

# Unit 1: *Introduction*

- **What is Nitrox**
- **A Bit of History**
- **Why Dive with Enriched Air Nitrox**
- **Common Misconceptions About Nitrox**
- **Terminology**

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# ***Student Performance:***

By the end of the lesson you will be able to:

- **Describe what nitrox is.**
- **List other names for nitrox.**
- **State the early history of diving with gases other than air.**
- **State when NAUI sanctioned nitrox diving.**
- **Describe what nitrox is not.**

# ***What is Nitrox?***

- **Nitrox is air in which fraction of nitrogen is reduced**
- **Nitrox is also called:**
  - **Oxygen-enriched air**
  - **Enriched air nitrox**
  - **EAN<sub>x</sub>**
- **Reducing Nitrogen**
- **Increasing Oxygen**

# *A Bit of History*

- **Development of nitrox use**
  - **Early research and use**
  - **Controversy**
  - **NAUI endorsement of EAN<sub>x</sub>**
  - **NAUI Standards for EAN<sub>x</sub> training**



# Why Dive With Enriched Air Nitrox

- **Extended Dive Time**

Maximum Dive Times (in minutes)							
Depth fsw	Depth msw	Air		EAN <sub>32</sub>		EAN <sub>36</sub>	
		NAUI Tables	NAUI RGBM	NAUI Tables	NAUI RGBM	NAUI Tables	NAUI RGBM
60	18	55	55	100	85	100	115
70	21	45	40	60	60	60	85
80	24	35	30	50	47	60	60
90	27	25	25	40	38	50	46
100	30	22	20	30	30	40	35
110	33	15	16	25	25	30	31

# Why Dive With Enriched Air Nitrox continued

- Repetitive dive times and surface intervals
- Safety margins and post dive fatigue

Comparison of Dive Plans using Air and EAN36

Diver 1: Air		Diver 2: EAN <sub>36</sub>	
NAUI Dive Tables	NAUI RGBM Tables	NAUI Dive Tables	NAUI RGBM Tables
<b>First Dive</b> 80 feet/24 meters Dive Time: 30 minutes Ending Group: G	<b>First Dive</b> 80 feet/24 meters Dive Time: 30 minutes	<b>First Dive</b> 80 feet/24 meters Dive Time: 30 minutes Ending Group: F	<b>First Dive</b> 80 feet/24 meters Dive Time: 30 minutes
One hour surface interval Entering Group: F	One hour surface interval	One hour surface interval Entering Group: E	One hour surface interval
<b>Second Dive</b> 55 feet/17 meters Max. Dive Time: 19 minutes	<b>Second Dive</b> 55 feet/17 meters Max. Dive Time: 55 minutes	<b>Second Dive</b> 55 feet/17 meters Max. Dive Time: 62 minutes	<b>Second Dive</b> 55 feet/17 meters Max. Dive Time: 115 minutes

# ***Common Misconceptions About Nitrox***

- **Myth 1: “Nitrox is for technical diving.”**
- **Myth 2: “Nitrox is for deep diving.”**
- **Myth 3: “If you dive with nitrox you won’t get bent.”**
- **Myth 4: “Nitrox is safer than air.”**
- **Myth 5: “If you dive with nitrox you won’t get narcosis.”**
- **Myth 6: “It is hard to dive with nitrox.”**

# *Terminology*

- **New and unfamiliar terms**
- **Interchangeable terms**
- **Percentages or fractions**
- **Ambiguous terms**

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# End of Unit 1

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