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The Roles of Activism and Citizen Science in the Area Covered by the East Gippsland Regional Forest Agreement

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SIT Study Abroad

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**The Roles of Activism and Citizen Science in the Area Covered by
the East Gippsland Regional Forest Agreement**

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ISP Ethics Review

(Note: Each AD must complete, sign, and submit this form for every student's ISP.)

The ISP paper by Ian Corbet (student) does conform to the Human Subjects Review approval from the Local Review Board, the ethical standards of the local community, and the ethical and academic standards outlined in the SIT student and faculty handbooks.

Completed by: Peter Brennan

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Program: Australia: Sustainability and Environmental Action

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Abstract:

For this Independent Study Project, I have examined the roles of activism and citizen science under the East Gippsland Regional Forestry Act. I conducted the study in the hopes of understanding better how activists have contributed to the overall conservation of the forests of East Gippsland. As the government has recently extended the twenty year agreement for another year, I wanted to determine if the real stakeholders of the conservation movement were taken into account. I sought the perspectives of people involved in either the administration, implementation or opposition to the RFA. This ended up being eight people in and around the East Gippsland area. I interviewed them to gauge their perspectives on activism and the RFA. I conducted these interviews either over the phone or face to face on my weeklong journey out to the East Gippsland. I made sure to respect the wishes anyone who wished to be kept anonymous. While out in Orbost I took part in a surveying camp wherein I conducted a survey of a logging coup looking for traces of threatened animals. I also observed the group as a whole as part of participant observation.

My results showed that there was definitely a large role for activists in the conservation of the forests, yet some interviewees disputed how necessary or important that role really is. Through my participant observation, I saw firsthand the important and thorough work that environmental organizations have done in the conservation of forests. These findings may be used to encourage activism in these communities or to call for a change in the policy that makes it so the activists are the forest's only line of defense against destruction.

Key words: RFA, conservation, citizen science, activism, forestry

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To all the activists who have dedicated their lives to protecting those things that cannot stand up for themselves, we cannot thank you enough

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Abbreviations:

RFA: Regional Forestry Agreement

CAR: Comprehensive, Adequate and Representative

EEG: Environmental East Gippsland

GECO: Goongerah Environmental Center

Introduction:

The Regional Forest Agreements (RFA) has been a controversial forest management policy since the East Gippsland RFA was signed in 1997. Its proponents claim that it has allowed a sustainable forest industry to flourish and expand, creating more jobs and economic infrastructure in rural areas. Its detractors say that the RFA has been an environmental disaster and has led to the destruction of an ecologically vital ecosystem for only the profit of a few. Throughout the past twenty years, as more trees are cut down, there is an activist community that is dedicated to the protection of these forests. They employ citizen science as way to raise awareness and gain protection for these forests and the animals that inhabit them. In East Gippsland, these environmental activists take the form of two organizations, Environmental East Gippsland (EEG) and the Goongerah Environmental Center (GECO). These organizations work towards surveying the areas that are due to be logged and then taking legal action against the forestry industry to stop them from completing their harvest.

The aim of this study was to discover what the role these actions have been in the conservation of forests under the RFA. The East Gippsland RFA has been extended for a year and faces the possibility of being extended further. Through this study, I want to raise awareness of the work that has been done to conserve areas in spite of the RFA so that they may have a greater say in the future of East Gippsland forest management. I sought to do this through interviews with various players involved in the issues surrounding the East Gippsland RFA and see their perspectives on the RFA itself and the resulting activism that occurs within the boundaries of the RFA. I also participated in

some of the citizen science through a survey camp at GECO. Through these experiences, I was able to formulate my own perspectives on the role of activism alongside the perspectives I received during the interviews. Throughout this study, I have heard the forestry industry referred to as a sustainable industry. While at one point in time, sustainability arose as a reference to the forestry industry, the definition has shifted. (Brennan, 2017) Now the current definition of sustainability has taken on a more conservationist outlook. It no longer refers to simply prolonged growth but methods of ensuring a fair and continuous future for all. (Brennan, 2017) Through my research, I hope to identify whether the activists should reclaim the title of sustainable action from the logging companies.

Literature Review:

Legislation:

The East Gippsland Regional Forestry Agreement was signed and enacted on the 3rd of February in 1997. (Victoria and Commonwealth, 1997, p. 10) It was the first the RFAs that would be enacted in the next couple years. The East Gippsland RFA itself is a ten page long document with eight attachments. (Victoria and Commonwealth, 1997) It is a sixty-seven-point list of all the agreements between the Commonwealth and the Victorian state government and is concluded with the signatures of the Prime Minister John Howard and the Victorian Premier Jeff Kennett. (Victoria and Commonwealth, 1997) The document begins with the establishment of the purpose of the agreement, which is that both of the signatory parties are dedicated to “ensur[ing] effective conservation, forest management and forest industry outcomes” by meeting the obligations of the agreement. (Victoria and Commonwealth, 1997, p. 1) This statement reflects the vision of the RFA to be a sort of common grounds between the competing interests of conservationists, the logging industry and the government. The Regional Forestry Agreement was supposed to last for twenty years after the date that it was signed, meaning it would have ended on the 3rd of February 2017. (Victoria and Commonwealth, 1997, p. 1) If the governments deemed that the RFA should be extended, that process would be discussed in the third of the five-year reviews. (Victoria and Commonwealth, 1997, p. 1) The RFA then states that the parties in agreement will adhere to the policies outlined in the *National Forest Policy Statement*.

(Victoria and Commonwealth, 1997, p. 1)

The *National Forest Policy Statement* was created in 1992, five years before the East Gippsland RFA. (Commonwealth, 1992) It was an outcome of Australia's recent international obligation to the Rio Summit as well as increased debate over the usage of Australia's native forests. (Commonwealth, 1992, p. iii) The text of statement begins with an introduction that affirms the responsibility of that state to effectively manage their forest resources, as they are the owners of them. (Commonwealth, 1992, p. 1) They are responsible for ensuring effective use of the forests to benefit both the industry without destroying the natural environment and heritage of the area. (Commonwealth, 1992, p. 1-2) The main visions of the statement are to protect the biodiversity of the land, make sure the forest in total is increased, and that sustainable logging industry is developed and grows. (Commonwealth, 1992, p. 3) It also lays out a vision that the public will be educated on the values and successful conservation practices of the forest. (Commonwealth, 1992, p. 3) Then it moves into the goals of the statement which include the conservation of the forests, the promotion of industry, tourism, the stability of the water supply and others. (Commonwealth, 1992, p. 4-5) The remaining 29 pages outline the specific actions that are to be taken to promote the eleven goals. (Commonwealth, 1992, p. 5-36) One of the important aspects of this is the creation of the CAR system in order to protect forests that are "comprehensive, adequate and representative." (Commonwealth, 1992, p.7,10) The statement also asserts that the government will fund these conservation plans and will accurately report on their effectiveness. (Commonwealth, 1992, p. 9) It also says that it will continue to promote the trend away from native forest logging and into plantation or regrowth harvesting. (Commonwealth, 1992, p. 9) However, the clearing of area in order to create a plantation will be avoided if it compromises conservation goals. (Commonwealth, 1992, p. 11) Overall, the statement lays out a large amount of government funded and initiated programs that would promote conservation of the forests. (Commonwealth, 1992, p. 7-13) However, the language is somewhat non-committal and does not provide many specifics or timelines for these actions to occur. As for promotion of industry, the statement says that the government will minimize the regulations it places on the industry as well as creating infrastructure and facilitating investments that will benefit the industry. (Commonwealth, 1992, p. 14) The

government will also fund research into cost cutting and value adding processes to further help the industry. (Commonwealth, 1992, p. 15) It also removes some of the limits on the export of woodchips as long as they are under the plans that will eventually become the RFAs. (Commonwealth, 1992, p. 16) While the statement goes on into issues such as tourism and plantations, I believe that the first two sections on conservation and the industry are what is pertinent to the RFAs.

After its mention of the statement, the RFA then moves into its goals and aims. It begins by saying that “neither party will seek to use existing or future legislation to undermine or impede [the] agreement.” (Victoria and Commonwealth, 1997, p. 2) It then goes on to say that the logging industry now longer has to complete environmental impact statement. (Victoria and Commonwealth, 1997, p. 2) It also provides an avenue for World Heritage listing of the area through the mechanisms of the CAR system. (Victoria and Commonwealth, 1997, p. 2) It then states that woodchips and unprocessed wood are no longer subject to export controls or limits under current guidelines. (Victoria and Commonwealth, 1997, p. 2-3) The RFA then goes on to discuss the implementation of the CAR system, which can be found in the first attachment to the RFA. (Victoria and Commonwealth, 1997, p.3, 11) Things protected under the CAR reserve are divided into three categories: dedicated reserves, informal reserves, and places protected due to the regulations on the industry that prevent them from being logged. (Victoria and Commonwealth, 1997, p. 11) The RFA then goes on to mention the five year reviews that are to be conducted on the progress of the RFA, although the outcomes of them do not leave the agreement up for renegotiation. (Victoria and Commonwealth, 1997, p. 4) It then lays out its commitment to the preserving of threatened species through new action plans for recovery as well as plans for protecting forests for cultural as well as natural heritage. (Victoria and Commonwealth, 1997, p. 5-8) The RFA then moves into what it will do for industry, including the addition of research and financial resources in order to promote the continuation of a sustainable forest industry. (Victoria and Commonwealth, 1997, p. 9)

In 2002, the Regional Forestry Act was passed, furthering the establishment of the power of the RFAs. (Australian Government, 2002) This act lays out the other acts of the Commonwealth that the RFAs and consequently, the forestry industry is exempt

from. (Australian Government, 2002, p. 5) This includes the Export Control Act 1982, the Australian Heritage Commission Act 1975, and Part 3 of the Environment Protection and Biodiversity Conservation Act 1999. (Australian Government, 2002, p. 5) This document also lays out a process for holding the Commonwealth liable for actions that impede the RFA if it limits the freedoms of the companies. (Australian Government, 2002, p. 6) The act also explicitly states that the Commonwealth does not have the power to get rid of the RFAs except through the process laid out in the actual text of the RFAs themselves. (Australian Government, 2002, p. 5)

The only five-year review that was completed combined what was supposed to be two separate five year review. (Victorian Department of Environment and Primary Industries, 2014) In that review, it contended that the a good amount milestones of the RFA in terms of conservation and promotion the timber industry had been met. (Victorian Department of Environment and Primary Industries, 2014, p. 8) It did however mention that fact that the milestone of conducting a five year review in the time that was prescribed was not met as well as the fact that a system of assessing and establishing reserves for cultural heritage was not created in the time it said it would be. (Victorian Department of Environment and Primary, 2014, p. 20, 27) An independent report on the RFA also took note of the problem that the five year agreement was not completed in time. (Wallace, 2010, pp.23-24) It also noted that the proposed action plans for the recovery of threatened species were not completed. (Wallace, 2010, pp. 37-38) In all cases except for Western Victoria, less than half of the actions plans had been completed. (Wallace, 2010, p. 38) It also discussed some of the controversies surrounding the implementation of the CAR reserve system, specifically in the East Gippsland case where in protected zones were being returned to the forestry industry as a trade off for protected national park areas. (Wallace, 2010, p. 43)

On January 20th, Amendment One to the RFA was signed by the acting premier of Victoria, James Merlino, and Prime Minister Malcolm Turnbull. (Amendment One, 2017, p. 2) The amendment extended the RFA through to the 27th of March 2018, with the expressed purpose of allowing for the completion of the third of the five yearly reviews and matching it up with the expiration of the Central Highlands RFA that is due to expire at the time. (Amendment One, p. 1) It also said that the extension was to allow for the

completion of the Forest Industry Task Force. (Amendment One, p. 1) The extension was questioned by Senator Janet Rice during a meeting of the Rural and Regional Affairs and Transport Legislation Committee on the 28th of February 2017. (Australian Senate, 2017, p. 75) Senator Rice posed the question to the committee about when the decision was made to extend the East Gippsland RFA. (Australian Senate, 2017, p. 75) Senator Anne Ruston answered that the extension was discussed between the Commonwealth and the state government in 2016 for the reasons stated in the text of the amendment, mainly to allow for the completion of the review. (Australian Senate, 2017, p. 76) Senator Rice then inquired about how well the public was informed about the extension, as the decision was not announced until right before the RFA was set to expire, more than ten days after the amendment was signed. ((Australian Senate, 2017, p. 76) She also then questioned how well the impacts on threatened species were taken into account for the 13-months until the RFA expires once again. (Australian Senate, 2017, p. 77) She mentioned the accusations against the logging industry about how their “prelogging surveys” are inadequate and expressed concern that the extension did not come with any increased regulation. (Australian Senate, 2017, p. 77) The results of the extension and what will come after it are points of speculation.

Industry:

The logging industry in East Gippsland is controlled by VicForest, a state government owner business. (“About VicForest”, 2010) According to their own reports, the company only logs about .1% of forest each year and is committed to the regeneration of the forests that it takes away. (“Native Timber Harvesting in East Gippsland”, 2017) It only logs the forests that it has been given through an allocation order. (Agriculture Victoria) The allocation order is managed by DELWP and lays out the amount and areas that are available for logging as well as the conditions that must be met in order for VicForest log in the area. (Agriculture Victoria, 2017) These orders were formulated as a part of the Sustainable Forests Act in 2004. (Victoria State Government, 2004) The act, which states ones of its purposes as “provid[ing] a framework for sustainable forest management and sustainable timber harvesting in State forests” creates standards and regulations that the forestry industry must abide by. (Victoria State Government, 2004, p. 1) It also outlines the policy for the creation of

a timber safety zones. (Victoria State Government, 2004, pp. 42-45) These zones can be declared by the industry and it prevents certain activism or blockades in the coup. (Victoria State Government, 2004, p. 42-45) It states that officers are allowed to require people to leave the area and if they do not comply they can be arrested. (Victoria State Government, 2004, p. 43)

VicForest controls about one third of the timber industry in Victoria, the remaining timber products being supplied by plantations. ("About VicForest", 2010) They claim that for all they cut down, they regenerate with native seeds. ("About VicForest", 2010) This process involves the burning of the logged area "because Victoria's eucalypt forests regenerate naturally by fire." ("Regenerating Victoria's Forests", 2010) Once the forests are regrown, the management of the area is returned to the government. ("Regenerating Victoria's Forests", 2010) VicForest claims that they only log a small percentage of the old-growth forest in East Gippsland, somewhat due to the fact that much of it is protected in reserves and parks. ("Native Timber Harvesting in East Gippsland", 2010) Yet there is still almost 40,000 hectares that are available for logging. ("Native Timber Harvesting in East Gippsland", 2010) VicForest justifies their logging of native old-growth forests by claiming that they supply "some of the highest quality wood in Victoria" and native forest logging "plays a vital role in Victoria's sustainable timber industry." ("Victoria's Old Growth Forests", 2010) They also claim that this operation reduces the imports of timber from countries with less strict regulations than Australia. ("Victoria's Native Timber Industry", 200" VicForest also claims that they work to preserve the habitat of Victoria's native flora and fauna, even though the majority of habitat is "unsuitable for timber harvesting operations." ("Protecting Victoria's Flora and Fauna", 2017) VicForest works to preserve these areas by keeping trees that are the habitats for these animals and abiding by zones created to protect these species. ("Protecting Victoria's Flora and Fauna", 2017)

VicForest's regulatory handbook for 2016 includes the initiatives that must be taken when a threatened species is discovered to be in the area that is due to be logged. (VicForest, 2016, pp. 39-43) This can either be from VicForest's own surveys of through the surveys of another organization as long as it is verified by DELWP. (VicForest, 2016, p. 40) VicForest must develop a special management plan to determine how they may proceed with the logging process. (VicForest, 2016, p. 40) This plan must be done with

the input of DELWP and must be approved by VicForest's own conservation biologists. (VicForest, 2016, p. 40) The regulatory handbook also includes stipulations on what types of forests may be harvested and what buffers must be created around protected forests. (VicForest, 2016, pp. 41-42) Heathland, rainforest, and mixed forest are examples of forest that must be protected and buffered. (VicForest, 2016, p. 41-42) In the case of the greater glider, the area can be protected if more than ten of them are found within a kilometer. (VicForest, 2016, p. 55)

A website parody of VicForest's own website that is headed "VicFore\$t\$: Ensuring there are none" provides insights in opposition to what is found through VicForest's own releases. (VicFore\$t\$, 2017) It claims that VicForest has misrepresented a number of their facts and figures as well as downplayed the destructiveness of their practices. (VicFore\$t\$, 2017) The website also claims that their policies of fire management and regrowth are also based on inaccurate data that they provide to the public. (VicFore\$t\$, 2017, sections 5,7) They also discuss how VicForest's claim that plantations would not be able to fully meet timber demands is a myth and that the industry would be better than the heavily subsidized native forest logging industry. (VicFore\$t\$, 2017, section 10)

Environmentalism:

The two main organizations dedicated to environmental activism in East Gippsland are EEG and GECO. Both of these organizations are based in Goongerah, Victoria, a small village in the heart of East Gippsland. GECO has been around since 1993 and has contributed to much of the environmental knowledge and protection of East Gippsland's forests through their citizen science and surveying of coups that are due to be logged. (GECO: "Home") They have identified the presence of threatened species in many different logging coups and have identified instances where VicForest has logged illegally in places that they are not allowed to be. (Hill, 2016) They run a number of survey camps during the year to teach people the tools needed for effective citizen science as well as the issues concerning the conservation of the native forests. (GECO: "Events") They outline these survey techniques in a surveying manual that includes information on how to bait for cameras, how to conduct audio surveys for forest owls and how to spotlight for greater gliders. (GECO, 2015) These actions have been

successful in various aspects and GECO has achieved protection through the discovery of threatened species. (Hill, 2016)

Environmental East Gippsland operates towards the same goals but utilizes different methods. They file lawsuits against the logging industry in an effort to get them to adhere to the practices that they have laid out for them. (Environmental East Gippsland: "The Legal Cases") A victory over illegal logging on Brown Mountain led to VicForest being forced to complete surveys on the places that they intend to log before beginning the harvest. Other legal actions have been brought against VicForest to protect other animals such as owls or potaroos, yet these are normally settled out of court. (Environmental East Gippsland: "The Legal Cases") EEG also released various media that allows it to disseminate information to the public about the RFAs and the issues surrounding it. (EEG : "Media Releases") Through these actions, they have contributed to the conservation of much of East Gippsland's forests as well as creating awareness of the practices of native forest logging.

Methods and Ethics

Interviews:

All of the interviews took place in the last two weeks of my project. It started when I traveled out to Goongerah to stay with Jill Redwood, who became the first person I interviewed. As I made my way back to Melbourne, I contacted a number of organizations and government offices to see if I could interview them. I received a response from only one, Wildlife Unlimited, whose representative I interviewed in their Bairnsdale office. I walked into the regional office of VicForest in Orbost and was granted a short interview with the regional manager. I left my contact information with the Department of the Environment, Land, Water and Planning, who I then contacted later the next week. When in Melbourne, I conducted an interview with Senator Janet Rice of the Green Party, a project manager in forest industries technology, and another conservation activists. All of my interviews were recorded with the consent of the interviewee using the iPhone recording software for in-person interview and the application garage band for over the phone interviews. For my analyses of the interviews, I grouped together the activists with the member of Wildlife Unlimited, the VicForest regional manager with the forest industries project manager, and Senator Rice with the representative from DELWP. This way I could analyze consistencies, contradictions and overall sentiments between the members of similar groups. I looked for common themes, word choice, and characterization of the facts surrounding the issue. Finally, I would take all the responses together and compare them with the other groupings. To make this process more smoothly and coherent in the paper, I combined the results and discussion sections in my paper.

As my interviewees all had different backgrounds and expertise, I made separate interviews for each of them, with the consistent thread being the role of activism under the RFA. I also always included a question about what that particular person or their organization thinks should be the future policy for the management of East Gippsland's forests. These questions elicited varied responses, but only one interviewee was unaware of the roles of activism. I developed my questions at different points during the month as I was learning more about the issues and what the activist

community has participated in in the past twenty years. As my initial focus was simply to learn about the different perspectives on the RFA, I began my first interview with Jill Redwood going over the basic facts and opinions on the implementation and extensions of the RFA. I asked her mainly policy questions concerning the Comprehensive Regional Assessment and CAR reserve system. However, the questions relating to personal activism and the activism of her organization, Environmental East Gippsland, elicited the most interesting and informative responses. Over the next couple days of staying with her and partaking in activities with GECO, I learned more about the role of activism and how it became a sort of regulatory mechanism for ensuring conservation under the RFA.

As this was early on in my data collection, I decided to change my focus away from simple perspectives in the RFA to more concise study goal of finding out what the role of activism has been through the information I gather from the interview. While it does rely on my interpretation of the opinions and views expressed in the words of those being interviewed, it is also based on what I have found through my participant observation and analysis of content provided by the logging industry and the environmentalists. While still maintaining questions pertaining to more holistic perspective, I added in more questions pertaining to how each interviewee assessed the role of activism as well as what that perceived the relationship between the activist community and the logging industry to be. In an effort to keep a balanced line of questioning when switching from the activist community to the logging industry, I made a point of not including any of the activist viewpoints in my questions. I simply sought the opinion of the industry on the issues independent of what I had learned in the previous couple of days. As independent bias and perspective was sought, I did not want to impose any of the bias from the other viewpoints into my questioning.

In compliance with my LRB approval, I compiled a verbal consent form that I read to each interviewee before I began the interview. I told them the purpose of the study, where it would be published, and that I would try to minimize any risk of community, government or employer backlash by allowing any anonymity they wanted. I also informed them that they could back out of the study at any time in this process and that they could decline to answer any question. I also made sure not to share any information that had been disclosed to me in other interviews with another participant in my study. A lot of people acknowledge that the issue was controversial and some

were reluctant to share their names because of this. I complied with this wish and referred to them how they wanted to be referred to. All those who wished to have their contribution acknowledged I also obliged. I received verbal consent from all of my interviewees and none declined to answer any of the questions I asked.

Participation Observation:

In order to better understand the role of citizen science contributes to the conservations under the RFA, I set out to participate in a survey camp conducted by the Goongerah Environmental Center in East Gippsland. The survey camp ran from the Friday of the third week of the ISP period to that Sunday. Due to travel constraints I was only able to participate in the Saturday survey during the day and the spotlighting at night. On the night before the surveying day, we learned some of the basics of what we were looking for and how we record the data. The next morning we split up into groups with each going to a different coup that was scheduled to be logged. The group I was in consisted of about fifteen participants and the group leader, Ed Hill, who provided the information on what we had to do. Our two goals of the day were to find evidence of a koala in the area or the animal itself and to locate and record the data from a field camera set up by the organization.

We had two GPS trackers that had the coup preloaded onto them. When something is found, it is recorded in the tracker through its GPS coordinates. A picture of the GPS with the coordinates displayed alongside the evidence of the animal is then taken as evidence. In searching for the koala, we were supposed to be looking for scratch marks up the trunks of eucalypts. We were also looking for scat samples of a koala, which we would identify through a picture book of Australian mammal scat samples. Once we found a sample that looked promising, we would put it in a zip-lock bag to be sent off to testing. Each participant kept a bag on him or her and was within shouting distance of someone with a GPS. We traverse the terrain for about an hour and a half looking for these indicators. The field camera was set up in the center of the coup pointed on a bait trap with an identifiable background. The bait trap was an elevated box containing a tea strainer filled with a mixture of peanut butter, oats and truffle oil in an attempt to attract the endangered potaroos. The animals would not be able to eat the food, only sniff it as this was a passive surveying technique that sought to not impact the

behavior of the animals in an obtrusive way. We retrieved the memory from the camera which included heat sensed videos and pictures, including night visions images in the dark. The camera had been set up by a previous surveying group who had calibrated it to take a picture when an animal approaches the bait trap from any angle or direction.

That night, I participated in a spotlighting survey for the greater glider. This involved entering a logging coup with high powered spotlights that shine up into trees and reflect on the eyes of the greater gliders. Once the animal is identified as a greater glider by members of the team, its coordinates are placed into the GPS. The participants used binoculars to accurately identify the species of the animal. If more than ten gliders are found in a one-kilometer area, then the coup is protected. Audio calls from certain glider species was also recorded in the GPS, but this was for another glider species. If we found another greater glider in an area close by where we found another, we needed to confirm that the other one had not moved or else it could not be counted. We spent approximately five hours doing this, from around 7:30 pm until 2:30 am. The conditions that night was intermittent rain showers.

In addition to the results from the survey, I observed the actions of the organization as whole through participating in their program. I used the following framework to assess the actions and how they contributed to the conservation of at the area.

	Daytime Surveying	Nighttime Spotlighting
Knowledge and expertise		
Education of Participants		
Commitment to conservation goals		
Effectiveness and adherence to standards		

Table 1: Initial framework for participant observation.

In compliance with ethics approval, I will only comment on the actions of the organization as a whole and my own not on any individual members. I have left out the name of the group participating in the program and any actions or comments of individuals. I received approval from Ed Hill, the leader of the GECO surveying camp to include the actions of the organization over the course of the survey in my participant observation. The actions highlighted in this report represent a day of the activities that GECO participates in the goal of conserving the forests that are marked for logging. These actions are known to the public as they form the basis of legal motions to protect the coups, and the data is published and released to the public.

Results/Discussion:

Interview Results:

Activist Interviews:

Interview with Jill Redwood from Environmental East Gippsland conducted on April 19th, 2017:

My interview with Jill Redwood occurred at her house in Goongerah on the night I arrived during the third week of the ISP period. Jill Redwood is a renowned activist in East Gippsland who has advocated for an end to native forest logging for decades. She heads the organization, Environmental East Gippsland, which has brought lawsuits against the logging companies in order to force them to adhere to their own regulations. I spent three nights with her in Goongerah, during which I learned much about her activism and what the forests of East Gippsland mean to her. She has lived in East Gippsland for over thirty years and has been involved in environmental activism since she was around eighteen years old. She began getting involved because her passion for animal welfare led to an awareness of all the things going wrong with the environment and the need for conservation. This eventually led her to move out to East Gippsland and into forest activism as it is the place that she lives.

When I moved into questions about the RFA, Jill informed me that the RFA in East Gippsland has led to “twenty years of no-holds-barred destruction of forests.” While there were other plans in place to regulate the forest industry in the past, the RFAs were different as they gave the logging industry greater economic security while taking away any policing of their actions. Over the years, Jill has become more outraged at what the RFAs have done. She says that the RFAs exempt the forestry industry from any environmental regulation that any other industry or person would have to abide by, and this makes her question the Australian democracy as a whole.

The RFA process began with a Comprehensive Regional Assessment of the area that was supposed to look at the ecology and biodiversity of the area as well as take into account the viewpoints of various members of the community and environmental

organizations. Jill describes this process as “a heap of shit; it was a predetermined outcome.” She says that they knew what the outcome was going to be before they even conducted the assessment and although they did find a lot of missing information on the forests, they did nothing with this information and allowed logging to continue unimpeded. They did not look at what the ecological impact of the logging industry would be or what would happen to the timber supply in the event of disease or fire. They simply did the assessment and then allowed told them “you can log X amount for the next 20 years, go for it boys.” Although environmental groups brought up a lot of concerns to the assessors, they were only given “token” consideration.

I then asked Jill about the CAR reserve system that was set up around this time to protect forests that were deemed comprehensive, adequate and representative. She described the system as “totally inadequate and non-comprehensive.” She said that even though some habitat was placed in SPZs, much of it has been returned to the industry to be logged. The zones that were created have not been honored and the system has ultimately failed. She says that this has been allowed to happen as the public remains unaware of the RFA and its ramifications, and the government and VicForest has actually been misrepresenting the state and health of the forest to the public.

Jill claimed that the RFA ended up doing very little for the environmental side of things. The five-year reviews that were supposed to be conducted on the progress of the RFA have been neglected and to date only one has been completed after twenty years. However, the limit on the number of woodchips that could be exported was lifted, allowing the logging companies to take unlimited volumes of wood for that purpose. Jill then goes on to talk about how VicForest was set up in 2004 as a semi-governmental organization that takes in public funds and uses them to destroy the natural heritage of Victoria. She says that VicForest has “been the most appalling breakers of laws... it’s just a massive sheltered workshop that the public is paying for and we’re losing our ecosystems.” She says that the industry has targeted beautiful, biologically rich native forests to log and replace with “single species, industrial tree crops for private profit.” This has led to s destruction of habitat for gliders and owls that need hollow-bearing trees that only can form in old-growth forests. VicForest’s process of clearfelling these areas had been unbelievably destructive for these animal populations.

Jill contends that VicForest does not adhere to their own regulations and are permitted to do so by a government that is “bowed down to the industry.” She says that

while VicForest is required to do surveys, they do them in a way that they do not find the species to stop the logging and can continue doing so as they please. The RFA contended that surveys would have to be done, but they never were enforced and no one was held accountable. It took the work of Jill's organization, EEG, to take VicForest to court, where they proved that VicForest was "illegally logging forests and not abiding by the laws that protect threatened species." Even though EEG and the activist community was successful in this case, VicForest continues to do so-called "desktop surveys" and the only people who ever hold them accountable are the activist community. Jill then goes on to say:

...We are losing more and more every day. It's going down and it will never come again, you know? Hundreds of years, maybe thousands of years of stored carbon, of evolutionary magic, it's all just been totally obliterated from the landscape, clear-felled with their 40 ton bulldozers, chainsaws, and then intensely hot burns, just total, total obliteration of ecosystems and wildlife. All right, I'll stop there.

While that was all she had to say in response to the question about VicForests, she had much more to say about the RFAs and the forest management system.

I asked Jill more about the activism in the area and she told me all the non-direct action that EEG has taken. On their website and Facebook page, they release various media criticizing the RFA and the native forest logging in East Gippsland. They all compile reports and studies on the ecology of the forests and the legality of the actions of the logging industry. They also point about how absurd the economics of the whole industry is. Jill uses the example of how wood is sold to Japan for 9 cents a ton; wood that is eventually chipped up and made into paper. Conversely, buying wood in a town in East Gippsland costs the consumer 20 dollars for the same amount. EEG also uses images of the logged and burned coups to show the public the damage that is being done to the forest. They also employ social media as a way of interacting with politicians and calling them out in a public way before an election. Another line of action is through the legal system. They worked with lawyers to bring cases against companies to get them to adhere to the existing laws and regulations. This is a costly undertaking and is sometimes restricted by the amount of funds needed, something the logging industry is

aware of. As far as direct action, Jill says there is not as much as their used to be. She says it requires a lot of effort and most of the areas just end up being logged anyway. There was some success with media attention, but that has dwindled over the years.

Besides the lack of media attention, she says their campaigns have been successful in swaying the minds of the public. She says that 80% of the public want to see an end to native forest logging, or want to stop subsidizing the industry at least. However, this public opinion has not had any effect on stopping the logging of the forests. Jill claims the subsidies to be one of the most outrageous part, stating that “they could send every logging employee to Bali to retire” for the amount they are subsidizing the industry with, instead of paying them to destroy the environment.

When asked about the exact role of legal action in the protection of the forests, She mentions the case of Brown Mountain, where the courts determined that VicForest was illegally logging curtained area. The order also forced them to survey in the area, something that they have not done a very thorough job at. Jill says that the surveys are underfunded and minimal and intentionally use bad methods to look for animals that that they know they won't be able to find. Recently, citizen scientists have taken over this role and complete adequate surveys that are then used in court cases against VicForest. Legal action to protect forest owls has protected a lot of areas. At this point, Jill says that sometimes “the lawyers just have to write them a letter” and they will move out of the area.

Jill characterized the relationship between the activist community and the logging industry by talking about her own experience. She says that she is treated badly in some communities because of her activism. She has received death threats, had her mailbox destroyed, and has taken much verbal abuse from people who are angered by the work that she has done. She characterizes all these actions as “quite cowardly.” Contrary to this, when she has sat on some committees with representatives of the logging community, they were able to treat each other with respect and acknowledge that they were all human. She even describes a time when a logger picked her up when she was stranded on the side of the road and gave her a ride, even though she was carrying a lot of “Greens propaganda” with her. She says that sometimes face to face or over the phone interactions can be positive even with the contentiousness of the issue. Jill thinks that this could be because the workers aren't such bad people but simply people in need of jobs who can be manipulated by the higher-ups. Jill says that the mill

owners love to put their workers against the environmental communities and try to frame them as the enemy. The industry has portrayed the environmentalists, or anyone who does not see a growth in the industry as the only option, as radicals.

Moving into questions about the extension of the RFA, Jill claims that the process was not transparent and lacked public contribution. She said the public was unaware that it was going to happen due to the fact that it wasn't proceeding by any reports on the progress of the RFA. On a similar topic, I asked how she would assess the current state of East Gippsland's forests. She characterized them as "little islands of intact forests in a sea of degraded, industrialized, crapped out, abused, what once was beautiful and biodiverse forests." She still says that these are better than a lot of the forests in the state and thus are still very important in a place that has lost so much of its native vegetation. She said that East Gippsland is one of the last vestiges of forests that provide valuable ecosystem services and provide the home to a great number of threatened and rare species. When asked how she would assess the current state of East Gippsland's animal populations, she said that it is impossible to know for certain because nobody does any far-reaching surveys on the populations. She mentioned the existence of the Victorian Wildlife Atlas that was supposed to keep detailed population records, but it has recently fallen into underfunding and disrepair. Jill contends that this is deliberate on the part of the industry and the government, as they do not want to face the reality of the damage they have caused or have to stop their damaging practices. They are not aware of what Jill sees as the end to a lot of species, and the only reason that anyone knows that the populations are in decline is because of citizen science.

I then asked Jill about what she would like to see for the future management of East Gippsland's forests. She says she would like to see the industry "very rapidly" move them out of native forest logging. She says that "if they want to keep logging" they should be moved over into plantation growing. She then says they should take the few people who are actually employed in native forest logging and move them into regeneration work, something that is desperately needed. She says that hopefully with proper regeneration management, the forest can regrow to a state that it once was. When asked if this outcome was likely, Jill says she has become cynical to any type of change. She says she despairs and she doesn't know what it will take to turn the tides. She cites the example of the Central Highlands where "they have run out of trees" due to fires and still want to log the places that are set aside to protect the Leadbetter's

Possum. She thinks that market forces will be eventually what turn people away from native forest logging, as the money lies with the unions and the government.

I moved into questioning about whether the government aligns with her conservation concerns. This question was met with a chuckle and a simple no, but Jill did say that there have been many different governments in power since the signing of the RFAs. Overall, she thinks that the government does believe that they should be preserving native forests and “know what is currently going on is wrong” but are stuck in the “political machine.” Jill thinks that the government has transformed the economically unviable woodchipping industry into a “fire industry” and has created a culture of fear around bushfires. She says that while they say they are reducing the possibility of bushfire, they are doing the exact opposite. They are burning the plants that are resistant to fire and allowing the fire prone plants to grow in their place, increasing the likelihood of fire. She says that some claim this practice is “incredibly effective ecocide” as it kills a lot of things that are actually protected under environmental laws. She contends that as these animal populations are destroyed, they allow industry to continue without being held back by the regulations that protect these species. The protection for these species is under the Sustainable Timber Act, which is used by EEG in their lawsuits against industry.

I finished the interview by clarifying something that came out during the interview. I asked about how the woodchipping industry benefitted from the RFA and Jill replied by saying how the industry used to have to get permission from the federal government. Once these regulations were moved over the state responsibility, they were taken away and the “sky was the limit” for how much woodchips could be produced. This led to huge increases in the woodchipping productivity and what Jill refers to as “mining of the forest” without having to work under any environmental laws. After this somber note, I asked Jill what motivates her to keep up the fight and Jill said it used to be the animals she saw or heard when she would walk outside. Now she just has hope the forest will be able to return to what it used to be so that these animals will have a home. Other than that, it is outrage at the injustice that drives her and the fact that if she and the other activists don’t speak out for the forests, no one will.

Interview with Ed Hill from Goongerah Environmental Center, conducted on May 3rd, 2017:

Ed Hill is a campaigner for the organization Goongerah Environmental Center (GECO). During my time in Goongerah, I participated in a surveying camp with the organization where I became acquainted with the practices of citizen science and surveying logging coups for threatened species in order to get them protected. I spoke with Ed over the phone about a week and a half later. The interview lasted approximately fifteen minutes and due to technological difficulties, only about half was recorded. Ed has been doing this work for around fifteen years. He had heard about the issues surrounding the forest when he was living in Melbourne before he moved out to East Gippsland where he participated in a protest. This experience led him to become more involved in the activist community in the area. He describes his initial shock at finding out that the RFAs exempt the logging industry from various environmental laws and regulations that other industries have to abide by. Ed says that as the RFAs continued, the resources of Victoria's forests have dwindled and there has been an uptake in the level of species that are deemed threatened.

I ask Ed if he believes the RFA is in anyway or effective or lines up with his view of conservation. He replied "absolutely not", and that the forest management system only "pays lip service to environmental issues." He says it completely favors the needs of the industry over any environmental concerns, and that the policy of clear felling that is permitted under the RFA is "incompatible" with the conservation of native forests. He says that the conservation of species has been achieved through the use of citizen science and this method was made necessary because of the unregulated nature of the industry. Ed says that activists have had to work as "unofficial regulators of the industry." He characterizes it as pressuring the government to make sure the logging industry is complying with the laws that have been set out for them.

Ed claims that this lack of regulation is a result of the nature of the "agreement" portion of the RFA as it is an agreement between the state and federal government that turns over the management of the forests to state control. Ed says that this was in fact the federal government "washing their hands of any responsibility" and leading the state government to make the decisions on the outcomes of the forest outside of existing federal laws. When I asked if the federal government was aware that this would lead to less protection for the forests, Ed agreed that they must have known. I then

moved my questioning into what he would like to see for the future of East Gippsland forest management. He said that he would like to see a system based on conservation and an end to native forest logging. When asked if he believed this outcome was likely, he stated that it will be either because of economic reasons or when the public pressure forces the government to make a change. He stated “government’s don’t care about the protection of the environment unless the people care.”

Interview with Jenni Reside from Wildlife Unlimited, conducted on April 24th, 2017:

Wildlife Unlimited is an organization located in Bairnsdale, East Gippsland. It is an “environmental consultancy” organization that provides its services to outside clients that seek their services. These services include surveying species as well as a number of environmental education programs for schools. I spoke in person to Jenni as a representative of the organization in person during the beginning of the fourth week of the ISP period. I began by asking the basic functions of Wildlife Unlimited and how it contributes to the conservation of East Gippsland. Jenni replied by saying that Wildlife Unlimited operates by consulting with either governmental or non-governmental organizations that are in need of ecological and surveying reports. In addition to this, the organization leads school groups on tours of the environment to foster their education of the ecology. The organizations that consult with Wildlife Unlimited receive either specific surveying reports on species or “a general find out what’s there.” They provide their scientific expertise and opinions on the data as well. Jenni says that their organization increases the knowledge of the conditions of species in the area and their environmental education promotes understanding of the ecology of an area, their actions overall contribute to the conservation of East Gippsland.

Moving onto the topic of the RFA, Jenni says that since its implementation, there has been a big reduction in the health of the forests and the animal populations. She says the “RFA is really not adequate in protection and... walk[s] a fine line between the logging interests and the interests of wildlife.” She says that right now we need to be increasing the number of forests rather than decreasing them. Currently, there are various pockets of threatened species in East Gippsland that are at risk due to their proximity to logging and their destruction of habitat. The full impacts on species is not even known as it requires a lot more research than what has been done. She uses the

example of a population of yellow-bellied gliders that she claims is shrinking but people are unaware of the degree as it has not been thoroughly researched.

Jenni claims that this research and the overall conservation of the forests has fallen on the shoulders of activists. She says "...the only reason why there is any conservation of forests is because of activists." She attributes this to the activist movement back in the 60s and 70s that started looking at the health of forests outside of political or economic interests. She also claims that the majority of scientists she interacts with generally believe we should be saving our forests rather than cutting them down. When asked about how the government interacts with the scientific community, Jenni claimed that politicians lack the basic understanding of humanity needed for forests to survive. The logging industry as well, is rather blind to some aspects of ecology and erroneously believe that their current practices are renewable. Jenni says that their system of cutting down and regrowing for more timber does not meet a correct timeframe and can't go on. She says while their regrowth policies are actually quite good, it's the constant cutting down and felling that is causing the problem. Jenni attributes a number of climate and weather problems to the destruction of the forests, something that the public is not aware of.

Jenni goes on to claim that the fire management system is not based on concise scientific consensus; instead she says it is based on "simple science". Their philosophy is that they must burn preemptively so as a bushfire will not become out of control. However, they do not look at the effects of burning undergrowth that does not normally burn during a bushfire. By getting rid of this, the forests have become drier and the fires become hotter. However, after the recent devastating fires, people rely on the simple knowledge that if there is fuel, there is the potential for fires. Jenni also believes that the effects of the smoke have not been studied enough. She believes that the smoke, which hovered over the city for months, had adverse ecological impact that wasn't properly studied. She does note that similar fires will not happen again as there are fewer forests to burn. She thinks that people's fear of damaging fires have led to the government to mandate a certain amount of burns.

For the environment as a whole, Jenni does not believe the public is adequately informed about the issues surrounding native forest logging and the overall health of the forests. She says that people don't understand the relationship between well-being and preservation of forests. The burden of informing the public has fallen on the activist

community, although this is complicated by a relatively simplistic government initiatives and some right wing media sources. Jenni goes on to talk about how the inconsistencies and lack of coordination between governmental departments has hindered some of the governments effectiveness of forest management. She cites one example when some members of Wildlife Unlimited, while setting up cameras for DELWP, found that their cameras had been removed and their path blocked by prescribed burns conducted by the same organization.

When asked about whether her views on conservation align with those of her government, Jenni emphatically said that it didn't and that the government is mainly involved in the destruction of resources rather than the preservation. She also says that the local government in East Gippsland does not "want to know about environmental issues; they don't understand." In the future, Jenni wants to see a change in government policy that would ensure protection of the forests. She believes that native forest logging should end as soon as possible and should change over to recycled material. She thinks that this prospect will only become likely when it is too late to preserve the native forests. The abnormal weather patterns she mentioned earlier are another factor that she thinks will rally the public. She describes her outrage at politicians and publics who can't see the long-term and past the initial financial benefit. As for inspiration, Jenni says that she thinks nobody loses when resources are preserved and eventually the public will come around to this thought.

I ended my interview by asking about whether the surveys they conducted for government and non-government organizations are thorough, as I had heard from some of the environmental organizations that sometimes the job is done quickly so as to get it easy approval for logging. Jenni says that whenever Wildlife Unlimited conducts the survey, they are always approved by the environmental organizations. She says that sometimes when other organizations are completing surveys, they do a less than ideal job. She mentioned one time when the organization found a neglected baiting station that had plant growth on it. This seemed to confirm at least some of the other activists claims that some surveys are not followed through all the way, leading to inaccurate counts of species in an area.

Interview with an anonymous campaigner for forest conservation, conducted on April 27th, 2017:

During the last week of the ISP period, I spoke on the phone with someone who wished to only be referred to as a campaigner for forest conservation in East Gippsland. I had met with this person during my travels out to the area and they agreed to participate in the interview. My interview followed fairly the same format as the one I conducted with the other activists. The interview started with me asking about how they became involved in activism. They stated that they became aware of the issues surrounding the forestry industry through the involvement of friends in the movement as well as information from “alternative magazines.” I then asked about the initial reactions to the RFAs, which they characterized as negative to start, as it was obvious that the regulation was being diminished when it went to state control. The interviewee also stated that “it made it easier for the industry to log high conservation forests.” While the RFA was supposed to create a system to protect these types of forests, they did not put many inside the reserves including those that were considered to be of national estate value. This led to people being distrustful of the RFA as they began to see that environmental concerns were not taken into account, leading to protests against its implementation.

The campaigner said that this sentiment hasn’t changed much over time as so much native forest logging has been allowed since the signing of the RFA, particularly old-growth native forest logging. It has also become obvious to many that the RFA does not work in so many of its aspects, yet the government and the industry still continues to hold it up. They say that it could be seen as early on as 2002 that the RFAs were not working out the way they planned. In 2002, the sustainable yield figures came out and showed that the government had misrepresented how much was available to be logged. The figures showed how unsustainable the industry really was, a fact that has been proven by the revelation that the East Gippsland’s timber industry is subsidized by the Central Highlands by millions each year. The campaigner says that this has always been the case, but is unsure of why as it only makes money for the owners of the company and nothing for the government. They theorize it could be a method for turning the native forests into the type of forest crops they want and that will be profitable for them.

I then asked if they believe forest management plan is effective or if it aligns with their ideals for conservation. The campaigner talked about the rules for conservation of

particular species; how if you find a certain amount of a threatened species in a certain area, then logging can not occur. These stipulations exist for many different animals, some are listed as threatened and some aren't. The campaigner then goes on to criticize the system for two reasons. One is "no one is formally looking for most of these thresholds so if they were in an area, nobody would know." The other is that the rules for the number of species in these thresholds are often unattainable, so the species would not ever get the protection.. The campaigner then mentioned how VicForest was eventually forced to complete their own surveys because of legal action taken by EEG. But since EEG only referenced the protection of eight species in the lawsuit, VicForest only conduct surveys for only those species and neglect to look for other threatened species.

The campaigner mentioned that DELWP was supposed to serve as the regulator for this process. The work of the GECO recently proved that the special protection for species had simply not been done in the manner that it was supposed to have been done or in some cases, it wasn't done at all. Some of the areas that were due to be given special protection because of the presence of threatened species (found by VicForests' own contractors) had already been logged. They then said, "VicForest, at every step of the way, is not doing what they are supposed to be doing and its up to the community to police it." They also believe that the government is misrepresenting the industry by claiming that it is sustainable, word choice that the interviewee believes is misused.

When asked about the relationship between the activist community and the logging industry, the interviewee said it was "not good." They think that it could be better, but is the result of a culture of negativity and antagonism against the activists. The conservation believes that this is because they don't see the alternative to their industry or even the need for an alternative. They don't understand the conservationist's point of view that an alternative is possible and that it is worth protesting for. This has led to the loggers hassling the activists. This has led to conflict between the two groups and is what stands in the way of a positive relationship between the two groups. They also think that the loggers may be unaware of what they are doing because they see so much forest through their work, they do not fully realize how little is left. And while some do show signs that what they are doing is detrimental in some ways, they don't fully understand the ramifications of their and their industry's actions.

I then asked about what how they would assess the current health of the forest. They prompted me to look at a map of the forests before the RFA and the forest now, where I would see that the loss is massive, especially after the first couple years of its implementation. They say, “there are only tiny specks left” and there are much fewer logging crews as they have logged the majority of their supply. The forests that they have planted in their regrowth process have not yet reached maturity and cannot yet be logged. The amount of logging trucks on the road has decreased from a near constant flow to only the occasional. Bushfire has also decreased the amount of forests all across Victoria. Since there are less resources to log, the industry wants to open up more land to log, while the conservationists see a greater need to conserve what is left. Either way, the interviewee has said that it is amazing the amount that has been lost in such a short time.

As for assessing the animal population, the campaigner says people can't really know the effect of the RFA as there hasn't been baseline surveys. An exception to this case is the Greater Glider, which had a baseline survey done with the RFA and has recently been listed as threatened due to its declining population. Even without population information, it is predictable that these populations are declining as their homes in old-growth hollow bearing trees have been cut down. They also mentioned that there used to be a big and healthy population of owls on the coastal area but this population may also be in decline. The campaigner says that if the animals in healthy populations are declining, there is not much hope for the smaller populations. They claim “all these animals' populations are going to decline and no one is going to know until they're not there anymore.” While the state government is responsible for this, they simply have not done it and they no longer have the teams of researchers and scientists conducting surveys that they used to. They say that those who are left have to compete for grant funding just to do these surveys or any other work that they are already supposed to be doing.

Concerning the future of policy for management in East Gippsland, the interviewee mentions how valuable East Gippsland is to so many threatened species. They also want to see the government realize the error of their ways in logging high conservation value forests and move into “real sustainable forest management, not fake” that involves more funding into research. They, however, do not think this is very likely as there is little to see in positivity in the government. They claim that

government only thinks in “three year terms” and actual conservation requires a much longer plan. While the campaigner does believe that some members of the government may align with their beliefs, overall they are either uninformed or they just don’t care and if they don’t care then they don’t align. They mention that the environmental minister generally seems to care about the issues, but won’t do anything without political support. As for the local government, they do not do much with the environment, yet the interviewee informed me that they are generally conservative as East Gippsland overall is a conservative place.

I then moved onto my two final questions. One was one the process of how a species gets listed. In the case of the greater glider, which was recently listed at the state level but is awaiting confirmation, the evidence is first presented to a scientific advisory committee. Then they may bring in in experts to comment on it and verify the evidence and then open up the nomination for comment by the public. If the species is determined to be in need of protection, it is then recommended for the listing before being signed off by the relevant minister. One of the drawbacks is that the government does not employ scientists to keep the threatened list up to date and therefore leaves it mostly up to the public. This slows down the process and makes it so many of the species don’t end up getting listed. They have another list, called the advisory list that says how threatened a species is, which is compiled by government scientists. However, this list does not go onto legislation and does not lead to any protection for the species. The campaigner also said that the act concerning forest and fauna is up for review and will hopefully reform the system and the protection of all threatened species. The last question I asked was about what inspires them to keep up the fight. They answered that it feels like a “moral obligation” as the environment cannot talk for itself, someone must do it for it. They also feel a sense of satisfaction in the work that is done as a volunteer, especially when it leads to a positive conservation outcome.

Discussion of Activist Perspectives:

The perspectives I received from the four activists all spoke to the very important role that activism plays in the conservation of the forests of East Gippsland. They all identified different roles that activists play within the system. Whether it be education of the public, direct action through blockades, citizen science, or legal action,

there are a multitude of things that activists must participate in in order to guarantee the conservation of forests. And while the actions have seen some successes and some losses, those I interviewed seemed committed to keep up the fight as long as they can.

While speaking on the relationships between the logging industry and activists, the overall theme was that the relationship was not particularly good but there was room for improvement. Both Jill and the anonymous interviewee spoke about aggressiveness that they have faced from the members of the logging industry. (Redwood, personal communication, 2017) (Anonymous, personal communication, 2017) However, they also shared positive experiences and blamed the division on the higher ups who consistently pit the two groups against each other. (Redwood, personal communication, 2017) (Anonymous, personal communication, 2017) They mentioned that without these factors, the relationship could at one point be a positive one. (Redwood, personal communication, 2017) (Anonymous, personal communication, 2017) I have come to learn that the issue of native forest logging is a very controversial one. The fact that these people who are so opposed on a specific issue live and work close by is very interesting. They both enjoy the same environment but they look at it and see its worth very differently.

Some other interesting points came from Jill and Jenni regarding the fire management system. (Redwood, personal communication, 2017) (Reside, personal communication, 2017) From a scientific side of things, Jenni believes that the system is based on simple science that does not reflect the complex nature of fire. (Reside, personal communication, 2017) Jill and Jenni both believe that the burning of the undergrowth actually dries out the forests and leads to more frequent and hotter fires. (Redwood, personal communication, 2017) (Reside, personal communication, 2017) While Jenni was concerned with the environmental ramifications of so much smoke being released into the atmosphere, Jill took a more hardline approach. (Redwood, personal communication, 2017) (Reside, personal communication, 2017) She sees the fire as another industry onto its own, and one that dramatically contributes to the loss of species in the forests. (Redwood, personal communication, 2017) She claims that because of these fires, less species can be found in other areas, which benefits the logging industry. (Redwood, personal communication, 2017) They both believe that the public's fear of bushfire has led to this reckless management going unchecked. (Redwood, personal communication, 2017) This is a point that I heard come up a lot in

my interviews but never had heard of before. Many people see the fuel reduction burns as necessary, and it is hard to determine the scientific truth of the matter.

While all of the interviewees were in agreement to the role that surveying animal populations plays in the conservation of the forests, the anonymous source in particular focused on how the lack of government funding has led to activists taking up these roles or else they will simply not be done. (Anonymous, personal communication, 2017) While the RFA does require plans for recovery and surveying of species, the government has simply decided not to do it. (Anonymous, personal communication, 2017) That is why there is so much uncertainty about the state of the animal populations in East Gippsland; only the activists have bothered to conduct the surveys. (Anonymous, personal communication, 2017) Jenni also mentioned this as a problem in assessing a population of yellow-bellied glider. (Reside, personal communication, 2017) It is known that the population is declining but without proper surveys, nobody knows to what degree. (Reside, personal communication, 2017) The anonymous interviewee mentioned that if people are even somewhat aware of the fact that large populations are declining, then there is little hope for smaller populations. (Anonymous, personal communication, 2017) They also discuss how the process of listing a species as threatened has fallen on the shoulders of activists or concerned members of the public as the government has cut all of the scientists they used to have conducting the surveying work. (Anonymous, personal communication, 2017)

The interviewees were pretty much in agreement that the surveys conducted by VicForest were not always done to the best of their ability. Jenni said that when Wildlife Unlimited conducts surveys, they are always done accurately and thoroughly, which is not the case of VicForest's other surveys, in which she believes the job is not done well intentionally. (Reside, personal communication, 2017) Jill Redwood shares the fact that EEG had not taken VicForest to court to prove that they were not conducting the surveys and were, in fact, illegally logging. (Redwood, personal communication, 2017) Even with this stipulation, Jill claims that VicForest does not conduct surveys in the way that they should be conducted. (Redwood, personal communication, 2017) While my interview with a representative of VicForest displays a different viewpoint on the matter, through my interviews with the activists, I have found that the responsibility for assessing the animal populations has largely been left to the citizen scientists. (Kriek, personal communication, 2017)

As for the RFA, Jill and Ed both expressed their initial shock and outrage on hearing about how the RFA would allow forestry to be immune from federal regulations. (Redwood, personal communication, 2017) (Hill, personal communication, 2017) Ed contends that when the federal government turned over the responsibility to the states, they basically left it in what would become an unregulated and unaccountable industry. (Hill, personal communication, 2017) Jill states that for the past twenty years the industry has been allowed to log and destroy the environment completely unencumbered. (Redwood, personal communication, 2017) She states that the destruction has been immense. (Redwood, personal communication, 2017) The anonymous source would agree with this as they prompted me to simply look at a before and after map of the area to see the devastating effects that the RFA has had on the forests. (Anonymous, personal communication, 2017) Jill also mentioned the role of the woodchipping industry in this destruction, as any limits on woodchipping was lifted by the RFA. (Redwood, personal communication, 2017)

As for future policy, all of them were pretty much in agreement that they want to see a system that is actually dedicated to the conservation of forests rather than the destruction of it. Jill contends that the subsidies of the industry could be used to give the logging workers a different path in life. (Redwood, personal communication, 2017) This could either be through plantation work, regeneration or even pest control as Ed stated. Even with these optimistic views for the future, they were all skeptical that this outcome could be achieved in the short term. The consensus was that something big, whether it be economic downturn or political pressure, would be required to rally the public away from the current system of forest management and native forest logging.

Industry Interviews:

Interview with Deon Kriek, conducted on April 24th, 2017:

During the fourth week of the ISP period, I conducted an interview with Deon, Regional Manager of VicForest in Orbost. The interview was conducted in person in the office and lasted for about fourteen minutes. VicForest is a government owned business that is responsible for the logging of the forests in Victoria. They also operate the sale of

the timber and the regrowth of the area that has been logged. Their actions are governed by their Codes of Practice as well as the Sustainable Timber Act. They tout themselves as a sustainable organization that only takes a fraction of native forests for logging and dedicates itself to make sure that only log in places that don't affect threatened species. According to Deon, they only plan out and harvest coups that meet up with the guidelines in their Codes of Practice and other management and planning documents that determine the rules regarding threatened species near or in the logging coupes.

I began my interview with Deon by asking about the process by which a coup is selected and handed over from state control to the logging company. His response was about how the Timber Release plans are created through “an engagement with various stakeholders” to hear the various concerns of the stakeholders so that they may be addressed . Deon then said that before the Timber Release Plans come into effect. VicForest is responsible for the selection of the coups themselves. The process is called “coup reconnaissance” and involves a tactical planning group looking at the timber value of a certain area of forest. They look for commercial values such as species and volumes that can be transformed into different products for sale as well as how well the site can be accessed by the logging crews. Once the coups have been released, they stay that way for a number of years.

Also during this process, a survey of biodiversity and threatened species is carried out. This process involves the identification of any possible threatened species in the area followed by a survey looking for either the animals themselves or indicators of their presence. Deon states that while those conducting the surveys are not ecologists per say, they do have an understanding of the various indicators of species habitation. If there is a sign that a certain number of a threatened species may be in the area, a field ecologist is then brought in to confirm the findings. When I asked more about the assessment of the biodiversity of the coup, Deon said that it is a “requirement” for VicForest to use the Victoria biodiversity atlas that is compiled by DELWP to determine where the threatened flora or fauna might be. In addition to these surveys on the coups as part of the timber release plan, VicForest also conducts ongoing surveys of the coups within their holding, led by their contracted field ecology researchers. These surveys look for many different factors such as the conservation values of the area, the old-

growth forests, and any threatened species that have been detected by contractors or by third parties.

I then moved on to asking Deon about the relationship between VicForest and the activist organizations in East Gippsland. Deon says that during the process of the timber release plans is when they interact as the organizations (specifically EEG and GECO) are considered stakeholders. Deon also says the relationship is open, and although that do not interact directly, VicForest still is aware and considerate of their third-party reports. When prompted about the disagreements between the group, Deon stated simply that the environmental organizations have “a problem with native forest logging in general”. When asked about the misconceptions that people have about the logging industry, Deon said that a lot of it comes from the environmentalist community, and that they think that VicForest contributes to biodiversity loss and is an unsustainable organization that overlogs the forests. The general public doesn’t really engage with VicForest unless they are involved in environmental activism (or if they want to know which four-wheel drive roads will be closed). When asked about what VicForest would like to see for the future of forest management in East Gippsland, Deon stated that they want to see the continuation of sustainable native forest harvesting. Deon emphasized the word sustainable twice, reflecting the view that VicForest is committed to ensuring both the sustainability of the industry and the natural environment.

Interview with an anonymous project manager involved in forest industry research, conducted on March 26th, 2017:

The fourth week of the ISP, I came into contact with a project manager involved in research on forest industries. They wished to remain anonymous except for how I have referred to them in the previous sentence. I conducted the interview over the phone and it lasted for approximately twenty minutes. I began the interview by asking about what is entailed in the research on forestry industry in terms of policy making. They informed me that their research does not directly pertain to forestry policy, instead they are focused more on the industry and economic aspects of the industry. They say that they are “heavily integrated with industry and work hand-in-hand with industry on projects.” They described the process as a consultation where in they meet

with the industry representatives and discuss their priorities and needs for industry development and then create a project to address them. I asked them whether their work addresses any environmental concerns. They said that while it is not the main focus, it is one of the components that is considered and gave the examples of soil compaction and biomass as important environmental considerations. However, the primary consideration of all of these would be future productivity and economic returns.

The project manager said that the industry generally listens to the result of their study. The only exceptions being when the industry does not consider the result to be sufficient to warrant a shift in their practices or when the outcome is not relatable to the company's current needs. The companies look into the advice of the researchers and then determine whether or not to adapt to the recommended changes or to continue "business as usual."

I then moved into asking whether or not they believed the practices of VicForest were sustainable. They replied, "on the whole, yes," but claimed that there are some small patches of forests in Victoria where there are some issues with native forest logging. I asked about what effect the recent extension of the RFA has had on forest industry research, to which they replied that uncertainty is always a factor in "managing a resource sustainably." They mentioned the case of Queensland where native forests were being blocked off from private logging, leading to a lot more uncertainty in the industry and adaptive thinking. With that type of uncertainty, the planning aspects of the industry face "significant challenges." Speaking more on the future of the forest industry, they said that pulp and paper products as well as construction materials are relying more on plantation growth, while "high-value solid wood products are still very much reliant on a native forest resource." They say that there is still a very significant industry that relies on timber extracted from native forests.

I asked about what they perceived to be the greatest risks or impediments to the future of the forest industry. They said that it depends on the industry; the pulp and paper industry is shifting due to changes in the market because of "pressure on paper usage." For the solid wood product industry, the concern is how they compete with alternative materials such as concrete. There is a need for them to adapt to the technology that is emerging and the market shifts that come with it. When asked about whether they thought there would be more regulation on the industry, they said, "that

has generally been the trend,” but does not foresee any drastic differences in the near future and that any new policy after the RFA will probably be only a “mild variation.” He attributes that to the fact that things don’t change drastically on that large of a scale.

I then moved into questions on the particulars of their research. They replied that it is mainly technology and operational research, including pest and disease management. Rather than study how to change the policy, they study more on how to work within the confines of the existing policy. They said that there have been recent advancements in mechanization of the industry, including how to work better on steeper terrain, better image data and sensing, and detection of pests. They are currently doing work on mechanized fuel reduction processes in an effort to improve the fire management system. This involves mechanically removing the undergrowth rather than burning it, yet they say that they don’t believe it will replace controlled burns. It does however, make it easier to manage and allow them to operate more closely to infrastructure.

I asked them about what they look for in their research of technology to then advise to the industry. They replied that they are “highly focused on cost, productivity, speed of operation, flexibility.” The individual says that the industry look for cost and safety improvements in their technology, as well as the environment in a “three-legged stool type of thing.” They informed me that it is hard to say that any of them could be considered more important than the other.

Discussion of Industry Perspectives:

While my interviews with people involved in the forestry industry were short, they provided some insightful views that were not seen in those provided by the activists. Both of those interviewed contended that the industry in its current practices is sustainable. This is one of the things that was mostly dismissed in the interviews with the others. While the other activist interviewees claim that the industry is neither environmentally or economically sustainable, Deon from VicForest maintains that it is. (Kriek, personal communication, 2017) Obviously, some bias is apparent in this answer as Deon is financially tied to the industry he is commenting on. As his job security relies on the continuation of the forestry industry, he most likely does not think of it as an

unsustainable practice. The project manager involved in forest research also used the term “sustainability” when addressing the fact that it is hard for an industry to operate in sustainable resource extraction when there is so much economic and political uncertainty. (Anonymous, personal communication, 2017) The anonymous interviewee also admitted that there were some problems with the logging of native forests in some areas in Victoria. (Anonymous, personal communication, 2017)

Deon’s characterization of the relationship between the forest industry and the activist community was also interesting. (Kriek, personal communication, 2017) Instead of simply stating that there was very little communication between the two groups, he mentioned instead of how the activists contribute their third party reports to the process of the allocation of the land to be logged. (Kriek, personal communication, 2017) Deon did not express any affinity or need for these type of reports, noting that the reasons the activists feel the need to supply this information is because they believe the industry’s information is inadequate. (Kriek, personal communication, 2017) He mentioned the Biodiversity Atlas, which had been mentioned in the other interviews with activists. (Kriek, personal communication, 2017) Contrary to Deon’s position, the activists contended that the atlas or database is not kept up to date. (Redwood, personal communication, 2017) Deon also stated that it is required for VicForest to utilize the atlas when they are looking at whether threatened flora or fauna may be found in their coup. (Kriek, personal communication, 2017) Deon also mentioned that the activist community has different viewpoints when it comes to the heart of the industry. (Kriek, personal communication, 2017) Deon lists a number of misconceptions that he believes the activists have about the industry, including the claim that it is not a sustainable industry. (Kriek, personal communication, 2017)

Overall, the responses from Deon demonstrated the entrenched viewpoint that the industry is not doing anything inherently wrong and that their practices should be allowed to continue. (Kriek, personal communication, 2017) This is affirmed in part by the comments by the project manager who spoke about the how the industry seeks new technology to improve the industry. (Anonymous, personal communication, 2017) While environmental considerations are taken into account in the search for new technology, a lot of it is based on how to make the industry more profitable and even expand it. (Anonymous, personal communication, 2017) Unfortunately, this will lead to an even greater reduction in native forest populations, and efficiency in the technology

contributes to a more rapid rate of deforestation. (Anonymous, personal communication, 2017) The uncertainty of a new policy being put in place forces the industry into a sort of tough place. (Anonymous, personal communication, 2017) Activism and greater awareness of the issues will lead to more uncertainty for the future of the forest industry. In this sense, the activists and the forestry officials find more to disagree on.

Government Interviews:

Interview with Senator Janet Rice of the Greens Party, conducted on April 26th, 2017

I interviewed Senator Rice over the phone during the fourth week of the ISP period. I initially expected to be put in contact with her advisor, but was informed that Senator Rice was available for an interview. The interview lasted about twenty minutes. Senator Rice is a Senator for the state of Victoria and is a member of the Greens Party. She has been a member of the Greens since the early 1990s and holds the portfolio on forestry related matters. She was elected in 2013 and reelected in 2016. I began the interview by asking what is the stance of the Greens on the RFAs. Janet said that the position was “they should be scrapped and replaced with an agreement shifting all logging out of native forests over a period of time and the shorter the time the better.” This stance has evolved over the past twenty years since the agreements were signed and while the party was “highly critical” the RFAs when they were signed, only after it took effect did the environmental and economic failures become clear.

I then shifted my questioning to the recent extension of the East Gippsland RFA that occurred a couple months ago. Janet said that the extension was expected, but it was not publicly announced until the day before it was due to expire. She said that this type of bureaucratically maneuvering was expected, given that “the whole process of the RFAs is pretty much a farce in terms of good management.” She says that RFA was extended so the industry would be allowed to log native forests at the rate that they are currently doing it, but from a “bureaucratic perspective” it was done to line it up with the expiration of the Central Highlands RFA and so that they can complete the last

five year review, which has been delayed. I asked Janet what the Greens would like to see for the future policy of East Gippsland's forests. She said they would like to see "the forests managed for water, wildlife, tourism and for carbon. True multiple use." She says that 85% percent of wood products in Australia are coming from plantation resources, and she believes that government should be focused on moving that to 100%. She thinks that this outcome is not likely in the short term, but they will "keep chipping away at it." Eventually, she thinks the change will come from the complete lack of economic viability of the native forest logging industry.

Janet discussed how both major parties in the state and federal governments, the Labor party and the Liberal and National parties, are pretty much aligned on the view that native forest logging should continue has slowed any real progress away from the practice. This has led the Greens to use the community and activism as ways to protect the forests in whatever ways they can until the political pressure convinces the majority parties to change. She says that this activism and citizen science have been "really critical" in the conservation of the native forests. The activism has raised public awareness and citizen science has increased our knowledge of our forests and brought the knowledge of what we have lost to a wider audience. When I asked why the responsibility for this has fallen on the activist communities, Janet replied that it is "because of the power of the industry. She says she does not know why the logging industry holds so much political power, especially since it is an "economically unviable" industry. She thinks the major contributor to their level of influence is the lack of jobs in rural areas outside of resource management and the government's need to protect these communities. Janet contends that the money that goes into subsidizing the industry (five million dollars a year) could be going into providing jobs and training for those who would lose native logging jobs. This money could go towards creating recreation or rehabilitation jobs that would benefit the communities and the environment.

Janet goes on to say that there is a sort of "pioneering ethic" associated with the use of native forests. She says many people think that they should use them just because they are there and the public isn't entirely aware how damaging that mentality and the actions spurred from it can be to the environment. They see the products without seeing the damaging process that creates them. Janet also states that lack of public awareness is due to the lack of current salience about the issue, as the RFAs were

implemented twenty years ago. It also had not been much of a political interest since that time. While some issues like the closure of the Heyfield Mill attract public attention, it is more focused on the loss of jobs while “the ongoing logging and the pushing to extinction of Victoria’s animal emblem has had a steady trickle of interest.” When asked if the public was adequately informed about the health of Victoria’s forests, she emphatically said this wasn’t this case and that people are simply not aware of the issues or even that native logging was still going on. She says that people are horrified when they find out.

On the topic of the RFAs, Janet says that they have enabled the logging industry to continue logging at a high and less regulated level. Any protection that was granted to other forests as part of the agreement is not sufficient to protect the populations of threatened species. She specifically notes the case of the greater glider, which used to be fairly common and is now threatened. She says this is due to the deforestation of old-growth and hollow bearing trees in which the gliders make their home. These hollows take hundreds of years to form before the animal can be “suitable habitat.”

I asked Janet how she would describe the relationship between the logging industry and the activist community. She said that it is “not positive” but that the Greens are not completely against the wood products industry overall and actually support the plantation production. She thinks that if the industry moves over to plantations, then the relationship between the two groups could be a positive one. Janet says that she does participate in the forestry conference and events and engages with the industry in an effort to encourage them to get out of native forest logging. Moving on to the topic of VicForest, Janet states that there is not a lot of accountability or transparency about the operations. She says that they only have information on the financial aspects of the industry because they were leaked out. She says that the information on the environmental and economic impacts is kept internal they only “share what’s necessary.” She says that VicForest has the support of the government and those who are supposed to be concerned with the management of the environment “wash there hands of it and say that it’s all happening under the RFA and that there is nothing they can do to intervene.” Since the RFA takes away the power of the environmental regulations in the case of the forestry industry, there is little accountability. She finished the interview by answering a question on the fire management policy of the government. She states that the policies of burning the undergrowth dries out the

forests and makes them more fire prone. The regrowth policies also lead to more fire prone species being grown.

Interview with an anonymous person involved in state government policy, conducted on April 27th, 2017.

I interviewed someone who would like to be referred to as anonymous during the last week of the ISP over the phone for approximately twenty minutes. The interviewee is involved with the implementation of the policy of the Victorian state government. I began my interview by asking about the role of the government in the management of East Gippsland's forests. They answered that the organization DELWP is the nominated land manager of Crown land that is "not managed by Parks Victoria." I then asked about how the role of land management has changed under the RFA. They didn't identify any specific changes, but did state that the DELWP is bound by whatever the current policy is. DELWP oversees the infrastructure and general use of the forests under its control.

They said that DELWP is guided by forest management zones in their choosing of which plots to release for commercial logging. The type of zone that an area is delegated determines what the land can be used for. This zoning process is evaluated on various criteria including economic and environmental factors. When asked about the relationship between DELWP and VicForest, they stated that VicForest operates independently from the government yet is tied to it through the allocation process. DELWP plays two roles in that its job is to allocate land for different uses, but it also must serve as a protector for the environment. DELWP "does not actually direct VicForest to do anything, it does not have that authority", as once an area is allocated to VicForest, it is no longer managed by DELWP but by VicForest themselves, yet the compliance office from DELWP still directs VicForest through regulations of acts from the Victorian government. They say that "VicForest becomes the land manager for that period."

I shifted the line of questioning to the role that activists take in this process. They said that there is "a democratic process" by which activists or any other member of the concerned public can advocate for a change in zoning. I asked if when threatened species are found in an area managed by VicForest, whether the land returns to the

management of DELWP. They said that in fact it does and if it is approved, at the next review process, the area will be removed from the allocation order. This review process occurs every twelve months and a more in-depth one occurs every three years. The interviewee said that this process is driven by VicForest. The need to survey the land for threatened species under the process also falls to VicForest.

The interviewee explained more about how the land is allocated for timber use before the land is surveyed. It is released to VicForest with the knowledge that they have the responsibility to make sure they are doing their due diligence in making sure they comply with their codes of practices and other regulations. The interviewee mentioned that there have been many cases where the land has been allocated to VicForest and they have backed out of it and returned that land to DELWP. When asked how they would assess the health of East Gippsland's forests, they said that "in some ways it's better than it has been and in other ways it's not." They mentioned that the growth in the protection zones is higher than it has ever been, but this is matched with a large amount of recently harvested coups. They said that while it cannot be considered a "pristine system" it can also not be said to be "in trouble."

I asked whether they believed that the logging industry was sustainable under its current practices. They said that at a personal level, they did not believe it was. They said that it was not economically sustainable and that from an ecological standpoint, the industry "could do better." They said they had a theory that moving towards a "farming system" with long-term allocation would be a beneficial change especially for addressing bigger picture issues. The interviewee contends that the timber industry should continue in its essence but should move to a more farming practice. When asked if they think this change is likely, they referenced the forestry industry task force which included a number of stakeholder involved in the issue of forestry. They said that nothing has come of it but was unaware of any recent updates or resolutions from the taskforce. Because of this, they are doubtful that this level of change will occur in the near future.

Discussion of Government Perspectives:

Through the interviews of Senator Rice and the anonymous interviewee involved in the policy aspect of forest management, I have come to learn about the complex relationship that government has with industry. Senator Rice expressed disbelief at how politically powerful the logging industry has become, especially since it is not a profitable industry and actually costs the government money. (Rice, personal communication, 2017) It seems as if the government will put aside its own benefit to ensure the security of the timber industry. (Rice, personal communication, 2017) Until the upcoming economic disaster that Senator Rice believes is due to happen, the government will prop up the RFAs as a way to benefit an industry that claims to be sustainable. (Rice, personal communication, 2017) She also attributes this phenomenon to a something she refers to as a “pioneering ethic”, in which people extract natural resources just because they are there. (Rice, personal communication, 2017) They remain oblivious to the detrimental effects that such practices cause. (Rice, personal communication, 2017) Even when it threatens a national emblem of Victoria, the Leadbetter’s possum, people do not change their ways or their mindset. (Rice, personal communication, 2017) The policy representative also expressed a similar disbelief in the likelihood of people changing their ways. (Anonymous, personal communication, 2017)

Both groups had interesting perspectives on the roles of activism in the process of conservation of East Gippsland’s forests. Senator Rice described citizen science as “really critical” when it comes to conservation of the native forests. (Rice, personal communication, 2017) The other interviewee simply referred to the actions of the citizen scientists as adding towards a democratic process of review that occurs during the allocation process. (Anonymous, personal communication, 2017) The interviewee was somewhat dismissive about the role, while their answers about the current state of the forests seemed to suggest a concern for the forests that aligns closely with that of the activists. (Anonymous, personal communication, 2017) It is interesting that while they do not focus too much on the contribution of activists to the preservation of the forest, their views on the state of the forest and the what they would like to see happen for the future of East Gippsland’s forest policy seem to align. (Anonymous, personal communication, 2017) This could possibly be attributed to something that Senator Rice touched on. (Rice, personal communication, 2017) She said that while the relationship between the logging industry and environmentalists is strained, there is a lot that they

can agree on. (Rice, personal communication, 2017) The Greens do not want to see a complete end to the timber industry, but rather a swift shift over to plantation instead of native forest logging. (Rice, personal communication, 2017) This is what the policy representative also expressed as their wish for the future of forest policy in East Gippsland. (Anonymous, personal communication, 2017)

Another instance that the two people agree on is the fact that the current health of East Gippsland's forests is not ideal. While Senator Rice has a much more pessimistic view of the health of the ecosystem, the other source simply says that it could be better as well as worse. (Rice, personal communication, 2017) The latter does not go as far as blaming this on the native forest industry. (Anonymous, personal communication, 2017) They described the process of allocation of plots to VicForest as fairly diligent, where in surveys are conducted to determine the presence of threatened species. (Anonymous, personal communication, 2017) If these species are found, then the allocation returns to the government at the next cycle. (Anonymous, personal communication, 2017) While the claim that VicForest does not sufficiently complete their surveys has appeared in the interviews with the activists, it is not mentioned by the policy representative in the interview. (Anonymous, personal communication, 2017) Senator Rice provides a much more cynical view of the process. (Rice, personal communication, 2017) She contends that there is not much transparency or accountability in the process as VicForest does not have to abide by environmental regulations due to the RFA. (Rice, personal communication, 2017) These two differing views present different sides of the same coin. I believe that VicForest does not complete the surveys in the manner in which they are supposed to, but when the land has already transferred hands to industry, the government no longer involves themselves in checking up on making sure VicForest is completing its due diligence to the environment.

Participant Observation Results:

Surveying Results:

During the day we found a lot of scat that we determined to be either wallaby or wombat. Towards the end of the survey we found one piece of poop that matched the description of koala poop in the field guide. It was long and small and had a light color.

It was claimed that it also smelled like eucalypt but I was not able to confirm this finding, The poop was photographed with the GPS coordinates and then placed in a zip-lock bag. It was then sent off to be tested. I am unaware of the outcome of that test. The group located a couple of possible scratched tree trunks but we eventually deemed them to be discoloration of the bark. The results of the field camera showed a large amount of interested wombats, wallabies and lyre birds. I only saw a selection of the images and I do not know if any pictures of potaroos were found. As of my current knowledge, they were unable to protect the coup based on the findings of that particular survey.

During the nighttime, our group was able to locate five greater gliders. This was combined with another group's five, which were found less than a kilometer away. We confirmed that we had not double counted them and set off for two hours looking for the last one needed to protect the area. This involved traversing through the bush with no pathway. Most of the gliders we found were on the side of a logging road and two were found as a pair in the same tree. We did not find another greater glider and eventually stopped. During this time we also collected one audio record of a yellow-bellied glider and a visual of another one. I was told that yellow-bellied gliders cannot be exchanged for greater gliders and have their own regulations for protection.

Participant Observation Results:

	Daytime Surveying	Nighttime Spotlighting
Knowledge and expertise	<p>Very aware of the history of koalas in the area and where they could be located</p> <p>Knowledgeable about the level of protection a resident koala would gain</p> <p>Somewhat unsure of the scratch markings on the trees</p> <p>High expertise in surveying and use of equipment</p>	<p>Very knowledgeable about how to locate and identify greater gliders (clearly something that had been done many times)</p> <p>Showed expertise in using the equipment</p> <p>Was instantly able to identify a far away forest sound as the call of a yellow bellied glider</p> <p>Aware of the patterns and movements of greater gliders that could possibly lead to them being double</p>

	Generally knowledgeable about the issues surrounding the logging of native forests and the RFA	counted by the surveying group
Education of Participants	Spent a large amount of time explaining the processes to the participants and the outcomes we were looking for Informed the group about the issues surrounding the forest industry Presented it in a sort of one-sided way from the activist perspective	Less explanation was given other than how to use the spotlights and how many we had to find Some details on the practices of the industry and how they aren't the most effective surveyors Some information of how to identify greater gliders versus possums and yellow-bellied glider
Commitment to conservation goals	Committed to finding traces of the koala but the experience was treated more a learning experience rather than an actual survey Switched out the food in the traps as it became old and was probably ineffective	Spent a long amount of time looking for the last greater glider that we needed Went off terrain in a downpour to see if we could find anymore Only shown the light to see the animals and not too much to disorient them
Effectiveness and adherence to standards	Cross referenced all scat samples that we found with the pictures in the book Made sure to carefully mark the coordinates and take a picture of both of them to ensure that the evidence is accepted Set up the camera with an identifiable background so photos could be traced back to the exact location	Adhered amazingly to standards Only would count a glider in a nearby area when we had determined the other one didn't move Carefully logged the data and made sure we were within a kilometer No mention of ever manipulating the data even though we were so close to the goal

Table 2: Complete table of participant observation of surveying camp.

Participant Observation and Surveying Discussion:

Through my interviews and research, I had begun to draw the conclusion that this type of citizen science was critical to the conservation of the forest in East Gippsland. From seeing the tiresome work and long hours that they put into this, I feel as if I can conclude that this is the case. From the data collecting during the survey, I was able to see that these animals do in fact rely on these forests as their home and if they are logged then they will have no where to go. The fact that we found only ten in the area does not mean that there are not more in there or that the place shouldn't be protected. In fact, it reasons that there is a greater need to protect these animals at a lower threshold than has been prescribed for them. Through the participant observation, I was able to determine the high level of knowledge that is required to lead these surveying camps effectively. Leaders have to be aware of the terrain, the types of animals that can be found in the habitat, and know how to properly use the equipment to record their presence.

The amount of unpaid time put into this process shows the dedication of the activists to completing the surveys to the best of their abilities. They have no vested interest in the outcome other than their own affinity for preserving the native forests of East Gippsland. Surveys conducted by the government or by VicForest have the interest of their industry in mind, which could possibly lead them to do a lesser job than GECO. GECO's dedication has led them to be an effective resource for the conservation of the forests. The bait traps that they leave out are kept fresh, the cameras are checked regularly, and the equipment used is high tech and accurate. The group was prepared to continue to look for animals late into the night in less than ideal conditions for the possibility of saving that plot of forest and the animals that live inside it.

The educational aspect of the survey camp was also very important to the overall goals of sustainability. The participants were all taught how to properly use the equipment and identify the animals. By allowing us to do the work, we learned valuable skills that can transfer over to other conservation work. I came out of the program knowing that with the proper equipment, I could be able to conduct a similar survey. I also became much more aware of how citizen science and surveying of species leads to the protection of areas and how many and in what area they need to be found. While some of the information that was provided was biased in favor of the activist community, it did serve as a way to inform a group of people about the issues

surrounding conservation of East Gippsland's forests: information that they can pass along to others.

Conclusion:

The challenge of having such differing perspectives on the issue of the RFA made analysis of the conclusions difficult not impossible. While I don't believe I can make any far-reaching conclusion about the effects of activism on the conservation of the forest, it is apparent that the role that they played was a large and a necessary one. The RFA failed in its promises not only to the environment but to the industry as well. It has left an industry entrenched in its own belief systems that this process can go on and a government that is unwilling to stop them. While the RFAs attempted to create a regulatory system for the management of the forests, they failed to do this directly. Indirectly, however, the outrage and sadness at seeing an unregulated business destroying high conservation value forests, indirectly led to the creation of an army of activists who took up this role themselves, hoping that one day the practices that they were fighting against would stop.

While this study was rewarding and full of amazing experiences, it was held back by my lack of understanding about nuances of forestry policy before I began the project, unfamiliarity with the area and reliance on others for transportation left me in some tough situations. In future, I think this study could be increased in magnitude to include many different opinions on different areas under the RFA. Throughout this process, I have also learned about other very interesting elements that are worth exploring including fire management policy, the woodchipping industry and the viability of plantations. While I hope this research gets carried out, I hope it can be done under a new management system, with the RFAs a distant memory.

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Appendix: Verbal Consent Form for Interviews

Introduction, Background and Purpose:

Hello, my name is Ian Corbet and I am a study abroad student conducting a research project on the East Gippsland's Regional Forest Agreement as part of the Sustainability and Environmental Action Program for the School for International Training. This is a month long research project where I will be studying the role of activism under the RFA, as well as the policy behind it and its future. I am conducting a series of interviews in order to see their perspectives on the issue. Before you agree to participate in this study, you should know enough about it to make an informed decision, if you have any questions, please ask me.

Information:

For this part of my project, I will be conducting an interview. Participation in this study will involve the following: answering a series of questions related to personal activism as well as opinions on the forestry management system and industry. The interview should not take any longer than 30 minutes and you can stop or take a break at any time. Feel free to say as much or as little as you want. The interview can be conducted at a place of your choosing. The information obtained from this interview will be incorporated into a written report that will be submitted for an undergraduate class and will be included in the program library and may possibly be published on the Internet. It will also form part of a short oral presentation that I will make to my class.

Risks:

There are no likely physical risks to occur during this interview, but some questions may be emotionally challenging or disturbing as they could bring up negative emotions or reaction. In order to minimize this, feel free to end the interview at any time, take a break or simply not answer the question. There is a risk that the views expressed in your interview might be embarrassing or cause retribution from an employer, government or community as the issue is so controversial. In order to minimize this risk, I will make sure you have as much confidentiality or anonymity that you wish (e.g. you do not have to be named or closely identified in the paper) and I will send you the section of my paper where I record your answers to you for final review.

Benefits:

There are no known personal benefits to participating in this interview. It will, however, hopefully help in the understanding of activism under the RFA and the possible future management of the forests in East Gippsland.

Confidentiality:

You have the option of remaining anonymous or having your contribution to the study acknowledged. If you choose to remain anonymous, your identifying information will be

kept strictly to myself. No reference will be made in the oral or written report which could link you to the study. You will be referred to however you would like.

Participation:

Your participation in this study is voluntary, you may decline to participate. If you decide to participate, you may withdraw from the study at any time. You may also decline to answer any specific question. If you withdraw from this study at any time, the information already obtained from you will be destroyed.

Appendix: Non-anonymous Interview Questions:

Jill Redwood:

1. What is your name?
2. How long have you lived in East Gippsland?
3. How long have you been involved in environmental activism?
4. What was your initial reaction to the implementation of the RFAs?
5. How has this sentiment changed over the past twenty years?
6. What was the process of the Comprehensive Regional Assessment like? Do you believe all viewpoints were included?
7. How has the industry or the government misrepresented the state of the forests to the public?
8. What actions have been against the RFA in the area? Have they been effective?
- 8b. What methods do they use in engaging the public or the media?
9. What has been the role of legal action in combating the forest industry or protecting the forests?
10. What do you believe is the relationship between local activists and the forestry industry?
11. Do you believe the process by which the RFA was extended was transparent? Do you think the public was adequately informed about it?
12. How would you assess the current state of East Gippsland's forests? How would you assess the current state of its animal populations?

13. What would you like to see in terms of policy for the future of East Gippsland's forests? Do you think this outcome is likely?
14. Do you think the state government aligns with your concerns for the forests?
15. What are your opinions on the industry's fire management strategy?
16. What inspires/motivates you to keep up the fight?

Ed Hill:

1. What is your name?
2. How long have you lived in East Gippsland?
3. When did you start to be involved in environmental/forest activism? What drove you towards it?
4. What was your initial reaction to the RFAs and how has this feeling changed over time?
5. Do you believe that the forest management system is effective and aligns with your vision of conservation? How or how not?
6. How has industry or the government misrepresented the state or health of the forest to the public?
7. What actions have you been involved with against the RFA or logging in general? What methods have you used and how effective have they been? (What has been the role of surveying in combating the RFAs)
8. What do you believe is the relationship between local activists and the forestry industry?
9. How would you assess the current state of East Gippsland's forest? How would assess the current status of its animal populations?
10. What would you like to see in terms of policy for the future of East Gippsland's forests? Do you think this outcome is likely?
11. Do you think that the government aligns with your concerns for the forest? What would you like to see changed?
12. What inspires or motivates you to keep up the fight?

Deon Kriek:

1. How long has VicForests been operating in the East Gippsland?
2. What is VicForests role in the management of East Gippsland's forests? How would you describe what VicForest does?
3. What is the process that goes into selecting a coup to be logged? How long does this process take? What factors are taken into account?
4. What is the relationship between the forestry industry and the activists? What are the main disagreements?
5. How would you assess the health of East Gippsland's forests? How would you assess the health of the animal populations?
6. In what ways has the implementation of the RFA helped the industry? In what ways has it harmed it?
7. Do you believe that the current practices of logging companies are sustainable? If not, what would you like to see changed?
8. What would you like to see for the future management of East Gippsland's forests? Do you think this outcome is likely?
9. How does VicForest contribute to the conservation of an area? What steps does it take to be more sustainable?
10. What do you believe are common misconceptions of the forest industry? Why do you think this is?

Senator Rice:

1. What is the Greens stance on the Regional Forestry Agreements? Was this the initial stance or did this evolve over time?
- 2a. Was the process of the extension transparent? Were all view points taken into consideration? Why was this so?
- 2b.. What were the reasons behind the extension?
3. What do the Greens want for the future management of Victoria's forests? How likely do you think this is?

4. What has been the role of activism and citizen science in the protection of Victoria's forests? Why has the responsibility fallen on them and not the government or the industry?
5. Do you think the public is adequately informed about the health of Victoria's forests and animal populations?
6. What have been the main failures of the RFA over the past 20 years? What do you think the reasons are for this?
7. How would you describe the relationship between the logging industry and environmentalists?
8. Do you think VicForest Is kept accountable by the government?
9. What is the rest of the government's stance on native forest logging?
10. What are the Greens opinions on the industry's fire management?

Jenni Reside:

1. How long has Wildlife Unlimited been operating for?
2. What are the main functions of Wildlife Unlimited? How does it contribute to the conservation of East Gippsland?
3. What have been the effects of the RFA on the health of the forest and animal populations in East Gippsland? How would you assess these populations today?
4. Has conservation of the forests relied more on the government or on citizen scientists and activists? How so and why do you think this is?
5. What is the relationship between the scientific community and the forestry industry? What have been the main disagreements?
6. Do you think the public is being adequately and correctly informed about the logging industry as well as the environment in East Gippsland?

7. How has the RFA changed the management system of East Gippsland's forests? What have been its success and what have been its failures?
8. Do you think the government aligns with your views on the management of the forests? How so?
9. What would you like to see for the future of forest policy in Victoria? How likely do you think this outcome is??
10. What inspires you and your members to do what you do?