

# COMMENTS AND LETTERS

## Diving safety in fish farming

DANIEL XERRI



**T**he recent court judgment in the case of a fish farm diver who was awarded more than €500,000 in compensation raises important questions about diving safety standards in Malta's aquaculture industry.

Frederick Catania was left paralysed from the waist down and suffered a 75 per cent disability after ascending from a depth of 71 metres while diving on air. This goes against long-established guidelines in the global diving industry that specify what gases are to be used beyond a certain depth and what measures need to be taken to prevent decompression sickness.

The higher the proportion of oxygen in a gas mix, the more dangerous it is as one dives deeper. Hence, even though safety factors and nitrogen narcosis make it inadvisable to go to the limit, air (containing 21 per cent oxygen) should only be used up to a maximum depth of 56 metres. This is because the higher the pressure, the more likely it is for oxygen to impair neural function and cause convulsions and subsequent drowning.

Catania's paralysis was a result of decompression sickness ensuing from multiple deep dives on air. The growth of gas bubbles in the spinal cord's microcapillaries reduced blood flow and impaired nerve tissue. In such cases, a patient's rapid treatment by means of recompression and reoxygenation of tissue are vital.

The court ruled that the fish farm operation that Catania worked at did not have a safe system of work in place to safeguard the welfare of its employees. This was confirmed by the fact that he was not provided with trimix as a breathing gas despite being expected to dive deeper than the limits of air; the failure to ensure that he was properly following decompression obligations and the excessive delay involved in transporting him to hospital upon ascending from his last dive.

Is Catania's case a one-off or has it brought to the surface major concerns with diving safety standards in Malta's aquaculture industry?

A total of 307 divers received treatment at the Hyperbaric Unit at Mater Dei Hospital over the past 10 years. These cases are categorised as either mild or severe. The latter category involves incidents resulting in permanent sequelae, which are usually neurological in nature (that is, spinal paralysis or inner ear vestibular hits).

Several sources within Malta's diving community claim that a substantial por-



In 2021, fish farming in Malta generated almost €225 million. PHOTO: JON BORG

portion of these patients are divers working in the aquaculture industry. To understand what this proportion actually consists of, I submitted multiple requests for the relevant information to Mater Dei.

However, in a clear case of stonewalling, the hospital administration refused to release the data indicating how many fish farm divers have received treatment at the Hyperbaric Unit over the past decade.

The excuse made by an advisor at the ministry for health is that the hospital does not categorise patients according to their trade or profession. However, a standard question that every patient is asked upon admission concerns their occupation. It is an essential part of a doctor's history-taking from a patient.

The hospital's withholding of information concerning those divers working in the fish-farming industry also makes it difficult to determine the severity of their cases vis-à-vis other patients who received treatment at the Hyperbaric Unit. I have been assured that this data

exists and, yet, the administration of Mater Dei refuses to make it publicly available. Why is that?

Could it be that safeguarding the welfare of fish farm divers is less important than protecting the reputation and economic interests of an industry that has long carried favour with the political class? Does the clout of this industry allow it to operate with impunity?

In 2021, fish farming in Malta generated almost €225 million, an increase of around 26 per cent over the previous year. Given this astronomical sum, one would imagine that adequate investment has been made in guaranteeing safe working conditions. Or is that naïveté?

Writing in this newspaper last year, a spokesperson for the Maltese Federation of Aquaculture Producers repeatedly boasted of the industry's "high standards" and claimed that the federation expects "responsible behaviour" of its members. However, he failed to explain whether by responsible behaviour he was referring to how operators ensure that none of their divers' lives and health are put at unnecessary risk.

While vaguely referring to the industry "taking its responsibilities seriously", he neglected to clarify how operators are seeking to secure the safety of their divers.

If operators truly want to engage in responsible behaviour in relation to the welfare of the divers who work on their fish farms, they need to ensure that stringent diving safety standards are put in place and their employees are provided with the training and resources to adhere to them.

Simon Caruana, a lecturer responsible for coordinating ITS's degree in diving

Year	Number of Divers Treated at Hyperbaric Unit	
	Mild	Severe
2013	14	9
2014	7	5
2015	8	13
2016	6	14
2017	15	14
2018	26	22
2019	19	15
2020	17	18
2021	30	19
2022	21	15
<b>Total</b>	<b>163</b>	<b>144</b>

safety management, believes that education and training are key in ensuring the welfare of the divers working in this sector. Together with DAN Europe – an organisation specialising in diving safety – ITS offers a series of short courses that examine such aspects as hazard identification and risk assessment. Aquaculture operators would benefit from the customised training programmes that the institute is able to offer in response to their needs.

Stephen Muscat, the clinical lead of the Hyperbaric Unit at Mater Dei, testified in court that engaging the services of a diving supervisor to monitor all aspects of a fish farm diver's work is imperative. By doing so, fish farm operators would be ensuring that their employees are abiding by diving safety standards and not putting themselves and the operation at risk.

Daniel Xerri is a technical diver.



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