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3-1-3

How to Abolish Culling

1. Motivation behind Research Paper

Have you ever thought about the importance of life? I came to know the current situation of culling from the media. Culling is the act of reducing or controlling the size of a population by hunting or slaughtering them. Animals that are considered weak and unable are easily targeted. In the video that I saw, there were many dogs that were trembling and frightened while they waited for their lives to be taken. Among them there was even a dog that was weak and could not walk. This video is an unforgettable one for me. Even in the present, innocent dogs are killed by culling and precious lives are lost. Now that I know the current situation, I have a strong desire to eliminate the culling, and thus I began my research with my group.

2. Introduction

The aim is to raise awareness about culling or animal slaughter by using data. Although the number of culling has been decreasing in recent years, it is a fact that many animals are still being culled. According to the Ministry of the Environment, in 2020, 83,842 dogs and cats were housed in municipal public health and welfare centers, of which 26,416 were killed. From 2009 to 2014 for years, one million dogs and cats were killed, and the most common death was by carbon dioxide gas. Culling pets is considered one of the most serious social problems, but why is it still unsolved? To solve this problem, we formed Rep0.

3. Results and Analysis

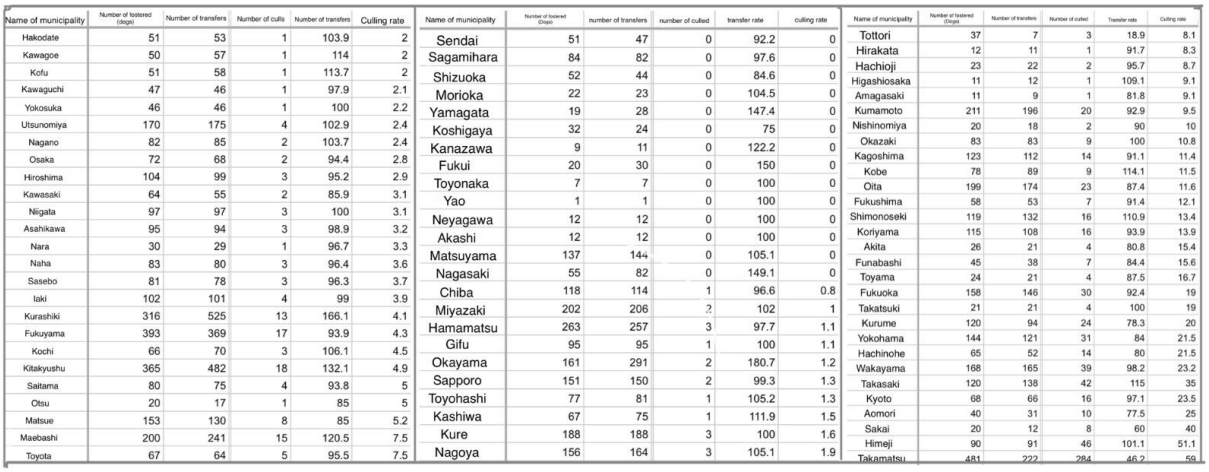
Nationwide Culling and Transfer Rate

At first, we calculated the rate of culling in some regions and then researched which areas have high and low culling. According to the data provided by the Ministry of the Environment, the culling rate was calculated by (Number of disposals)÷(Number of pick-ups)×100. I was able to provide data on the culling rate nationwide, but we noticed that even with the same culling of 0 there was a difference in the amount of activity in that area between areas with a large number of pick-ups and areas with a small number. From figure 11, Yao city killed 0 out of one dog it took in and gave away one dog so, the culling rate is 0% however, in Takamatsu city killed 360 out of 481 dogs it took in and gave away 173 dogs, so the culling rate is 75%. From this, it can be seen that even if the number of transfers is large, the number of culling is not necessarily small. Furthermore, even if the culling was 0, the number of dogs taken in in the first place may be small. From this, we realized that the culling rate of 0 is not necessarily the only good thing. In addition, we considered that “the amount of activity may be different between regions with a high transfer rate and a low culling rate of 0” and “if the transfer meeting becomes active, all the dogs kept by the shelter will be transferred and will not be euthanized.” Based on the idea hypothesized that the transfer rate is the number that shows the measures to reduce the local culling rate to 0. Then, we thought that if I could find out the factors that contribute to increasing the transfer rate, we would be able to solve the problem by disseminating it to each local government, so we decided to investigate the regularity of the areas that found the high transfer rate(In figure 2, red indicates areas with high transfer rates, and blue indicates areas with low transfer

rates.) Transfers rate=(number of transfers)÷(number of dogs taken)×100. According to figure 2, Niigata prefecture has 114% and Ehime prefecture has 33%, showing a large difference in the transfer rate. However, according to a website that summarizes transfer events nationwide, even if we compare the number, frequency, and dates of transfer events held each year, the high frequency of holding events does not necessarily mean that the transfer rate is high. In addition, there are almost no details of specific measures and efforts on the website, and we could not find a big difference in efforts between areas with high transfer rates and those without.

	Number of fostered(dogs)	Number of culls	Culling rate	Number of transfers	Transfer rate
Yao	1	0	0	1	100
Takamatsu	481	360	75	173	36

Figure 1-1: Comparison of transfer rate and killing rate



Name of municipality	Number of fostered (dogs)	Number of transfers	Number of culls	Number of transfers	Culling rate
Hakodate	51	53	1	103.9	2
Kawagoe	50	57	1	114	2
Kofu	51	58	1	113.7	2
Kawaguchi	47	46	1	97.9	2.1
Yokosuka	46	46	1	100	2.2
Utsunomiya	170	175	4	102.9	2.4
Nagano	82	85	2	103.7	2.4
Osaka	72	68	2	94.4	2.8
Hiroshima	104	99	3	95.2	2.9
Kawasaki	64	55	2	85.9	3.1
Niigata	97	97	3	100	3.1
Asahikawa	95	94	3	98.9	3.2
Nara	30	29	1	96.7	3.3
Naha	83	80	3	96.4	3.6
Sasebo	81	78	3	96.3	3.7
Iaki	102	101	4	99	3.9
Kurashiki	316	525	13	166.1	4.1
Fukuyama	393	369	17	93.9	4.3
Kochi	66	70	3	106.1	4.5
Kitakyushu	365	482	18	132.1	4.9
Saitama	80	75	4	93.8	5
Otsu	20	17	1	85	5
Matsue	153	130	8	85	5.2
Maebashi	200	241	15	120.5	7.5
Toyota	67	64	5	95.5	7.5

Name of municipality	Number of fostered (Dogs)	number of transfers	number of culled	transfer rate	culling rate
Sendai	51	47	0	92.2	0
Sagamihara	84	82	0	97.6	0
Shizuoka	52	44	0	84.6	0
Morioka	22	23	0	104.5	0
Yamagata	19	28	0	147.4	0
Koshigaya	32	24	0	75	0
Kanazawa	9	11	0	122.2	0
Fukui	20	30	0	150	0
Toyonaka	7	7	0	100	0
Yao	1	1	0	100	0
Neyagawa	12	12	0	100	0
Akashi	12	12	0	100	0
Matsuyama	137	144	0	105.1	0
Nagasaki	55	82	0	149.1	0
Chiba	118	114	1	96.6	0.8
Miyazaki	202	206	2	102	1
Hamamatsu	263	257	3	97.7	1.1
Gifu	95	95	1	100	1.1
Okayama	161	291	2	180.7	1.2
Sapporo	151	150	2	99.3	1.3
Toyohashi	77	81	1	105.2	1.3
Kashiwa	67	75	1	111.9	1.5
Kure	188	188	3	100	1.6
Nagoya	156	164	3	105.1	1.9

Name of municipality	Number of fostered (Dogs)	Number of transfers	Number of culled	Transfer rate	Culling rate
Tottori	37	7	3	18.9	8.1
Hirakata	12	11	1	91.7	8.3
Hachioji	23	22	2	95.7	8.7
Higashiosaka	11	12	1	109.1	9.1
Amagasaki	11	9	1	81.8	9.1
Kumamoto	211	196	20	92.9	9.5
Nishinomiya	20	18	2	90	10
Okazaki	83	83	9	100	10.8
Kagoshima	123	112	14	91.1	11.4
Kobe	78	89	9	114.1	11.5
Oita	199	174	23	87.4	11.6
Fukushima	58	53	7	91.4	12.1
Shimonoseki	119	132	16	110.9	13.4
Koriyama	115	108	16	93.9	13.9
Akita	26	21	4	80.8	15.4
Funabashi	45	38	7	84.4	15.6
Toyama	24	21	4	87.5	16.7
Fukuoka	158	146	30	92.4	19
Takatsuki	21	21	4	100	19
Kurume	120	94	24	78.3	20
Yokohama	144	121	31	84	21.5
Hachinohe	65	52	14	80	21.5
Wakayama	168	165	39	98.2	23.2
Takasaki	120	138	42	115	35
Kyoto	68	66	16	97.1	23.5
Aomori	40	31	10	77.5	25
Sakai	20	12	8	60	40
Himeji	90	91	46	101.1	51.1
Takamatsu	481	222	284	46.2	59

Figure 1-2: Overall comparison of transfer rate and culling rate

Current status of shelters

In order to actually learn about the activities of shelters, and to learn about the current situation from the people who are working there, and to obtain new information, we have volunteered four times at shelters in Nara prefecture (world love heart). participated in the movement. What I learned at the shelter was that each individual has a different personality, and Shiba Inu and Japanese Dogs in

particular will not listen to their owners if they are not careful about how to take care of them. As a result, many people feel that “it is harder to take care of than I thought” and “they don’t have the character I thought”, and as a result, they stop keeping them. Furthermore, we were able to obtain new information on the transfer rate, which had been stagnant due to lack of regularity. When he looked into the transfers, there was no difference in the efforts in each city, and he could not find any regularity. If data such as the number of volunteers and specific management methods were managed by each shelter, it would be possible to increase the transfer rate in any area by implementing the activities of the city, which has a high transfer rate. However, at transfer meetings, results depend on the efforts of people, and since most shelters are run by individuals or volunteers, detailed information and data are not well managed. No records remain. For that reason, even if I looked it up on the prefectural website, I found that I could not find any differences in the efforts that are proportional to the differences in transfer rate. As a result, the original purpose of "eliminating culling" is to find the difference in activities in each city from the culling rate, to find the difference in activity from the transfer rate, and to find a solution from these two. It was considered unrealistic due to the inaccuracies found in the data. (Fig.2)

	Number of transfers + Number of returns	Number of fostered	transfer rate	round off
Aomori	171	267	64.04494382	64
Miyagi	356	325	109.5384615	110
Yamagata	267	386	69.17098446	69
Fukushima	97	91	106.5934066	107
İbaragi	1018	1019	99.90186457	100
Tokyo	142	141	100.7092199	100
Kanagawa	203	198	102.5252525	102
Niigata	180	158	113.9240506	114
Fukui	92	85	108.2352941	108
Kyouto	62	62	100	100
Hyogo	79	152	51.97368421	52
Nara	51	76	67.10526316	67
Okayama	200	197	101.5228426	102
Hiroshima	1200	1172	102.3890785	102
Yamaguti	1298	1349	96.21942179	96
Yamaguchi	528	831	63.53790614	64
Kagawa	1125	1493	75.35164099	75
Ehime	222	669	33.1838565	33
Nagasaki	367	789	46.51457541	47

3. Current status of microchip implantation

Next, we decided to focus on microchips, and on June 1, 2022, microchips became mandatory. Microchips are like identification cards that are implanted in the animal's body. They are harmless and do not need to be replaced once implanted. The microchip is about 2 mm in size and about 11 mm in length, and can be implanted in almost the same way as a general injection. Safety has also been confirmed by tests.

If they are microchipped and identified, they are more likely to be reunited with their families if they are lost or lost in a disaster. In addition, by implanting a

microchip, people will be more aware that they are the owner, and it is thought that the number of people who abandon dogs will decrease. (Fig.3)

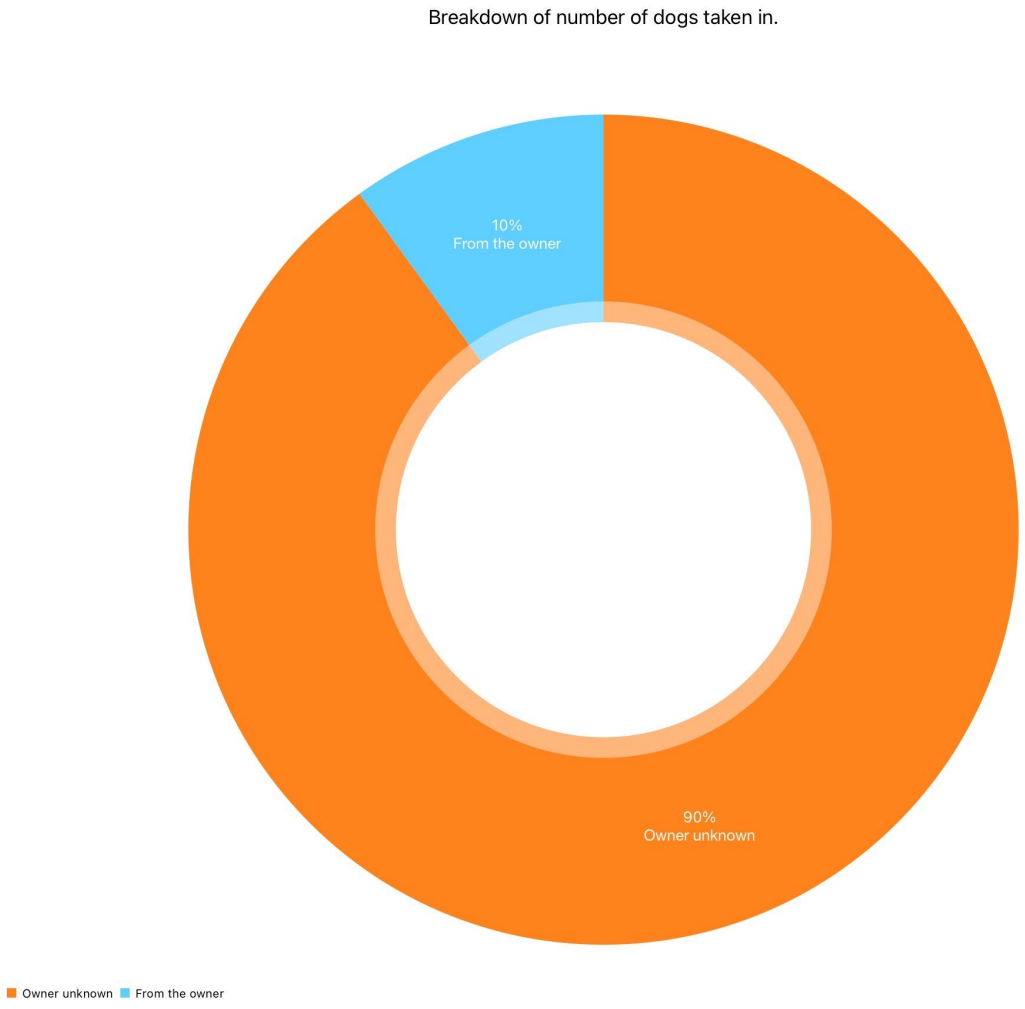


Figure 3: Breakdown of dogs adopted

Source: Animal Welfare Management Office, General Affairs Division, Nature Conservation Bureau, Ministry of the Environment There are places where the transfer rate is low even if there are no cullings, and there are places where the transfer rate is high even if the number of cullings is large. → No relationship.

4. Conclusion and Future Problems

Figure 3 shows that before the introduction of microchips, about 70% of new dogs were purchased from breeders and pet shops. If dogs are picked up from

breeders or pet shops after June 1, 2022, it is believed that the identities of about 70% of the dogs will be known, as dogs with MicroHis chips are being sold. Figure 3 shows that 90% of dogs taken into shelters are unidentified, but decades after the introduction of microchips, 90% of them are identified, and the number of dogs that are euthanized has decreased. I made a hypothesis. From these facts, it is possible to reduce the number of dogs taken to shelters due to unidentified dogs, and My He thought that microchipping would lead to a decrease in culling. However, it is unavoidable that there are dogs that cannot be given away for various reasons, such as harming people or having an incurable disease.

5. Reflection

In the course of my research, I met many people who risk their lives every day to think about living things and lives, and I was able to feel the weight of life more than I thought. Until now, I struggled every day wondering if there was anything that we high school students could do for him, but I was impressed by his words, "even though we're weak, we're not powerless." I think that the problem will not be solved even if only a few people act, and I think that each and every one of us must think about “life” and spend our days. I will continue to value my connections with people and work towards solving problems.

6. Work Cited

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