stop phosphorus contamination of ecosystems.

Finally, the enviropig is a great solution to phosphorus contamination because it is a safe and reliable animal. Dr. Cecil Forsberg states that, "They (Enviropigs) grow at rates similar to non-transgenic pigs and they appear to have similar reproductive characteristics" (Forsberg, 2001, para. 6). Even though these transgenic pigs are in early stages of testing, they exhibit characteristics normal to non-transgenic swine. Furthermore, the University of Guelph researchers did experiments and came up with results:

The results were the first three Enviropigs, which researchers named Wayne, Jacques, and Gordie after famous Canadian hockey players. Today, Guelph houses more than 100 enviropigs—the result of three generations of breeding, and all of them have inherited the



generic trait that allows for the digestion of phosphorus. All produce manure that contains 60-75 percent less phosphorus than non-engineered pigs (Vestel, 2001, para. 13).

This shows that the enviropigs are becoming more ordinary and stable as testing keeps happening to them. Nothing “abnormal” has happened to these pigs as a result of multiple tests, and the offspring that the enviropigs produce contain the same generic trait that allows them to digest phosphorus (Vestel, 2001, para. 14). Overall, results from testing show that the enviropig is a stable, non-abnormal animal that when ready will be a safe efficient animal for agriculture.

You may be speculating how feasible enviropig is to implement into society. The enviropig is a very feasible solution to the phosphorous crisis that is hurting ecosystems across the nation. Enviropigs grow up exactly like non-transgenic swine, so implementing it onto farms would be tranquil. Enviropigs can be raised in separate grounds away from normal swine, or they can be raised together. However, the only problem with this is the crossbreeding within the gene pool of swine. Furthermore, funding has stopped for the continuation of research into the enviropig. The company Ontario Pork, its only supporter, cut funding for the enviropig (Nickel, 2012, para. 4). However, research can start again if funding for the enviropig arises from a willing company. With this, research can begin again as well as trying to get the pig to be cleared by the U.S. Food and Drug Administration and Health Canada.

Regardless, I know that the animal agricultural system is very fragile and key to the economy of the United States. There are many ethical questions that arise from this topic that need to be addressed. First, are enviropigs safe to eat? What’s going to happen to normal pigs? First and foremost, the enviropig needs to be cleared by the U.S. Food and Drug Administration and Health Canada before it will be implemented onto farms. If the enviropig is cleared, then it will be safe to eat. The U.S. Food and Drug Administration would not allow hazardous products

into society. In addition, normal pigs will still be on farms, either with or kept away from enviropigs. Furthermore, are humans allowed to “play God” and create any animal they want? No, humans aren’t allowed to play God and create any animal they desire. The enviropig is a solution to a very serious problem in today’s world. Creating animals like glowing fish, different scented flowers, etc. are examples of humans playing God to create whichever animal they want. Also, is there a risk to the environment or human health? Enviropigs stop the risk of phosphorous leaks in nearby waterways that in turn harm the environment. And as said before, if the Drug and Health Administration clears the enviropig it will become safe to eat. And finally, why not just revert to sustainable food production? Sustainable food production is becoming increasingly popular with farmers across the nation. The market for sustainable meats is growing faster than ever, and the number of farmers markets has doubled in the past ten years. However, reverting to sustainable food production will hurt the economy. The demand for meat in the United States is enormous, so reverting to sustainable food production will drive the economy into the ground. The enviropig will allow farmers to keep growing thousands of pigs without the fear of phosphorous contaminated disasters.

All in all, the enviropig is the next best solution to stop the over secretion of phosphorous from leaking into our rivers and waterways. A multitude of ideas have been proposed, but the enviropig is the smartest out of all of them. The enviropig secretes less phosphorous in their manure, saves farmers money leading to enhanced environmental protection, and it’s a safe solution that has shown no abnormalities during testing. Because the nation is becoming more populated every day, animal agricultural production is going to increase. More phosphorous will continue to leak into nearby waterways causing marine life to die, water to be contaminated, and the surrounding ecosystems to be negatively affected. The health of society is also affected

because phosphorous pollution affects every day life in and around communities throughout the nation. Basically do you want the nation to progressively get worse from excess phosphorous in swine manure, or do you want to spend money to fund an incredible pig that will sufficiently help stop contamination in the environment and earn money. The enviropig is the next best solution that will solve swine phosphorous problems that affect the future.

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## DISPOSITIO

Exordium Narratio Propositio Partitio	Introduction (one to several paragraphs)	<ul style="list-style-type: none"><li>• Hook</li><li>•</li><li>• Background on the topic</li><li>•</li><li>• The thesis</li><li>•</li><li>• Brief overview</li></ul>
Confirmatio	Presentation of writer's position	<ul style="list-style-type: none"><li>• The body of the essay</li><li>• Presents reasons and supports them with evidence</li><li>• Reasons should be connected to an assumption or belief held by the audience</li></ul>
Oppositio	Summary of opposing views	<ul style="list-style-type: none"><li>• Brief summary of arguments opposing writer's views</li></ul>
Oppositio	Response to opposing views	<ul style="list-style-type: none"><li>• Refutes or concedes to opposing views</li><li>• Shows weaknesses in opposing views</li><li>• May point to some strengths</li></ul>
Peroratio	Conclusion	<ul style="list-style-type: none"><li>• Closes the essay</li><li>• Sums up the argument</li><li>• Leaves strong last impression</li><li>• Often calls for action or provides a larger context for the topic</li></ul>

## CAFOS AND FBCC SENTENCE OUTLINE

### 1. **Introduction:**

- a. **Exordium:** The livestock industry is vital to our national economy supplying meat, milk, eggs, and other animal products and providing employment in rural communities.
- b. **Narratio:**
  - i. Large CAFOs (confined animal feeding operations) now predominate livestock production.
  - ii. I was asked to evaluate the CAFOs in the Midwest by the EPA, specifically, the Four Bar Cattle Co.
- c. **Propositio:** EPA should consider shutting down CAFOs across the country because of numerous problems.
- d. **Partitio:** I will explain these problems, explain why they are malicious, and articulate what can be gained from shutting down the FBCC.

### 2. **Confirmatio 1:** One major problem with the FBCC is the lack of sanitation in and around the pens

- a. I saw at least 2 inches of manure on the ground, when only 1 inch or less can be on the ground at all times.
- b. Up to 70% of nitrogen manure can be lost to the atmosphere, which causes airborne ammonia.
- c. This causes harm to other environments and makes them inhabitable
- d. A survey reported that Iowans living within a 2-mile radius of the FBCC farm reported 40% more respiratory problems than a control group not living near the FBCC

### 3. **Confirmatio 2:** The FBCC farm is at least 1 square mile even though the EPA restrictions state that CAFOs can only be at or under ½ square mile.

- a. I interviewed past resident who said: “We all have cows. We all understand them, but these things need to be located out and away where they can’t affect people. These guys came in and wanted to put it right on top of us.”
- b. Though the farm is large, cattle were crammed into 20ft x 15ft stalls where they couldn’t move or turn around
- c. The manure being produced per year is between 1 and 1.6 million tons
- d. The manure combined with poor sanitation practices often affect ambient air quality in communities surrounding the farm

### 4. **Confirmatio 3:** The farm had a lot of insects (houseflies, mosquitoes, stable flies)

- a. Insects can agitate livestock and decrease animal health
- b. Insects have the potential for spreading bacteria and pathogens to humans
- c. FBCC give their livestock antimicrobial drugs and spray pesticides to deter bugs and other pathogens

- d. Former owner of the FBCC: “Yes we used antibiotics on our animals. We would give about one to two shots per week to keep the animals healthy. I wanted to be sure that our animals wouldn’t become sick”
- e. According to multiple veterinarians and general practitioners, the use of antimicrobial drugs contributes to the evolution of antibiotic-resistant bacteria, which transmit their resistance to humans typically but not only via contaminated food.

## 5. **Confutatio:**

- a. CAFOs can provide a low-cost source of meat, milk, and eggs due to efficient feeding and housing of animals, increased facility size, and animal specialization.
  - i. Cheap efficient meat is being produced while creating harmful by-products that completely overshadow the good CAFOs create.
- b. Some may say not all CAFOs are the same as the FBCC.
  - i. Reason to examine other CAFOs: The farms that do have problems can cause harm to the buyers of the meat and especially to the surrounding environment.
- c. Others wonder how Americans will get their meat if the EPA starts to close down imperative meat farms.
  - i. There are plenty of other methods to get meat to Americans: smaller meat farms, sustainable food production, cultured meat.
- d. Consumers may feel they are unaffected by the use of antibiotics on cattle
  - i. Overuse of antibiotics still has the potential to hurt you, if it hasn’t yet
  - ii. Each time you eat meat you are at risk of obtaining an antibiotic resistant pathogen
  - iii. Swine flu originated in a CAFO because of the overuse of antibiotics given to animals.
- e. You should care because CAFOs, not only the FBCC, produce more than 50% of our food animals.
- f. Will you start caring only if a loved one or yourself became affected?

## 6. **Peroratio:**

- a. The evaluation of the Four Bar Cattle Co brought up major flaws in the management of the farm: sanitation, pollution, shelter, treatment, and size.
- b. These flaws transpire into the local communities and environments where they will cause harm.
- c. Food animal production used to be integrated with crop production in a balanced way that was beneficial to society and the animals themselves.
- d. I recommend that the Four Bar Battle Co is shut down unless they move in the direction of sustainably produced foods.
- e. Sustainable food production offers profitable alternatives: grass-based, free range, pastured livestock and poultry.
- f. Market for sustainable meats is growing faster than the number of farmers willing to produce this type of food.
- g. The number of farmers’ markets has doubled in the past ten years.
- h. Sustainable livestock and poultry producers have opportunities through local and regional organizations not available to CAFO farmers.

- i. Sustainable food production will earn money, be safer, and cleaner in the long run.
- j. CAFOs represent agriculture of the past, not the agriculture of the future.

### TOULMIN STUDENT SAMPLE

<b>ENTHYMEME:</b> CLAIM Medical marijuana should be legalized in all states <b>REASON</b> because medical marijuana is less harmful than prescription painkillers	<b>REBUTTAL:</b> Arguments that contradict the idea that medical marijuana is less harmful than prescription painkillers:
<b>GROUND:</b> Evidence (such as statistics, studies, and arguments) supporting the idea that medical marijuana is less harmful than prescription painkillers <ul style="list-style-type: none"> <li>• Testimony from patients who have benefitted from medical marijuana (i.e., cancer patients, multiple sclerosis, etc).</li> <li>• Emphasis on the inability of a patient to overdose on medical marijuana.</li> <li>• Establish connection between legalizing medical marijuana and reducing the use of prescription painkillers.</li> </ul>	<b>COUNTERARGUMENTS:</b> <ul style="list-style-type: none"> <li>• Smoking harms lungs, throat, and other organs, and it may lead to cancer.</li> <li>• Marijuana impairs patients' mental abilities as much or more than prescription painkillers.</li> <li>• Arguments stating that implementing medical marijuana in some states has had a small effect on the prescription painkillers industry.</li> </ul>
<b>WARRANT:</b> We should privilege medication to treat pain that is less harmful to our bodies	<b>REBUTTAL:</b> Arguments supporting the benefits of prescription drugs
<b>BACKING:</b> Evidence supporting the idea that pain medication should be less harmful to our bodies <ul style="list-style-type: none"> <li>• Statistics showing the number of people who become addicted to prescription painkillers.</li> </ul>	<b>COUNTERARGUMENTS:</b> <ul style="list-style-type: none"> <li>• Arguments and statistics supporting the need for prescription painkillers.</li> </ul>



<ul style="list-style-type: none"> <li>Statistics showing the number of people who overdose each year from prescription painkillers.</li> </ul>	
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## TEMPLATES FOR EVALUATION ARGUMENT

### Organization Plan 1: Criteria and Match in Separate Techniques

Introduce the issue and state your thesis	<ul style="list-style-type: none"> <li>Explain relevance of the issue to your audience and why it is a topic of contention.</li> <li>Provide background information needed by your audience.</li> <li>State your thesis.</li> </ul>
Present your criteria.	<ul style="list-style-type: none"> <li>Establish and develop criterion 1.</li> <li>Establish and develop criterion 2.</li> <li>Repeat as needed.</li> <li>Predict and engage with the opposing view.</li> </ul>
Present your match argument.	<ul style="list-style-type: none"> <li>Think about restating your thesis.</li> <li>Argue that your case meets (does not meet) criterion 1.</li> <li>Argue that your case meets (does not meet) criterion 2.</li> <li>Continue with the rest of your match argument.</li> <li>Anticipate and respond to possible objections to the match argument.</li> </ul>
Conclude.	<ul style="list-style-type: none"> <li>Provide a brief summary of the argument.</li> <li>Place your issue within a larger context.</li> <li>Provide closure.</li> </ul>

### Organization Plan 2: Criteria and Match Information

Introduce the issue and state your claim.	<ul style="list-style-type: none"> <li>Explain relevance of the issue to your audience and why it is a topic of contention.</li> <li>Provide background information needed by your audience.</li> <li>State your thesis.</li> </ul>
Present series of criterion-match arguments.	<ul style="list-style-type: none"> <li>Establish and develop criterion 1 and argue that your case meets (does not meet) the criterion.</li> </ul>

	<ul style="list-style-type: none"> <li>• Establish and develop criterion 2 and argue that your case meets (does not meet) the criterion.</li> <li>• Continue with the rest of your criterion-match arguments.</li> </ul>
Respond to possible objections to your arguments.	<ul style="list-style-type: none"> <li>• Predict and engage with the opposing view.</li> <li>• Respond to the objections through rebuttal or concession.</li> </ul>
Conclude.	<ul style="list-style-type: none"> <li>• Provide a brief summary of the argument.</li> <li>• Place your issue within a larger context.</li> <li>• Provide closure.</li> </ul>

## TEMPLATES FOR CAUSAL ARGUMENT

### Organization Plan 1: Argument Explaining Links in a Causal Chain

Introduce the issue and state your claim.	<ul style="list-style-type: none"> <li>• Explain relevance of the issue to your audience and why it is a topic of contention.</li> <li>• Provide background information needed by your audience.</li> <li>• State your thesis.</li> </ul>
Explain the links in the chain going from cause to effect.	<ul style="list-style-type: none"> <li>• Explain the links and their connections in order.</li> <li>• Anticipate and respond to possible objections if needed.</li> </ul>
Conclude.	<ul style="list-style-type: none"> <li>• Provide a brief summary of the argument.</li> <li>• Place your issue within a larger context.</li> <li>• Provide closure.</li> </ul>

### Organization Plan 2: Argument Proposing Multiple Causes or Consequences of a Phenomenon

Introduce the issue and state your claim.	<ul style="list-style-type: none"> <li>• Explain relevance of the issue to your audience and why it is a topic of contention.</li> <li>• Provide background information needed by your audience.</li> <li>• State your thesis.</li> </ul>
Propose relative contributions of different causes of a phenomenon or relative importance of different consequences.	<ul style="list-style-type: none"> <li>• Describe the first possible cause or consequence and explain your reasoning.</li> <li>• Continue with the rest of your causes or consequences.</li> <li>• Arrange causes or consequences in increasing order of importance,</li> </ul>

	significance, or surprise.
Respond to possible objections to your argument (if needed).	<ul style="list-style-type: none"> <li>• Anticipate and summarize possible objections.</li> <li>• Respond through rebuttal or concession.</li> </ul>
Conclude.	<ul style="list-style-type: none"> <li>• Provide a brief summary of the argument.</li> <li>• Place your issue within a larger context.</li> <li>• Provide closure.</li> </ul>

### Organization Plan 3: Argument Proposing a Surprising Causes or Consequence

Introduce the issue and state your claim.	<ul style="list-style-type: none"> <li>• Explain relevance of the issue to your audience and why it is a topic of contention.</li> <li>• Provide background information needed by your audience.</li> <li>• State your thesis.</li> </ul>
Reject commonly assumed causes or consequences.	<ul style="list-style-type: none"> <li>• Describe the first commonly assumed cause or consequence and show why you don't think the explanation is adequate.</li> <li>• Continue with the rest of your commonly assumed causes or consequences.</li> </ul>
Argue for your surprising cause or consequence.	<ul style="list-style-type: none"> <li>• Describe your surprising cause or consequence.</li> <li>• Explain your causal reasoning.</li> <li>• Anticipate and respond to possible objections if needed.</li> </ul>
Conclude.	<ul style="list-style-type: none"> <li>• Provide a brief summary of the argument.</li> <li>• Place your issue within a larger context.</li> <li>• Provide closure.</li> </ul>

## Argument Evaluation

The Farm Fresh Factory is in violation of multiple codes, which is cheating their customers of the kind of high quality product they seek to purchase. As a freelance organic business evaluator, it was my assignment to reevaluate the partnership of the Farm Fresh Factory with the Whole Foods Alliance, who sells their crops to high scale food markets. I feel the WFA should only be looking to partner with companies who have a reliable business and the ability to produce a top tier crop. I was hired by the WFA because of my extensive background as a former USDA certifying agent. The FFF was evaluated in two main areas, service and product, but for purpose of this report only the criteria relating to providing customers with fresh, organic product shall be focused on. Upon my review I propose that the partnership should either be terminated, or the company should be given an allotted time to fix the infractions. This report should provide the WFA the necessary information to come to a final decision.

The valued motto of your company is “Serving the unrefined needs of the refined” and since you are targeting a niche market, whose customers are picky, the WFA must follow suite. This is the reason why the listed criteria below were created, to gauge whether not a company is a good investment for the WFA.

Category 1: Organic crops (No irradiation, sewage sludge, synthetic fertilizers, prohibited pesticides or genetically modified organisms used), in ordinance with USDA standards, sanitation, ability to produce quality product, high productivity

Category 2: Employee safety, ship dates, customer approach

Category 3: Smart business management, social relations, business mission

While having an organized business with strong management is important, and in the case of the Farm Fresh Factory needs revamping, those issues will be looked at glancingly. The body of this deconstruction of the FFF processes shall focus on Category one and two, and how missing these criteria affect the customers.

In the random interviews with various level employees I conducted, I found two commonalities with the workers. Those in upper management appeared corrupted and falsely chauvinistic, while lower-level workers seemed eager to share their grievances. This data is only subjective, but I feel that the lack of good relations and solid communication within the company is a precursor to the more serious infractions to the WFA standards.

The WFA needs companies who are safe and reliable, both to please customers, and also to stay out of legal issues. Unfortunately the FFF is currently putting those ideals at risk in the manner that they are currently operating business. One ex-employee, Johnny Appleseed, was injured on the job because as he stated “the management didn’t communicate well with the other workers” and so while he was out performing a special task, was severely hurt by another employee working with large equipment who was “uninformed about his location”. While this is only one man’s testimony, many other current employees had similar, yet less severe complaints. The disorganization leads to a point that deserves more focus by the WFA, reliable ship dates.

Although farming is dependent largely upon the weather, the concerns you expressed about the increase in number of late shipments was a valid line of inquiry. An analysis of the ship dates over the last 3 years was conducted as a part of the evaluation and it was found that since 2010 the number of late ship dates has gone up by 42%. This statistic is alarmingly high for the standards of the WFA, and hinders your goal to provide the customers with a steady flow of

fresh produce. The FFF does not have a proactive approach to pleasing their customers who are interested in a holistic organic product, which is a large contributor to the Category 1 infractions.

The most serious criteria that needs to be addressed is the problems I found in Category 1. The whole reason the WFA partners with companies is for their ability to produce a high quality product at a reasonable price. The FFF no longer satisfies the ideals of the WFA because they are taking short cuts in the processes that should be kept natural and raw. Complaints from residents near the Napa Valley branch of the Farm Fresh Factory are being issued because of the condition of the river that runs through many residential areas. They are complaining about the crude smell of the river, and after an analysis of the water, sewage leakage from the FFF Napa Valley location was found. Many behind the scene deals were discovered in my thorough investigation that are taking place without knowledge of the owners of the company. A select number of managers are cheating the system to make their FFF location appear to be more efficient, and thus eligible for promotion. At three of the plants it was found, through record research, that imported seeds were coming through facilities not under the control of the USDA. This puts the crops, and those who eat them at risk for diseases because the seeds have not been properly inspected. Another disease risk was found in the manure fertilizer used instead of synthetic chemicals, which are not allowed in organic growing. The manure was improperly treated and I find it shocking there has not been any E. coli outbreaks in connection to this company. My accusations may seem outlandish, but with my long history with the USDA I have seen companies in similar disrepair dealing with law suits from hospital patients. They are putting the health of the customers at risk, while falsely labeling products as organic because of their deficient criteria.

The opposition may feel my evaluation to be biased and over-opinionated, but my conclusions are based off of a wide variety of evidence conducted and collected by various parties, including myself. If they feel my evidence is invalid for some reason there are still the facts derived from outside sources such as Johnny Appleseed's case file, shipment records, data collected from the rivers and complaints on file with local authority. One might also argue that my resolution to terminate dealings with the FFF is too harsh, which is why I offered an alternative option to create a timeline for mending the company. If the owners do not feel they have the fiscal means to operate at such high standards then they should pursue a more financially attainable method of farming. I apologize for the brashness of my opinions, but I only have the Whole Foods Alliance ability to maximize profits and efficiency at heart. I see the company has a hard decision ahead, and I can only hope this evaluation can ease the process.

In summary I believe it is of the WFA's best interest to terminate dealings with the FFF or demand changes. If you should so choose the latter option the timeline should be laid out as thus: to have 2/3 of the missing criteria fixed in 90 days, and then for the FFF to be completely reinstated they must be in full compliance with all criteria by the half year mark. My recommended improvements to consider first are recertification of all locations by the USDA, reengineer the shipping process and to find loyal, hard-working management.

The poor conditions of the FFF must be fixed. Companies that do not meet the standards of the WFA are unacceptable to the organization and the customer. The customers deserve a quality product and through this evaluation it can be seen that the FFF is lacking this ability.

**Topic: Consequences of increased popularity of use of growth hormones.**

**Organization Plan 2: Consequences**

Introduce Issue and State Claim	<p>Issue: What are the consequences of increased use of growth hormones?</p> <p>At stake is the health (mentally and physically) of the individual who uses the substance (or abuses it)</p> <p>There are many factors that cause the popularity of use of growth hormones by humans, but we are going to examine the consequences of this recurring phenomenon.</p>
Propose relative contributions of different consequences	<p>Mental health: mood changes, psychological dependence. This can backed up with facts and statistics of the use of hormones and the effects of mood and behavior and rate of dependence once introduced to the body.</p> <p>Physical health: body changes-those that are irreversible, injury, performance. Backed up with statistics and research.</p> <p>Idolizing for society and those who look up to them: children and teens. Becoming another one of those people who society views as an "unattainable image". Examples of field studies and interviews.</p>
Respond to possible objections.	<p>Performance is everything; society's pressures are at fault, looking at the positives (FDA approved to treat short stature.)</p> <p>While these may be true, the long term consequences on health, cost, and relationships are rather more devastating than living up to "unattainable" standards.</p>
Conclude	<p>While approved by the FDA for medical reasons, the increased use of growth hormones has been a use that is not approved by the FDA. The physical and mental well-being of the individual is more important than "getting big" and "getting ripped" even though this is the picture society paints for us today.</p>

Type of phenomenon: Recurring-like an eating disorder.



Inductive Reasoning: Correlation: correlates with increased risk of diabetes and growth of cancerous tumors. Correlated with nerve, muscle, and joint pain which may inhibit performance instead of help.

*This is really strange.*

What caused the outbreak of BSE across the U.K. in 1985?

Introduce the issue and state your claim

- Engage reader's interest in your causal issue and show why it is controversial or problematic
- Show what's at stake
- State your claim

• meat production going down  
• faith / loyalty in companies lost

• add a crazy engagement something unbelievable

- Bovine Spongiform Encephalopathy commonly known as mad cow disease is a fatal disease of the nervous and digestive system of cows
- It currently affects over 1.5 million of the 12 million cattle in the U.K.
- The first outbreak occurred in 1985, it was something completely new to everyone who say it
- While similar diseases may happen to humans based on survival aspects, this terrible disease that affects cows is strictly only because of economic reasons

Explain the links in the chain going from cause to effect

- Explain links and their connections in order
- Anticipate and respond to possible objections if needed

early 80s

- Starting in the 70s, oil prices increased ↓
- Extended heating process was cut in order to reduce energy bill, this step may have correlated to the formation of prions in the meat ↓
- Farmers began to spend less on cattle feed, they began to feed them what little scraps they had left ↓
- They were fed with protein from bone meal and meat meal, they believe this may have come from sheep ✓
- At the time, there were many sheep with scrapie, an infection of the central nervous system. It is believed that the cows may have been infected by this and then developed prions ↓
- Prions are infectious proteins much like viruses, but are not alive therefore cannot be killed
- This outbreak affected so many cows that soon after it was beginning to be seen globally

Conclude

- Perhaps sum up your argument
- Return to the "big picture" of what's at stake
- End with something memorable

- The outbreak was not cause by one specific event, and the exact cause of it has not been found
- This is all correlations that may have led to disease that infected so many cattle
- This outbreak could have been easily solved if only feeding practices would have remained the same as they were for previous years (single difference)

### Audience/ what's at stake?

- This causal argument is targeted to the public, outside the meatpacking industry who do not know much about BSE and what effect it has on cows. This paper allows the public insight on the injustices that cattle face simply for the sake of profit and earnings.
- Many people may only know mad cow disease as a myth that they hear of on TV. They may not, at first, believe the argument at hand but after reading it their concerns may increase about the disease and the effect it may have on them and the overall health of the public.
- Because mad cow disease is not something that we hear is common in the US, many of these findings may be bizarre and different to the reader.
- They may argue that cows may just be sick of the environment in which they stay, not that they are sick with this disease. I will need to object by stating that the effects of BSE are unique and not common in non-infected cows.
- Most Americans eat meat, therefore any carnivore may be at risk of being affected by this disease of steps are not taken to diminish this problem in its entirety. Meatpacking plants may feel threatened by this information being leaked out to the public because it may interfere with the sale of their products.

engaging  
Beginning

conclude

### Questioning/critiquing a causal chain

- Weaknesses may be found because no specific concrete finding have been found, this paper is based on the idea of correlations and therefore needs strong qualifiers.
- If using the data of other countries on the outbreak of BSE, a skeptic may argue that that information is not needed, but I will need to clarify that including this data will allow us to see the effects it may have in our country. This information can be used as resemblance.
- State that scientist have not found concrete evidence of BSE but that this entire process is based on correlations between events. Establishing this information in a concrete manner will allow the ethos to become stronger

In the 1970s, oil prices began to skyrocket. This caused many businesses to shut down or reduce their production amount. Just like other companies, the meatpacking industry also struggled with this problem. They were using high amounts of oil to run their plants. They were forced to cut back on some of their normal practices and move budgets around to fit in this high expense that oil was demanding.

Rethinos

Until the 80s, cattle meat was processed with solvents and put through extended heating. These practices ensured meat quality to be high and ensured safety of eating the meat. As budgeting became tight, this practice, many plants, thought to be redundant and unnecessary. They decided to continue production of their meat without putting it through this complicated and expensive ritual. Scientist believe that this process allowed for the killing of prions in the meat. Prions are hazardous proteins that are found in almost every mammal. Prions affect the central nervous system of an animal and eventually causes it to become completely paralyzed. Prions are much like a virus except they are not alive like viruses therefore cannot be killed or treated.

(ohesin)  
food  
Blend

Each another [losing]

In order to spend money more wisely where it was needed, meatpacking plants decided to invest less money on cattle meat and more on their electrical expenses. Cattle began to be fed protein from bone meal and meat meal. This protein is believed to be from sheep. At this time, many sheep suffered from scrapies. Scrapies is a disease much like BSE that affects the central nervous system of the sheep and causes them to become very sick over time. While no proof of this has been found, researches have predicted that cows may have been affected with contaminated food. This scrapie filled food may have caused the disease to appear in the cow, while taking a different form.

change  
word  
injection  
p/c  
diseases  
need

→ what Researcher

Because this disease was so new and foreign to everyone around, it took a long time to diagnose it in cattle and even determine what exactly was wrong with them. In the meantime, cattle were having seizures and acting strange. Farmers were not aware that this disease was contagious, and the disease spread like wildfire in a very short amount of time. When cows are effected with this disease, they can live with it from anywhere from a few months to up to 5 years.

Good  
transition

alliance

→ sophisticated  
clarifier

## The Beagle Freedom Project

### Problem:

Annually, in the U.S. alone over 20 million animals are killed in research labs, where they're used for testing products in pharmaceuticals to cosmetics. The others that aren't killed during practice, are either euthanized due to severe defects or passed along to other research facilities when they are no longer needed, all in the name of science. One of the leading candidates to serve as these test subjects are in fact beagles, man's very own best friend. The reason beagles are a top choice has been said to be due to their docile and friendly behavior, inexpensive feeding, and adaptability to living in cages. So why kill these compliant dogs or make them proceed to other labs when their initial duties are completed? According to most scientists, they believe that after the beagles assist in scientific studies, their chances of survival and of assimilating back into homes is very unlikely. Additionally, there is a common belief amongst some labs that if the beagles are bred for research, they should continue to be used in favor of it. Although this may have once just been a point of view, it's now actually being done here and in other countries.

So now raises the question, has this issue been addressed? See, it's not that there haven't been previous attempts to solve this problem, it's that when there was, they were gone about the wrong way. Most animal activist groups' arguments were obviously in defense of the beagles and called for research facilities to stop using them completely. As a result, a compromise couldn't be met because facilities were only given one choice and too much was at risk for them. For starters, one of the biggest factors that was at stake was money. If these big makeup or pharmaceutical companies were to allow for the beagles to be freed, it would be as though allowing thousands of dollars to just walk away. In connection with profit, there was the matter

of the people who invested large sums into these companies' research. As recognized by a Forbes article, the creation of a new drug can cost up to \$5 billion in investments (Herper, 2013, para.8). Yes you read correctly \$5 billion which, includes the amount spent on purchasing and supporting the test subjects. Thus, permitting the beagles to be released couldn't be an option and so they chose to ignore the issue at hand. One has to then consider if there's another possible solution to this inhumanity. The simple answer is yes, adoption! It may not stop the overall use of beagles in studies, but it could allow for them to have another chance at a normal life in the end.

Solution:

Until December 2010, a project in California by the name of "The Beagle Freedom Project" was developed by Shannon Keith, an animal rights attorney and spokesperson, who finally had the right idea. The project was established in order to bring a stop to the death and the continuous distribution of beagles once they're no longer wanted for research purposes in one location; indirectly providing an answer to this conflict (BFP, "About", 2010). Their mission emphasizing the rescuing of beagles that have been tested on and finding them "forever" homes. Therefore, this project not only gives people the chance to adopt a new pet, but it also gives the dogs a second chance at life.

All rescues performed by BFP from testing facilities are done legally and voluntarily. When BFP is informed of either a lab that is closing down or when beagles that once assisted are granted freedom, they take action. They send a team of hands-on workers to travel across the globe to wherever the beagles are being released and then transport them to loving homes. That's where the fostering process and mending of the beagles begins. As a result of being used by humans for experiments, most have developed a fear of man. The job of fostering, encourages

them to open up at their own pace and allows them to get used to an environment they've never been exposed to before. After the beagles have learned to do all the usual things dogs do, such as playing, eating on their own, and being house-trained they can be adopted. Although, if one wishes to take on the challenges that come with a newly adopted pet, a family could skip the fostering and take a beagle home once it arrives. All in all, both options are offered to the public in hopes of supplying the beagles with new forever homes.

#### Feasibility:

Now one has to determine why and how this solution has worked. One of the main reasons is because how willing and accepting BFP is. According to an article in Huffington Post, "Last year, Shannon helped engineer the biggest rescue of her life: 40 beagles relinquished to her care from a laboratory in Spain" (Woodhouse, 2012, para.7). It's evident that even somewhere out of the United States, there are labs that are in support of the project and have contributed to the cause. This also executes how only two years after being established, BFP has been a success. Additionally, after messaging the BFP's Facebook page I was informed how they will take any beagle that is handed over to them. There are no requirements or conditions that the beagles must meet and once they are rescued, "They are rehabilitated, receive veterinary care, and are adopted to loving families when the animals are ready." Hence, all dogs that they receive are able to participate in the adoption process; illustrating how BFP is a mission with open arms.

Furthermore, in an interview with Keith, BFP's founder (2013), when asked about the companies in affiliation with them, she admitted:

Although they may disagree with us about the efficacy and ethics of using animals for research, they do share our principle of giving these dogs a chance at a normal life after

all they have endured and suffered through for the sake of human products and corporate profits. (Zizo, para.6)

This provides the backbone to why this adoption project has worked; it's the participation of companies and the compromising of both sides in the hopes of the bettering of beagles. Along with its success, it should be acknowledged that it's mainly due to the wide-spread action and contributions of others. As said by a journalist in *The Daily Activist*, "Their mission is fueled by awareness and support and funded by tax-deductible contributions" (Benson, 2012, para.6). Citizens and companies have donated money and others help by participating as volunteers, allowing the project to sustain itself. Consequently, BFP is an efficient project where love and support has provided unbelievable results.

The answer to what should be done with these beagles once they are no longer needed is once again, adoption. Although, it stands as only a partial solution due to the opposition from big cosmetic and pharmaceutical companies that refuse to participate. These companies that run these research labs argue and feel that the beagles should be used for what they were created for. A prime example being, AstraZeneca, a global research-based pharmaceutical company that uses beagles for testing. After recently closing down two breeding facilities, one in Sweden and the other in the UK they decided they would transport all the beagles to another facility to continue using them for work. Based on an interview, when questioned why not grant the beagles freedom they stated, "Our team has concluded that, because these dogs have been purpose-bred for research, they are needed to support our global research efforts" (Owen, 2013, para.12). This response from the company showed no relevance to the issue at hand nor answered why they refused to release the beagles to the BFP. Their reasoning behind their actions therefore could be considered flawed, showing that there was no legitimate excuse as to why they refused to grant



the beagles freedom. And in response to companies such as AstraZeneca, that think beagles that were once used for testing should continue to support other experiments, could even serve as unreliable sources. For starters, if beagles that have experienced numerous testing to them already, are taken to other labs to be tested on they wouldn't perform the same way. In most cases, they may not even be able to act as the control in experiments because of their defected states. Thus, most times making the beagles useless to scientific studies.

Moreover, the only explainable reason as to why some companies won't participate with the BFP is due to the issue of economics. As already discussed, cosmetic and pharmaceutical companies invest extremely large sums of money into conducted research. The companies have to test their products before distributing them to the market, so they spend money on breeding beagles in order to make the research happen. With that being said, they're not willing to just release the beagles without some type of profit. To them it's believed efficient to continue using them in the name of science, and could be a possible answer as to why some companies just don't partake in the project. It may even seem that if the beagles are taken to another facility they can help serve as additional evidence of a product proving safe or not. Overall, it can be supposed that the big evil moustache twirling guy in this issue only cares about money and the results the beagles will provide the company with to make the new top-of-the-line product.

Ergo, the Beagle Freedom Project has not only saved hundreds of animals' lives in the past three years, but it continues to do so. It supplies beagles that were breed in labs to have a normal life in a loving home or as the BFP calls it, a forever home. Sadly, adoption as simple and nice as it sounds, has in fact received opposition from some companies. One has to suppose that the refusal to work together with BFP is due to economics and all it involves. The reason I say that is because this solution has shown to support itself. Its actions have proved to be a success

and it's efficient in how it maintains itself. Likewise, this project has provided an answer for some companies that no longer find use in the beagles and an answer to those that want to provide a better home for them. All in all, people can help by taking action alongside the BFP team because this project has supplied an amazing solution to a long overdue problem. Animal testing has never been seen in a positive light, but if there's anything that could make it seem a little less dark it would be starting here, giving these beagles a second chance. One paw at a time, anything is possible.

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*exordium*

As portrayed in the famous documentary film *The Cove*, which was awarded the Academy Award for Best Documentary Feature in 2010, scenes of the Japanese industrial whaling have astounded many viewers due to its cruelty and inhumanity. The blood from these whales and dolphins stained the water of the entire bay, and to me it seemed to be more like whale slaughtering rather than whale hunting. Commercial whaling in Japan first started in the 17<sup>th</sup> century, when whale meat became a popular cuisine among the Japanese people. Since that time, whale has become an indispensable part of the Japanese culture. Many culture elements, such as dances, ceremonies, and rituals have developed along with the whaling industry in Japan. Although in 1986, the International Whaling Commission (IWC) has banned commercial whaling worldwide due to environmental concerns, Japan found a loophole that allow countries to hunt whales for research purposes and carried on whaling. However, if Japan continues to hunt whales at its current rate, not only would it become an ethical issue, but it would also adversely affect the environment as well as other living species besides whales, and bring about serious consequences not only to the ecosystem, but also to humans.

*narrative*

*proposito*

*causal*

First of all, excessive commercial whaling would significantly decrease the number of whale population, thereby breaking the ecological balance in the oceans. For example, the fin whale is an endangered species that needs protection. Although the IWC has already banned commercial whaling for this species, Japanese government puts them into the JARPAII, which is a six-year plan to kill up to 50 fin whales each year. The blue whale is another species that became endangered because of commercial whaling. The number of blue whales has decreased to only one percent of its original numbers a century ago. On the other hand, some whale species, such as the minke whale and the humpbacks, due to their low commercial value, managed to

escape from the harpoons of the whalers. Consequently, their population expanded enormously during the past few decades, creating an imbalance among the natural distribution of whale populations in the oceans.

Not only does commercial whaling destroy the delicate balance among whale species, it also affects other animal and plant species in the ocean. For example, Japanese commercial whaling has caused the sea lion population in that area to decrease significantly. As a species that stand at the top of the food chain in the ocean, the killer whale normally eats sperm whales and baleen whales. However, due to excessive whaling, the population of the sperm whale and the baleen whale dwindled significantly, and killer whales had to look for other animals to substitute as their food source. As a result, they started to eat seals, reducing the seal population. Consequently, killer whales began to eat sea lions, causing the sea lion population to decrease by more than 80 percent during the past 30 years. Beyond that, some plant species in the ocean are also affected by this ripple effect caused by industrial whaling. As the sea lion population declined, killer whales started to consume sea otters, causing the population of the sea urchin, which is a major food source of sea otters, to increase drastically. As a result, these overwhelming sea urchins destroyed the kelp forest. All of these serious consequences are resulted from the chain reaction caused by the excessive whaling of sperm whales and baleen whales.

Another consequence of excessive commercial whaling in Japan is the disruption of the Ocean Carbon Cycle, namely the reduction on the ocean's ability to store carbon. Whales, although constitutes a small portion of the entire biomass in the ocean, play a big role in the Ocean Carbon Cycle. Studies have shown that more than 400,000 tons of carbon is pulled from the air by these whales every year. Moreover, since whales have lifespans of many decades, they

have the ability to store carbon for a much longer period of time, when comparing to other smaller organisms in the ocean that live for only days. And even the whale poop can be valuable in cleaning up the ocean and providing other fish and plants a better environment to live in. Studies showed that nutrients within whale poop can serve as a fertilizer for phytoplankton, which help refresh air in the ocean by extracting carbons. In addition, unlike fish poop, whale poop actually floats to the surface of the ocean, carrying with it the nutrients at the bottom of the ocean, thus accelerating the entire carbon cycle even more. Therefore, if whales were to be hunted excessively in the ocean,

The last serious consequence of commercial whaling I hereby would like to discuss is mercury poisoning. Unlike the other consequences, mercury poisoning is a more immediate threat to humans, especially people who consume whale and dolphin meat. In Japan, most of the whales and dolphins are hunted for their meat, which are consumed by humans. In Taiji, Japan, one of the major whaling towns of Japan, the local people consider whales and dolphins as simply larger fish that are no more than a food source to humans. As a matter of fact, local people of Taiji have been habitually consuming whale and dolphin meat for generations. However, being at the top of the food chain in the ocean, whales collect and accumulate mercury as they eat other fish in the ocean. As a result, when humans consume whale and dolphin meat, the mercury enters the human body and starts to adversely affect their health. Researchers collected hair samples of residents of Taiji who consume whale meat and found that the average mercury concentration far exceeded the tolerable level set by the government. Since it is difficult for humans to get rid of mercury, it bioaccumulates, causing health problems such as headaches, hair loss, depression, and even heart diseases.



On the other hand, I am aware that some people hold discrepant views. For example, one Japanese official once argued that for many coastal towns like Taiji, their economy relies heavily on commercial whaling. I concede that currently there are more than 1000 whaling ships and 100000 whalers in these small towns. However, a recent survey has shown that only 4 percent of Japanese people frequently consume whale meat, and 35 percent of the people would never eat whale meat. As this study indicates, the demand for whale meat in Japan has gone down significantly from several decades ago when people relied heavily on whale meat as their primary source of protein due to poverty caused by the World War II. As a result, more and more whaling firms are currently undergoing industrial transformation due to decreased profit. Beyond that, other proponents of commercial whaling argue that whales eat a huge amount of fish in the ocean, and therefore the number of whales must be controlled. However, not all whales eat fish, and some whales eat mainly krill. As a matter of fact, whales are not the primary predators of fish.

In sum, despite many negative impacts it has upon both the ecosystem and humans, commercial whaling in Japan remain a highly controversial issue. Considering the historical and cultural links between whales and Japan, it is difficult to come up with a solution that can be both effective and practical. Nevertheless, one thing that we can agree on is that if commercial whaling is not regulated effectively, humans will soon suffer the consequences our own actions.