Fluorescence Night Diver

Photo: Scorpion Fish – Red Sea, © Sept 2012, Courtesy Steffen Beyer
INTRODUCTION

Course Philosophy and Goals

This specialty is an introduction to Fluorescence (Fluo) Night Diving, to familiarize divers with the skills, knowledge, planning, organization, procedures, techniques, problems, hazards and enjoyment of Fluo diving. It’s intended to serve as a safe and supervised introduction to Fluo diving. This training will emphasize safety and fun.

As an open water diver you have already experienced the excitement of the diving sport. Perhaps you have already had a night dive or two. Was it natural curiosity? Was it getting a new look at the familiar? Could it be the vibrant changing colors of aquatic life at night? Or, is it just because you can, that night diving has become so popular? Whatever the motivation to dive at night – you’ve found the environment is quite different than during the daytime.

This course is going to put an entirely new texture to your night diving experience. You will see creatures in an entirely different way. You will even see creatures that without the techniques and equipment you will learn about in this course are virtually invisible under regular white light conditions be it daytime or nighttime.

The purpose of the PADI Fluorescence Night Diver Distinctive Specialty Course is to provide a safe introduction under professional supervision into diving at night with blue light torches (flashlights) and mask barrier filters to experience the effect of fluorescence in marine life.
The goals of Fluorescence Night Diver training are:

A. Knowledge of planning, organization, procedures, techniques, problems and risks of night dives with fluorescence and its associated equipment.
B. Correct procedures of buoyancy control, navigation and communication skills.
C. Usage of underwater lights (with blue light source / LED) and emphasize use of the Buddy-System.
D. Procedures to follow in case of losing orientation and emergency procedures.
E. Knowledge of marine species excited by blue light and the causes / implications of this excitation.
F. Emphasis on the relationship between recreational diving, reef health and protection.
G. Introduce you – the student - to the PADI Project AWARE

Certification

Upon completion of the program you will be certified with a PADI Fluorescence Night Diver Distinctive Specialty. This course can be applied to your Adventures in Diving Program as well as the Advanced Diver Certification. Additionally this course can count toward the prestigious Master Diver Certification.

Course Prerequisites

By the start of the course, you must be:
1. Certified as a PADI Open Water Diver or have a qualifying certification from another training organization.
2. Have a minimum of 2 logged night dives.
3. Be at least 12 years old.
PADI

PADI is the Professional Association of Diving Instructors, the world’s largest diver training organization. PADI establishes training programs, materials and standards, monitors their quality, certifies instructors, and provides support services for PADI professional members. The professionalism of PADI Instructors, Dive Centers and Resorts has made PADI certifications the world’s most respected and sought-after dive credentials. You can be confident that your certification will be recognized virtually anywhere you go diving worldwide and that PADI’s reputation stands behind it.

Course Structure

You will participate in knowledge review sessions where you will develop the principles and learn the basic information you need to dive safely, have fun and understand the physics and biology of fluorescence night diving.

You will then perform four dives: Two during the daytime to become familiar with the sites you will be diving at night. The purpose of which is to practice buoyancy skills, study local flora and fauna, practice navigation techniques and in general, become comfortable. These two daytime dives will be followed up with two night dives where you will be using the specialized techniques and equipment taught in this program.

You will perform one daytime dive followed by one night dive. However, at the discretion of your instructor he/she may modify your training schedule to better fit your needs.
Course Standards

Prerequisites: PADI Open Water Diver or qualifying prerequisite
Minimum Age: 12 years
Depth: Maximum Depth 30 meters / 100 feet: 18 meters / 60 feet recommended
Minimum Confined Water Dives: None
Minimum Open Water Dives: 2 day / 2 night

Materials and Equipment:
• Fluorescence Night Diver Course Student Manual
• Dive light, backup light, personal marker light, and compass
• Specialty equipment and supplies:
  a. Blue light torch (450-470nm)
  b. Yellow Barrier mask filter (Required – both for technical and safety reasons: Without it, you won’t experience the fluorescence phenomena and eye discomfort or irritation can occur from prolonged exposure to the blue light)

Recommended Student Diver Prerequisites

1. Certified as a PADI Peak Performance Buoyancy Diver or have a qualifying certification from another training organization.
2. Certified as a PADI Navigation Diver or have a qualifying certification from another training organization.
3. Certified as a PADI Night Diver or have a qualifying certification from another training organization.
KNOWLEDGE DEVELOPMENT

Whether natural curiosity, getting a new look at the familiar, the vibrant changing colors of aquatic life, or just because you can, fluorescence night diving is exciting, fun and puts a whole different perspective on night diving activities. Observing marine life under blue light is magical and in some environments can appear surreal.

A coral reef during a regular night dive is an artifact on the seabed, but when you revisit it at night under blue light, it becomes a world out of a science fiction motion picture and sends shivers down your back. The sight is magical, enchanting - as if the underwater life was actively shining like neon signs in the dark, or like a psychedelic disco, in many different colors. It is discovering a hidden world behind a hidden world. With these examples in mind, the philosophy of this course is to focus on seeing in blue light things that appear differently during white light night dives. This includes showing student divers how to use fluo night diving equipment, how to evaluate dive conditions at night that are unique to fluo night diving, how to use and maintain fluo dive equipment, how to navigate, and how to interact responsibly with the aquatic life they’ll see while fluo night diving.

Use the following teaching outline as a road map of the conduct, content, sequence and structure for the Fluorescence Night Diver course. The result should be student divers with theoretical knowledge and pragmatic experience who can adapt what they have learned to dive safely at night using special lighting equipment and associated filters.