# 放射 後 の け の対応 題

### 汚染という新しい敵にも遭遇しました。 模な激甚災害であり、また、 震災は、これまでのノウハウが通用しないほどの、 の活動に役立ててきました。ところが、今回の東日本大 た。そして、そのたびに、活動のノウハウを集積し、 善意に支えられながら被災動物対応を実施してきまし 獣医師は、これまで大災害があるたびに、 今回の経験を、 今回の動物救護活動の実情について報告するとと 今後の対応にどのように役立てる 原発事故による放射性物質 本シンポジウム

《主催》 社団法人 日本獣医師会 かについて考えていきたいと思います。

|東日本大震災における被災動物対応の現状と今後の 伸彦氏 -放射性物質汚染への対応を考える―\_ (学校法人 北里研究所 理事 、北里大学

ついて

震災から今日まで…」

小動物における動物救護活動に

獣医学部 学部長

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(福島県動物救護本部/千葉小動物クリニック

課題

東日本大震災における被災動物対応の現状と今後の

-放射性物質汚染への対応を考える―」

(福島県

酪農業協同組合

生産部診療

Workshop VI

ワークショップ VI

#### "The Current Situation Concerning the Handling of Animals Affected by the Great East Japan Earthquake - Considering Responses to Radioactive Material Contamination"

Every time a great disaster has struck, our vets have been called to action to handle the victim animals, backed by the warm support of many people. With every new disaster we have at least gained some valuable new expertise, skills and insights to guide our activities for the next time. However, the overwhelming scale of the damage wrought by the Great East Japan Earthquake was so enormous that we could barely make any dent in the recovery, even with all our collected and combined knowledge resources. Furthermore, we have been forced to confront a new enemy, the radiation pollution from the nuclear power plant accidents. So, at this workshop we would like to report on the current progress of the animal rescue operations and consider how we can make use of the new experience gained to better serve future efforts.

Organizer: Japan Veterinary Medical Association (JVMA)

MC / Chairperson:

"The Current Situation Concerning the Handling of Animals Affected by the Great East Japan Earthquake -Considering Responses to Radioactive Material Contamination"

Nobuhiko ITO, Director, Kitasato Institute, Dean, School of Veterinary Medicine, Kitasato University

Speakers:

"Animal Rescue Operations for Small Animals - since the earthquake up until today" Jun KAWAMATA, Veterinarian, Great East Japan Earthquake Disaster Animal Rescue Task Force, Chiba Small Animal Clinic, Fukushima City

"The Current Situation Concerning the Handling of Animals Affected by the Great East Japan Earthquake -Considering Responses to Radioactive Material Contamination"

Toshihiro SATO, Veterinarian, Medical Care Division Head,

Production Department, Fukushima Prefecture Dairy Farming Association

《主催者メッセージ ORGANIZER MESSAGE》

社団法人 日本獣医師会

Japan Veterinary Medical Association (JVMA)

獣医師は、家庭動物・家畜等の診療のほか、口蹄疫 や鳥インフルエンザ等の伝染病から畜産を守るための 家畜衛生、食品等の安全性や人と動物の共通感染症防 疫に関わる公衆衛生、動物愛護、野生動物保護等の環 境保全など様々な職域に就業し、社会を支える役割を 担っています。

一方、獣医師は、これまで大災害があるたびに、多 くの方々の善意に支えられながら被災動物対応を実施 してきました。幅広い職域を持つ獣医師だからこそ、 そして、様々な職域にある獣医師が結束したからこそ、 激甚災害の中で、様々な社会貢献をなしえてきたと自 負しています。

そのたびに、活動のノウハウを集積し、次の活動に役 立ててきました。ところが、今回の東日本大震災は、こ れまでのノウハウが通用しないほどの、大規模な激甚災 害であり、また、原発事故による放射性物質汚染という 新しい敵にも遭遇しました。本シンポジウムでは、今回 の動物救護活動の実情について報告するとともに、様々 な立場にある獣医師が社会と連携して行ってきた今回の 活動における経験を、今後の対応にどのように役立てる かについて、国民の方々と一緒に考えていきたいと思い ます。

The role of a veterinarian extends much further than the examination of pets and farm animals. It involves various medical categories that help keep society safe relating to both animal health and public health. The former includes protecting livestock from infectious diseases (eg. foot-andmouth disease and bird flu), while the latter includes food safety and preventing zoonotic infections.

Every time a major disaster has occurred, veterinarians have been able to help the affected animals with efforts backed by the goodwill of a great many people. I believe that we veterinarians can contribute to our society in many different ways during serious disasters because we can combine to form a collective wisdom acquired from our work in so many varied fields.

In the past, we have consolidated the new knowhow gained from our activities and made use of it to help in subsequent disaster activities. However, in the case of the Great East Japan Earthquake the scale of disaster was so large that even the combined wealth of our expertise was barely able to help. We also had to confront a new enemy, the radioactive contamination caused by the accidents of nuclear energy plants. So, in this symposium, in addition to reporting about our actual animal rescue operations, I would like to share the experience gained by the various specialty veterinarians who worked together in collaboration with the public. I would also like to consider how we can make use of all the new experience gained to improve future measures with all the people in our country.

《座長メッセージ CHAIR MESSAGE》

## 東日本大震災における被災動物対応の現状と今後の課題 一放射性物質汚染への対応を考える―

The Current Situation Concerning the Handling of Animals Affected by the Great East Japan Earthquake - Considering Responses to Radioactive Material Contamination

学校法人 北里研究所 理事/北里大学 獣医学部 学部長・伊藤 伸彦 Nobuhiko ITO, Director, Kitasato Institute, Dean, School of Veterinary Medicine, Kitasato University

東日本大震災がこれまでの震災と全く異なるのは、広 い範囲で放射性物質による汚染が発生したことである。 そのため、動物の救護活動には3つの特殊な問題が加わっ た。すなわち、救護活動を行う場所における活動者の放 射線被ばく、被災動物の放射性物質による体表面と体内 の汚染、原発から 20km 圏内が警戒区域になったために 活動者の立ち入りが制限されたことである。

警戒区域内の飼育者たちが居なくなったために起こっ たことは、動物たちの放射線影響による死ではなくて、 飢餓による苦痛と死であった。それでも、故意に逃がし た動物や飼育檻や鎖から放れた動物の一部は生き延びた。 犬や猫などについては、日本獣医師会 HP で紹介された "動物の身体汚染への対応法について:緊急的暫定措置" を指針の一つとして保護活動が続いている。しかし、産 業動物に関しては、原子力災害対策本部長から福島県に 対して、警戒区域内の家畜の安楽死処分が指示され現在

The reason why the Great East Japan Earthquake has produced a totally different situation from that of any previous major earthquake is that it has resulted in radioactive contamination across a wide area. This in turn has created three additional special problems for those engaged in animal rescue activities. Firstly, rescue workers have been exposed to radioactivity in some places where they were performing rescue activities; secondly, affected animals were exposed to both external and internal contamination by radioactive matter; and thirdly, rescue workers were not permitted access to the caution zone within a 20km radius of the damaged nuclear power plant.

The fate of many animals left inside the caution zone when their owners disappeared was not death caused by radiation but pain and death from starvation. But even in these circumstances, some of the animals whose owners deliberately released them from their cages or chains survived. In the case of dogs, cats, etc., sheltering activities have been continued with reference to the guideline document, "Methods of coping with radioactive contamination of animals' bodies - urgent tentative measures". This was introduced on the website of the Japan Veterinary Medical Association. However, with regard to farm animals, the chief of the Nuclear Emergency Response Headquarters

に至っているが、域内には未だに 1000 頭以上の放れ牛 や多くの野生化した豚などが生き延びている状況である。 警戒区域内の動物には放射性物質の体内汚染があり、動 物は制御しにくくなっているため、安全に捕獲すること がますます難しくなっている。

国の方針に対し、牛の安楽死に同意した農家の方々に は無駄に殺されているという思いもあり、さらに国内外 から、警戒区域内の動物を助けるか人類に役立つ研究に 使えないかという要望が寄せられていた。これを受けて、 日本獣医師会会長が各方面に働きかけを行い、警戒区域 内の放射能汚染牛を活用した研究が11月から開始され ている。また、野生動物の体内放射能汚染の調査によっ て、福島県の面積の7割を占める森林中の放射能汚染を 評価する研究も提案されており、原発事故の動物への影 響の調査は始まったばかりである。

ordered Fukushima Prefecture to euthanize livestock within the caution zone. Nevertheless, the current situation is that more than 1,000 runaway cattle and many feral pigs still survive within the caution zone. Animals within the zone have internal radioactive contamination and have become difficult to control so it is becoming harder to capture them safely.

In the face of government policy, those farming households that agreed to euthanize their cattle now feel that their animals were destroyed for no purpose. Moreover, there have been requests both from within Japan and from overseas to rescue animals from the caution zone or to use them for research that can benefit people. In response, the Chairman of the Japan Veterinary Medical Association did change his request to the affected parties, such that research using cattle contaminated by radioactive materials in the caution zone began in November. A research project has also started in an effort to evaluate the radioactive contamination of the forests that occupy 70% of the land area in Fukushima Prefecture. This is being done by surveying the internal radioactive contamination of wild animals living in the forests. These examples demonstrate that research into the effects of the Fukushima Nuclear Power Plant accident on wildlife has just begun.

#### 「震災から今日まで…」小動物における動物救護活動について

Animal Rescue Operations for Small Animals - since the earthquake up until today

福島県動物救護本部/千葉小動物クリニック 獣医師・河又 淳

Jun KAWAMATA, Veterinarian, Great East Japan Earthquake Disaster Animal Rescue Task Force, Chiba Small Animal Clinic, Fukushima City



世界にも類を見ない東日本大震災により、福島県は宮 城、岩手同様に甚大な被害を受けることとなり、それに 加え原子力災害により、想像を絶する大惨事となってし まった.

福島県の報告によれば、警戒区域内にはおおよそ1万 頭にのぼる犬猫が生存しており、結果的にはその6~7 割が津波, 飢餓, 衰弱などにより死亡したとみられる. 警戒区域内にはいまだに推定 400~500 頭前後の犬猫 が取り残されており、行政による救護活動が精力的に行 われているが、動物が人間に対して警戒を強めているこ とや放射線の影響で活動しにくいことなどもあり、動物 の保護がスムーズに進んでいないのが現状である.

福島県動物救護本部は、震災後1カ月後に福島県が本 部長となり福島県獣医師会,郡山市,いわき市の2中核市, 福島県動物愛護ボランティア会の5団体で構成された. しかしながら当時は国,県,獣医師会は混乱を極めており,

The Great East Japan Earthquake was one of the most powerful earthquakes to have occurred anywhere in the world in modern times. The earthquake and the accompanying tsunami caused enormous damage in Fukushima Prefecture just as it did in the nearby prefectures of Miyagi and Iwate. But additionally, in Fukushima, the tsunami triggered a major nuclear disaster which has greatly compounded the impact of the original natural disaster.

According to a report from Fukushima Prefecture, prior to the disaster, approximately 10,000 dogs and cats were living within the so-called "caution zone". It is estimated that approximately 60 to 70% of these animals died either in the tsunami or else from subsequent starvation, weakness, etc. At present, around 400 to 500 dogs and cats are estimated to be living in the caution zone, and the authorities are actively attempting to rescue these animals. However, in the current situation, the work of protecting these animals is not going smoothly because they have become more cautious of people and because the presence of radioactivity makes it difficult to carry out rescue activities.

Fukushima Animal Rescue Headquarters was set up a month after the disaster struck by five organizations as members - namely Fukushima Prefectural Government, Fukushima Veterinary Medical Association, the governments of the two core cities of Koriyama and Iwaki, and the animal welfare volunteer association Fukushima-ken Dobutsu Aigo Volunteer Kai, with Fukushima Prefecture also playing an overall management role. But at that time, when the national and

我々県民も不安定な生活を強いられる状況下, これら団 体が一枚岩になり動物救護にあたることが困難であった. 県動物救護本部は県内に2ヶ所のシェルターを設置し対 応しており、緊急災害時動物救援本部からの義援金や全 国各地からの支援の上に成り立っているが、未曾有の大 災害ということもあり、その維持運営管理資金は膨大な 金額が必要なため不足している. それに加え, 慢性的な ボランティア不足に悩まされており、資金と人の不足が シェルター閉鎖の見通しが立たぬ現状での大きな課題で ある.

今回の大災害を通じ、県や獣医師会レベルの被災地単 独での動物救護活動には多くの問題と限界があり、官民 一体となった大規模な組織力の投入が必要であることを 痛感した. 今後は大災害に備え, より広域での被災動物 支援システムの構築と、そのマニュアル作成の必要性が あるのではないだろうか.

prefectural governments and the veterinary association were operating in a state of extreme confusion, and in a situation in which we Fukushima residents were also forced to live precariously day to day, it was difficult for the organizations to carry out animal rescue activities monolithically.

The Animal Rescue Headquarters has dealt with the situation by installing shelters at two locations in Fukushima Prefecture and its operations are financed from public donations provided by the Emergency Animal Rescue Headquarters and by support from people all over Japan. But since the scale of the disaster was unprecedented, the amount of money required to keep the work going and manage the operation is huge, with the result that funds are in short supply. In addition, the Headquarters also suffers from a chronic shortage of volunteers. In the current situation, in which the closure of the shelters is nowhere in sight, insufficient funds and manpower are the major problems.

Through this massive disaster I have become acutely aware that if prefectural governments and veterinary associations carry out animal rescue activities by themselves, they are bound to come up against all kinds of problems and limitations. To work effectively, it is necessary to install a large-scale organized authority in which the government and the people are united.

For the future, in order to prepare in advance for major disasters, it will be essential to build up a more broadly based animal support system and also to produce a manual that can serve as a guide to operating such a system.

#### 東日本大震災における被災動物対応の現状と今後の課題 一放射性物質汚染への対応を考える一

The Current Situation Concerning the Handling of Animals Affected by the Great East Japan Earthquake - Considering Responses to Radioactive Material Contamination



福島県 酪農業協同組合 生産部診療課 課長/獣医師・佐藤 利弘 Toshihiro SATO, Veterinarian, Medical Care Division Head, Production Department, Fukushima Prefecture Dairy Farming Association

今回の震災で直接的な被害を受けた福島県内の牧場は 僅かでしたが、ライフラインの寸断、乳業工場や飼料工 場等の被災、燃料不足による物流の断絶等により、通常 の生産活動ができず回復までには2週間余りを要し、原 発事故による原乳出荷停止は更に追い打ちをかけました。 そして浜地区に出された原発事故の避難指示は、状況が 見えない中で同心円状に 20km 圏内の避難指示、30km 圏内の屋内待避指示が1ヶ月余り続きます。この間牛の 所有者達はその地に留まったり、避難先から通ったり、 牛の避難を試みます。組合も行政との協議を経ながら避 難先を確保し、一部家畜の移動を試みます。しかし4月 22 日から 20km 圏内は警戒区域の指定により、事実上 家畜を放置せざるを得ない状態になりました。当初想定 されていた殺処分や死体の処理も、作業環境や産業廃棄 物としての処理見通しが立たず、大半の家畜が餓死し、

5月半ばには死屍累々の状況となったと聞きます。5月 に始まった一時帰宅者やボランティアからもたらされた その映像はメディアを通じて世界中の知る所となります。 その後も作業は遅々として進まず9月過ぎまでかかった 様に聞きます。これらの事は家畜の所有者や畜産関係者 に心の闇を残す結果となりました。

一方野生化した牛や豚の存在は、今後自家繁殖あるい は野生動物との繁殖によるエリア拡大等の新たな問題と なると考えます。

次に、放射性物質汚染は生活環境としての地域的な汚 染分布だけでなく、時間の経過と共に未知の放射性物質 の濃縮(地形的、生物的)を実感させました。地元農業 を持続させるための課題は多く、生産物モニタリングと 生産サイクルの検証、検査体勢、リスクコミュニケーショ ン、除染技術の開発等多面的な取組が行われています。

In Fukushima Prefecture, only a few livestock farms sustained direct damage from the recent earthquake. However, due to the severing of lifelines, damage to dairy factories and other facilities, interruptions in distribution due to fuel shortages and other reasons, it took more than two weeks before production activities returned to normal. Moreover, the dairy industry's problems were further compounded when the shipment of raw milk was halted on account of the nuclear power accident.

While the radioactive contamination situation was invisible to the eye, a nuclear power accident evacuation order was issued for people in the Hama district within a 20km radius of the plant, while those living between 20 and 30km of the plant were ordered to remain indoors. These orders remained in force for over a month. During that time, cattle owners attempted to evacuate their animals while remaining on their farms or commuting to and from their evacuation sites. The Dairy Farming Association also tried to remove some livestock to secure locations in consultation with the administration. However, from April 22, when the area within the 20km radius was designated as a caution zone, conditions were such that it became virtually impossible to help the livestock and they had to be left unattended. In the beginning, slaughtering the animals and disposing of the carcasses was considered, but there was nowhere suitable either as a working environment or as a disposal site for the carcasses as industrial waste, so most

of the animals died of starvation. I heard that, by the middle of May, the situation meant that there were heaps of carcasses. Such images, taken by people returning to their homes temporarily, and by volunteers, were brought to the world's attention by the mass media. Even so, restoration work made little progress. I then heard that the situation continued beyond the end of September and it created a sense of doom and gloom in the minds of livestock owners and people involved in stockbreeding.

On the other hand, with other livestock such as cattle and pigs having been let loose and turning feral in the disaster area, new problems are expected to emerge in the future. By this I mean the broadening of the contaminated area due to uncontrolled breeding or interbreeding with wild animals, etc.

Secondly, we have witnessed not only the distribution of radioactive material contamination in the local living environment but also the topographic and biological concentration of radioactive materials as time goes on. Many issues remain to be tackled in order to maintain local farming, and we also need to take a multifaceted approach that includes product monitoring, production cycle verification, checking systems, risk communication, and decontamination technology development, etc.