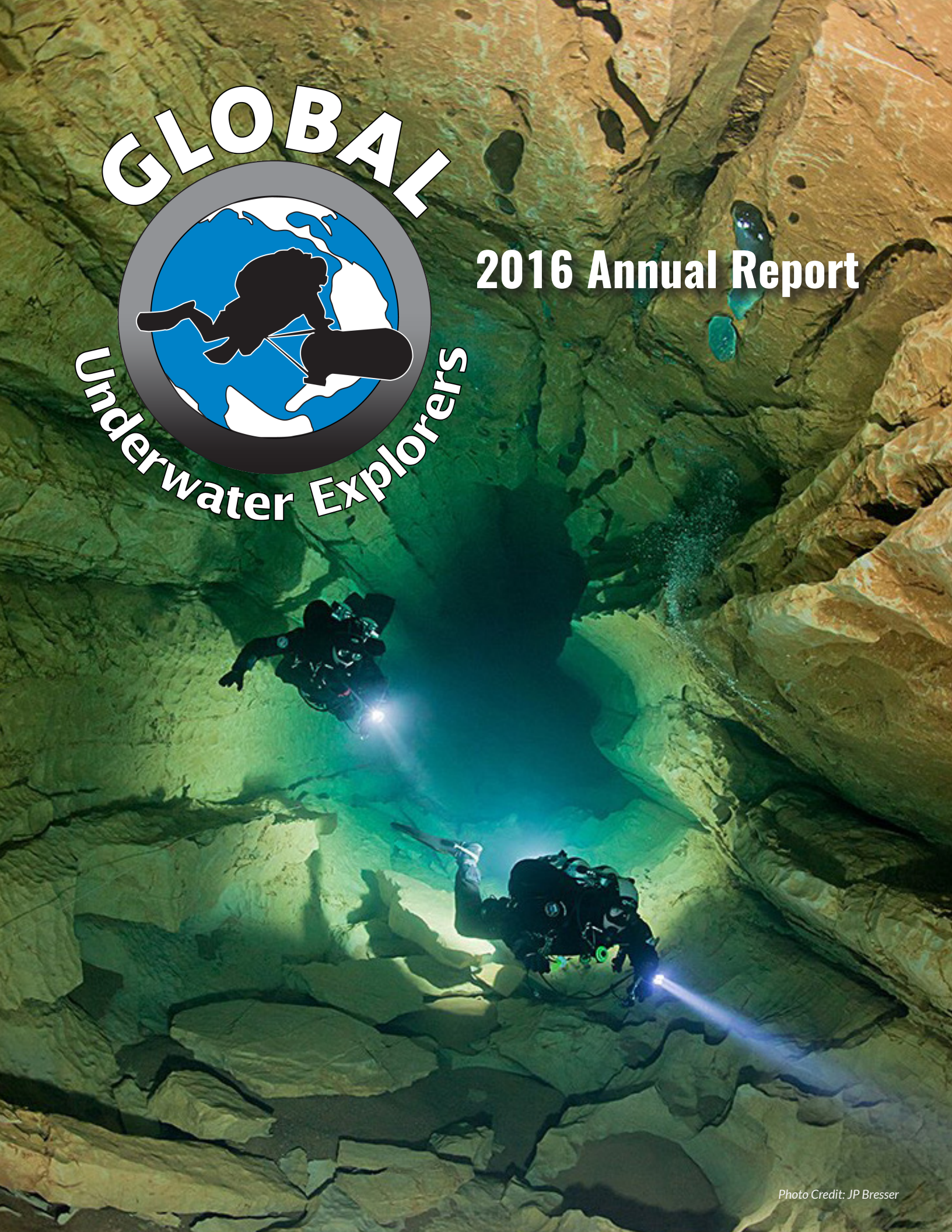




2016 Annual Report



Contents

About GUE ₃

A Message from Our President ₄

Training Report ₈

Historical Training Overview **9**

Cave and Technical Diving **12**

Recreational and Foundational Diving **16**

Exploration Report ₂₀

Conservation Report ₂₂

Project Baseline **23**

Aboard the *Baseline Explorer* **24**

Financial Report ₂₈

About GUE

Who We Are

Global Underwater Explorers began with a group of divers whose love of underwater exploration grew naturally into a desire to protect those environments. In 1999, we created a unique organization that would be dedicated to high-quality diver education with the goals of supporting aquatic research that advances conservation and safely expanding exploration of the underwater world.

Now a well-established 501(c)(3) nonprofit organization based in High Springs, Florida, we have developed expansive programs to support our mission with educational opportunities as well as conservation and exploration initiatives around the world.

Our Vision

To establish an educated, proficient global community of scuba divers inspired and empowered to conserve and explore the world's aquatic environments.

Our Mission

Global Underwater Explorers emerged out of a shared desire to safely explore and protect the underwater world and to improve the quality of education and research in all things aquatic. In line with the original vision of its founding members, GUE is committed to:

- Developing safe, skilled, and knowledgeable divers
- Undertaking and promoting underwater research
- Pursuing global underwater exploration
- Safeguarding the integrity of the underwater world
- Providing the public with a comprehensive resource on all things aquatic.

Working to redefine the ties binding the average underwater enthusiast to underwater explorers, conservationists, and scientific researchers, GUE is committed to the overall goal of promoting the interests of the underwater world and of those who seek to engage it.

A Vision for the Future

A Message from Our President

Global Underwater Explorers (GUE) began as a shared vision among a small group of like-minded divers and was formally registered as a nonprofit corporation in 2001. However, the ideas that would become GUE began developing years before its formal recognition. Admittedly, the early efforts to codify the values under which GUE would eventually be formed were largely informal; in fact, they were initially developed on the side of a mountain in Turkey following a deep exploration dive, a dive that was part of my dive partner's PhD research. That dive buddy, Todd Kincaid, is now GUE's vice president and directs a global conservation initiative, utilizing our community of highly skilled and passionate divers. From the methodical documentation of coral reef habitats to the complex recovery of ancient artifacts sitting deep below the surface, GUE and GUE-inspired projects enlist committed individuals in a wide diversity of successful diving projects. In a great many ways, this aspect alone is recognition for the success of our shared vision. The triumvirate of education, conservation, and exploration have truly become the bedrock from which GUE is built.

Education goal: Establish GUE as the industry's most influential organization in diving education.



GUE was formed partly as a safe haven for dedicated enthusiasts and partly as a way to demonstrate the viability of robust diver training. To this end, GUE has been an agent for positive change in the industry while directly training tens of thousands of divers and spawning a wide range of emulations. In the coming years we will strive to expand industry-wide awareness for the quality of GUE training and the positive outcomes that develop from this approach. GUE will expand support for advanced diving by using our expert community of explorers to craft the long-awaited, exploration-grade Level 3 Cave and Tech curriculums which will provide critical support for our growing list of dynamic, global projects. GUE is also highly focused on the recreational diving community, striving to remediate the industry practice of hastily taught diving programs, negative experiences, and loss of diving enthusiasm. We are establishing a much stronger presence by foregrounding GUE recreational activity within a dedicated recreational website alongside newly designed programs and materials. We are also

working to enhance awareness of our diving activities through social media, live broadcasts, and recorded presentations such as through the recently launched DiveGUE.tv, as well as with expanded dissemination of Quest. An important part of this outreach includes forming new and linking existing GUE communities and GUE dive centers, many of whom are actively engaged in exploration and conservation initiatives, and will be the cornerstone of success for GUE's recreational programs. GUE is also expanding support for broader educational values, including increased collaboration with groups like Divers Alert Network (DAN). Working with DAN and others in the industry, GUE will be supporting ongoing research and awareness programs by utilizing our existing communities

and resources. Support for research programs will include simple initiatives like post-dive monitoring programs as well as increasingly complex research initiatives into relevant decompression research, hoping to enhance understanding within the field.

Exploration goal: Establish GUE as a premiere exploration entity with global visibility and compelling projects available to GUE divers.

GUE dive training was born from the enthusiasm of dedicated explorers who wished to enable those with a personal desire to explore the underwater world. These ambitions may be expressed within distinctly recreational or overtly technical aspirations; in both



Jarrold Jablonski diving off the coast of North Carolina at the YP-389 shipwreck during a Project Baseline mission in collaboration with the National Oceanic and Atmospheric Administration (NOAA) in 2016. The dive team on this mission explored and photographed the wreck.

Photo Credit: Kirill Egorov

Location: YP-389 wreck, North Carolina

cases the GUE organization is coordinated to support a variety of personal ambitions.

The wide array of passionate GUE divers engaged in sophisticated global projects marks notable success in this arena. Beginning this year, GUE will be highlighting these activities within our community and throughout the industry by assembling a dedicated exploration report while also expanding use of social media and website publications. In seeking to encourage diving participation, we will foreground GUE diving projects and make joining these events easier through the creation of a structured GUE Project application process, simplifying the creation and promotion of officially recognized projects. We will be repurposing the course registration system to provide this platform and allow greater access to the expanding

list of GUE and GUE-inspired expeditions. Despite our notable progress, we must also guard against training aspirations that mistake diving certifications for diving experience. GUE must resist this trend, finding more structured ways to discourage a training-centric view and encourage a dive-centric vision of our sport. Robust dive education is a critical component of GUE, but dive training is only the means by which one prepares to reach their potential within a given environment. To this end, GUE is looking for ways to encourage divers to focus more on diving experience and enjoyment and less on a narrow view of dive training outcomes. This initiative should be addressed during training, through discussions within our communities, and by developing an ongoing means for divers to join and share the unique thrill that is found in joining diving projects.

Conservation goal: Establish GUE as a recognized source for scientifically credible missions through data gathering, sample collection, and ongoing support for conservation projects.

As explorers, GUE's early founders soon realized that their discoveries brought an understanding of the need to protect the underwater world. This developing awareness gave rise to support for existing conservation initiatives as well as the creation of new programs. The most visible of these programs remains GUE's signature initiative known as Project Baseline. Through this structure, GUE provides a range of unique advantages for communities across the world. First, a methodical characterization of the local environment creates a measurement of success or failure and thus important adjustments over time. Second, divers are in a special position with access to and appreciation for the unique aspects of their particular aquatic environment. Finally, organizing with others around a worthwhile cause is central to the fabric of our human experience. Conservation of our cherished



Photo Credit: JP Bresser
Location: Bermuda

natural and cultural resources provides a unique social and practical opportunity to become better divers and better global citizens. To this end, GUE offers substantial volunteer support to wide-ranging projects from reef and bay protection to fish and shark research. Meanwhile, our divers are using their skills to develop unique, local projects that are in a position to meet regional needs and priorities. Additional progress within GUE-organized conservation programs is being developed at the national and international level in a way that strives to inspire ongoing local involvement. In this way, GUE can plant seeds through direct or indirect support which, when nurtured properly, develop into ongoing and credible initiatives. For example, GUE projects with the Sicilian government and the National Oceanic and Atmospheric Association (NOAA) in the U.S. are organized so that local volunteers can provide support for ongoing activities. GUE is beta testing a new GUE Science Diver program, which aims to extend the capacity of our volunteer community, further expanding the types and significance of GUE projects.

In closing, we should recognize the amazing progress made over nearly twenty years. Compared to most dive training organizations GUE is merely in its infancy. Yet, in that relatively short period we have challenged many longstanding principles in support of enhanced diver enjoyment and safety. We have also employed the significant capacity of GUE divers to expand our reach through dynamic exploration projects while delivering millions of hours of volunteer work toward the protection of our most cherished resources. As a community, we have made great strides and have much to be proud of. Our family of GUE students, members, and educators is an inspiration to people around the world, positively affecting the industry and supporting exploration and conservation of the aquatic realm. We remain guided by grand ambitions whose fulfillment will take us well into the future. I



look forward to building upon the great work of our community over the next twenty years and beyond.

A handwritten signature in black ink that reads "Jarrod Jablonski".

Jarrod Jablonski

President of Global Underwater Explorers

Training Report



Photo Credit: Jarrod Jablonski
Location: Blue Grotto, Florida

Historical Training Overview

GUE dive training programs had been growing steadily at an average 6.9% but growth has slowed to an average 1.2% over the last three years. This slow growth is not surprising given ongoing, downward pressure in the diving industry, which is suffering from an unstable global environment, an uncertain economy, shifting demographics, and competition from other sports. GUE's current position is, in some ways, remarkable given the aforementioned complications in addition to competition from a wide range of programs seeking to emulate GUE courses.

As a nonprofit organization, there isn't a compelling need to promote growth for the sake of profit, although growth is one measure that helps gauge influence in the industry. GUE's development is also important for supporting instructors and facilities, as it allows them to remain committed to the diving industry. The current revitalization of the GUE recreational program is intended to form a broader base from which GUE can build support for all training programs and benefit the industry at large. GUE divers and instructors should consider supporting this initiative given its impact on all aspects of GUE's future development.

GUE training development has moved in cycles since its inception in 1998, showing alternating growth and plateaus over time. This might be due to economic cycles, instructor development, or likely some compilation of factors. Data since 2006 is more refined due to the implementation of a new database, although various imperfections remain. Changing course structure, variations in policy, and instructor habits, among other aspects, contribute to noise in the data. For example, approximately 10% of the courses in our database at the end of a given year have an indeterminate status whereby a student completed a QC form but the instructor did not submit an evaluation.

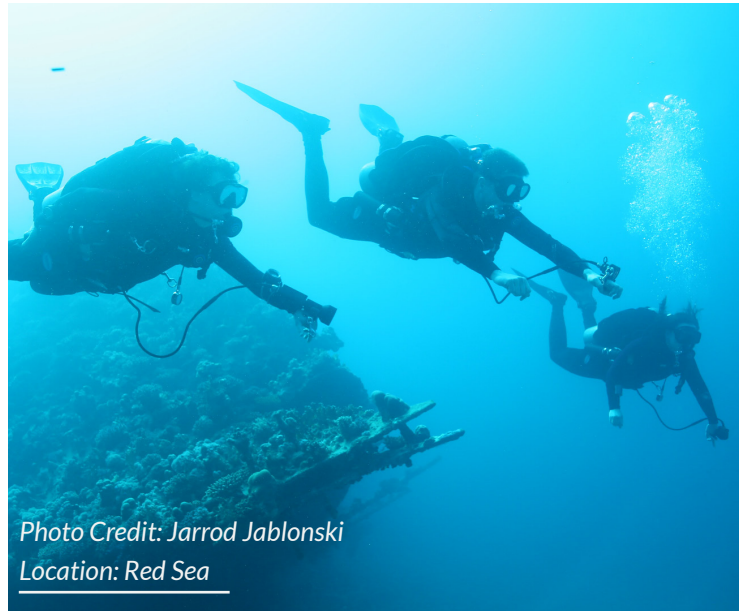


Photo Credit: Jarrod Jablonski
Location: Red Sea



Photo Credit: Andreas Hagberg
Location: Stuart's Cove, Bahamas

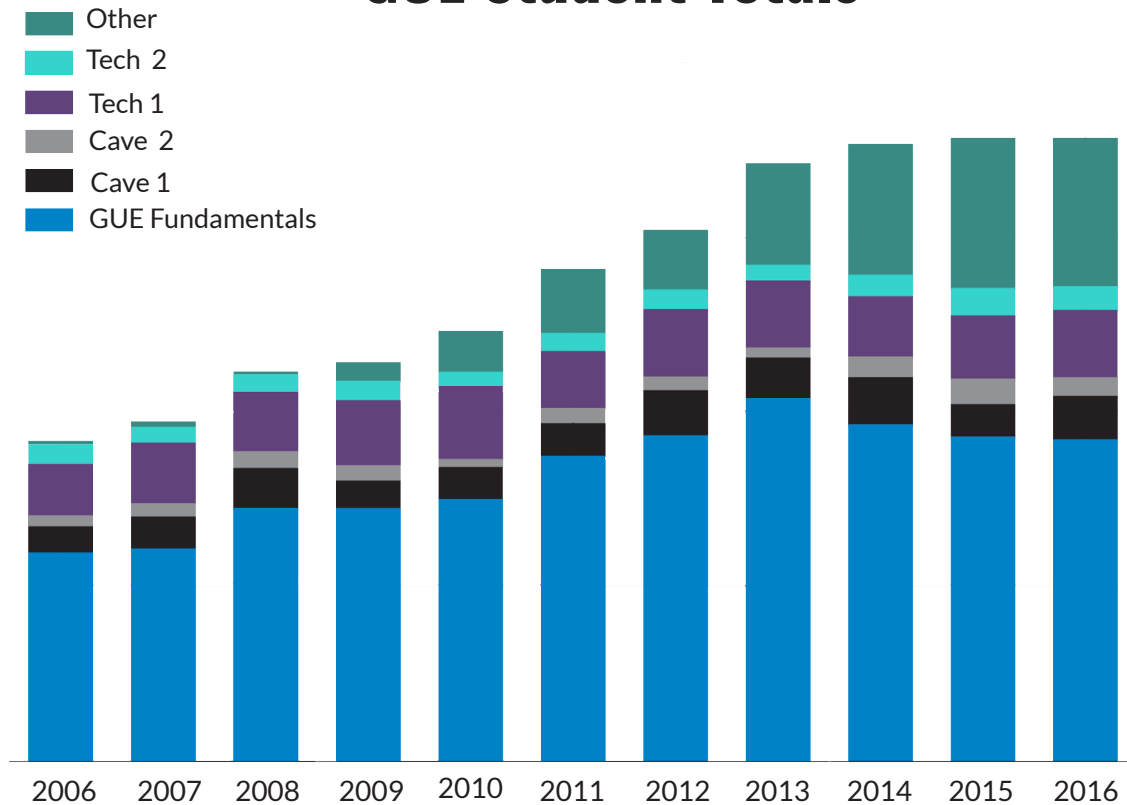
Growth in the number of GUE courses has occurred principally through the introduction of non-certification primers, which are designed to support less experienced divers and facilitate entry points in the GUE community. Some programs like Tech 1+ (now Tech 60) and Tech 2+ were efforts to accommodate local needs and/or insurance requests. Programs of the latter type are being considered for removal and the former non-certification programs are likely nearing their limit and might be considered for reduction. GUE's most popular course continues to be the Fundamentals program, accounting for just over half of all classes taught. Cave programs account for just under 10 percent while tech programs are slightly more than 15 percent. By most measures, the diving industry seems to be contracting so softness in GUE growth should not be surprising. Given that students from



Photo Credit: Graham Blackmore
Location: Bermuda

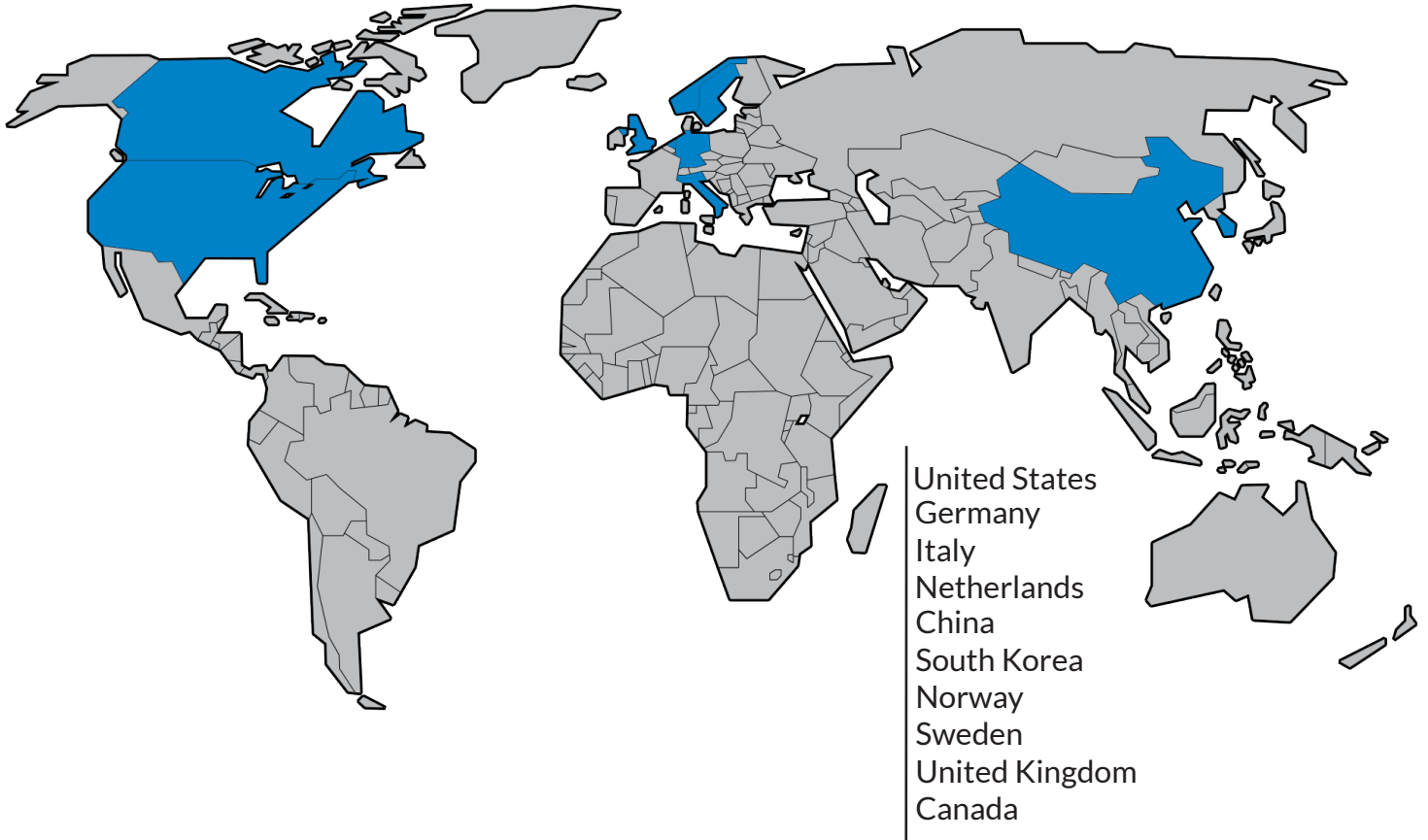
other agencies are the primary conduit for the GUE Fundamentals program, it would be unlikely not to see a downward trend especially absent a more vibrant recreational diving program.

GUE Student Totals



*Other includes: all Recreational courses, Doubles, Drysuit, Gas Blender, Documentation Diver, Diver Propulsion Vehicle 1, Rebreather, Tech 1+/60, and DPV Cave.

Top 10 Countries of Origin for GUE Divers



*Photo Credit: Rich Denmark
Location: Ginnie Springs, Florida*



Cave & Technical Diving



Photo Credit: JP Bresser
Location: Bermuda

Updates to Cave & Tech Courses

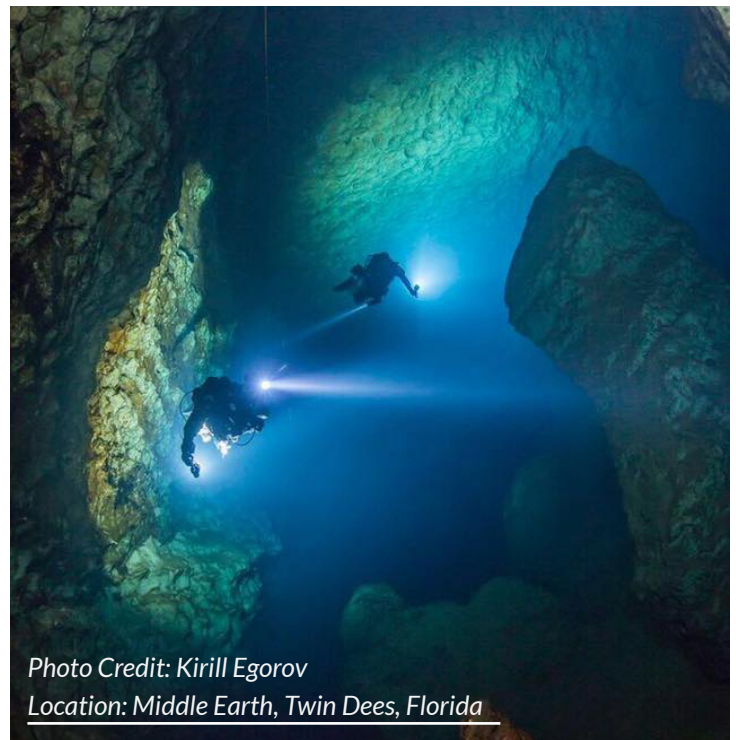
GUE cave and tech programs are inherently cyclical due to students matriculating through training programs and building experience before taking their next course. Despite their cyclical movement, they are performing above expectation compared to the yearly average over the last five years. However, stagnation at the GUE Fundamentals level would establish a ceiling for cave and tech programs absent development within recreational diver training.

Cave and tech students are more likely to be successful than Fundamentals students, further supporting the notion that Fundamentals is the hardest class on average. This is likely due to the large burden presented while learning entirely new skills which, when mastered, greatly support future training outcomes. Cave and tech course results are extremely similar with tech programs only a couple percent more likely to result in failure. Level 1 cave and tech programs show a couple percentage points higher failure rate when compared to Level 2 cave and tech programs. The average for all tech and cave programs is an 89% pass, 8% provisional, and 4% failure rate.

Development during 2016 included notable updates in Cave 1 and Tech 1 training materials for both students and instructors. A new version of GUE's Standard Operation Procedures (SOP) was developed and matriculated through the long review process and new presentations for Tech 2 and Cave 2 were also refined during 2016. 2017 will see the release of the new GUE SOPs and the new Tech 2, Cave 2, and CCR presentations. New tech and cave diving manuals are also planned for release this year. Course preparation materials are in development and include self-study materials supported by quizzes and video training through DiveGUE.tv.



*Photo Credit: Jarrod Jablonski
Location: Blue Grotto, Florida*



*Photo Credit: Kirill Egorov
Location: Middle Earth, Twin Dees, Florida*

Since 2006

39% of Cave 1 students have gone on to complete Cave 2

27% of Tech 1 students have gone on to complete Tech 2

Photo Credit: Su Eun Kim
Location: Bermuda

Cave and Tech Comparison

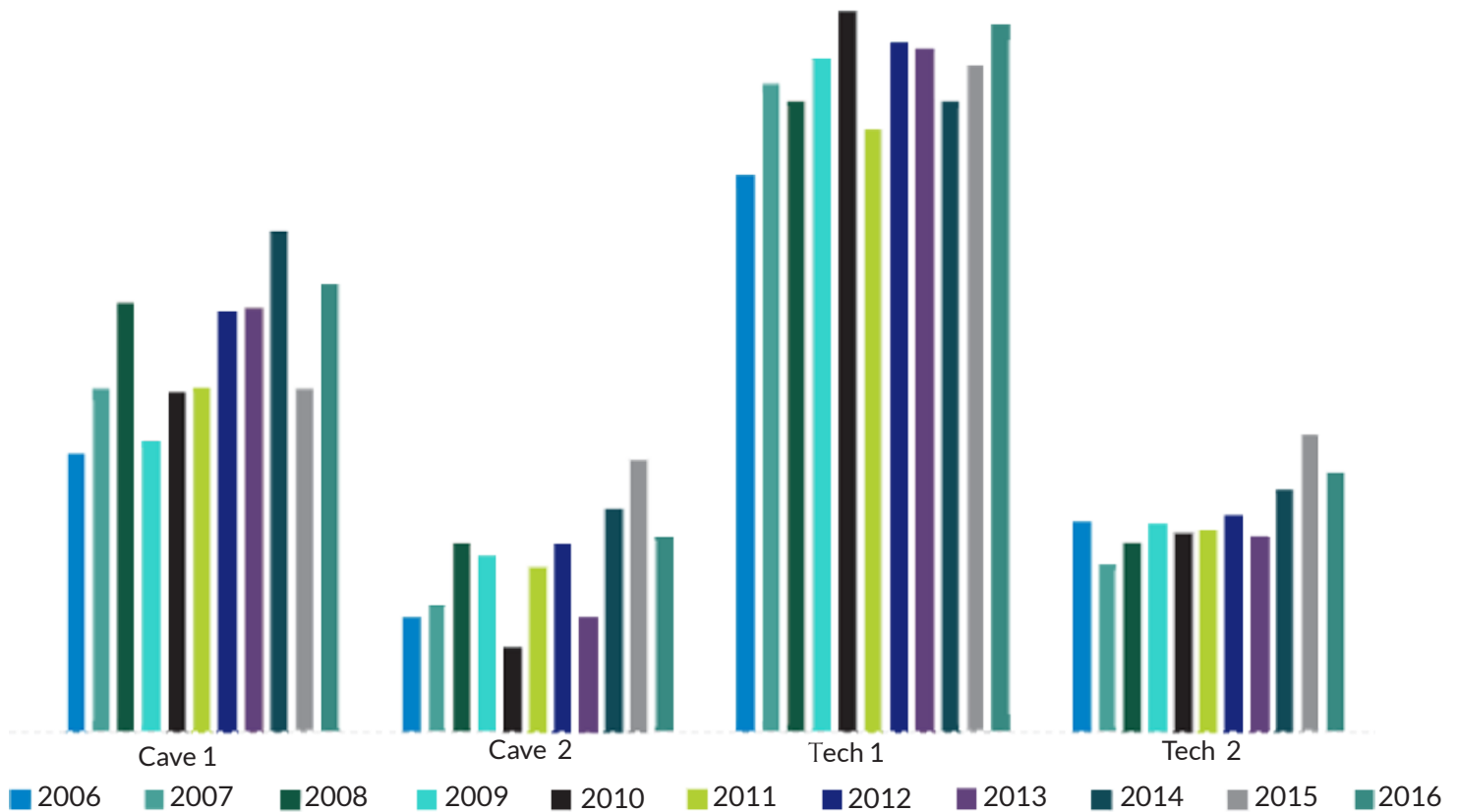
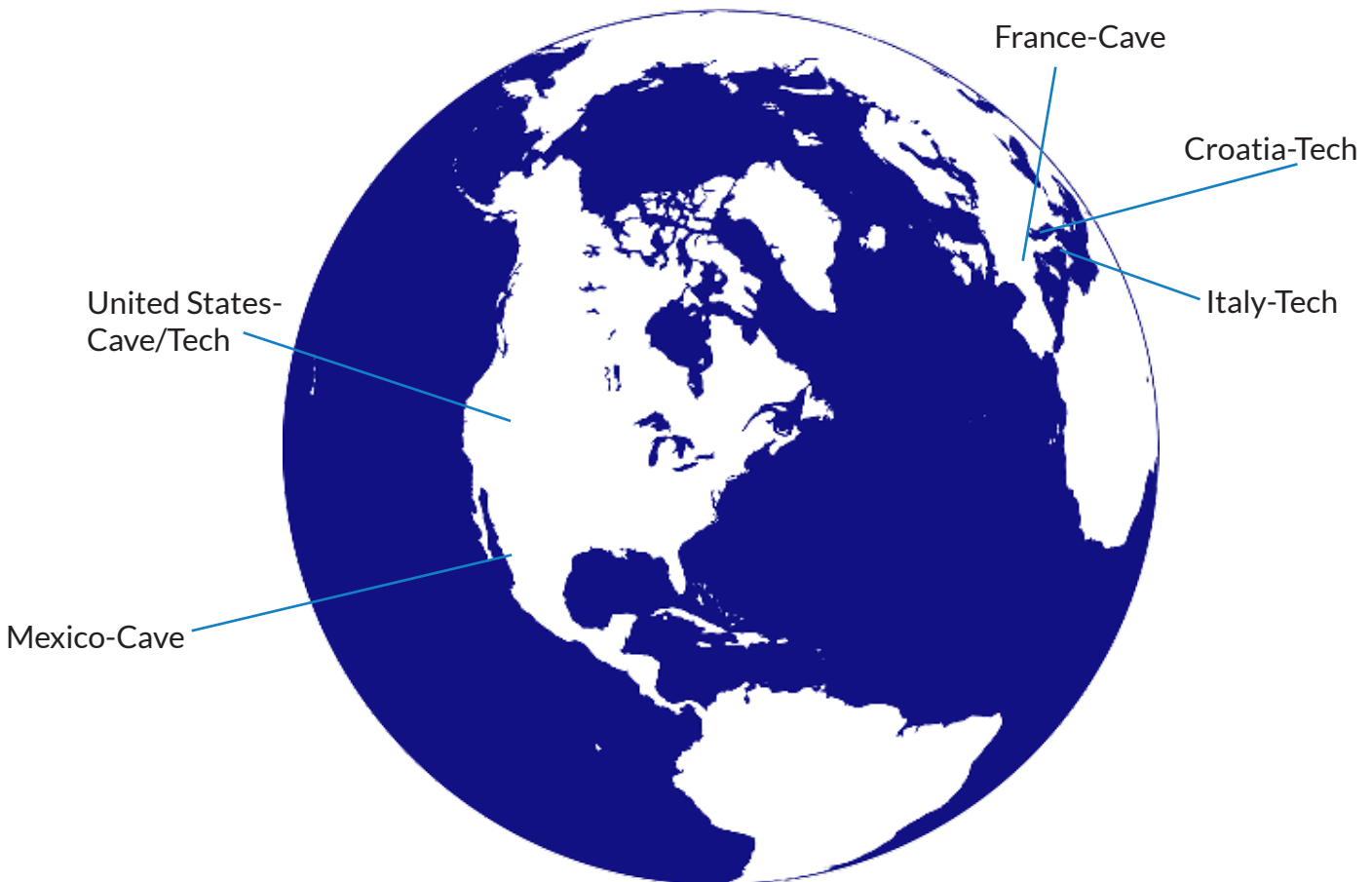


Photo Credit: Su Eun Kim

Location: Bermuda



Top Countries for Cave and Tech Courses



Recreational & Foundational Diving



Photo Credit: Jarrod Jablonski
Location: Red Sea

Updates to Rec and Fundamental Courses

2016 was heavily focused on restructuring the Recreational Diver Level 1 program including an introductory program, GUE Discover Diving. The discovery program is designed to be run in a half-day session and the Recreational Diver Level 1 program can now be taught as one course or divided into two, easing the barrier to entry for students and offering greater flexibility. Creation of a new GUE Dive Leader status supports the new recreational structure by allowing our most experienced GUE divers to guide newly-certified recreational divers who are not yet ready to dive unsupervised. GUE Dive Leaders are also a nice way to support the integration of new divers into GUE communities.

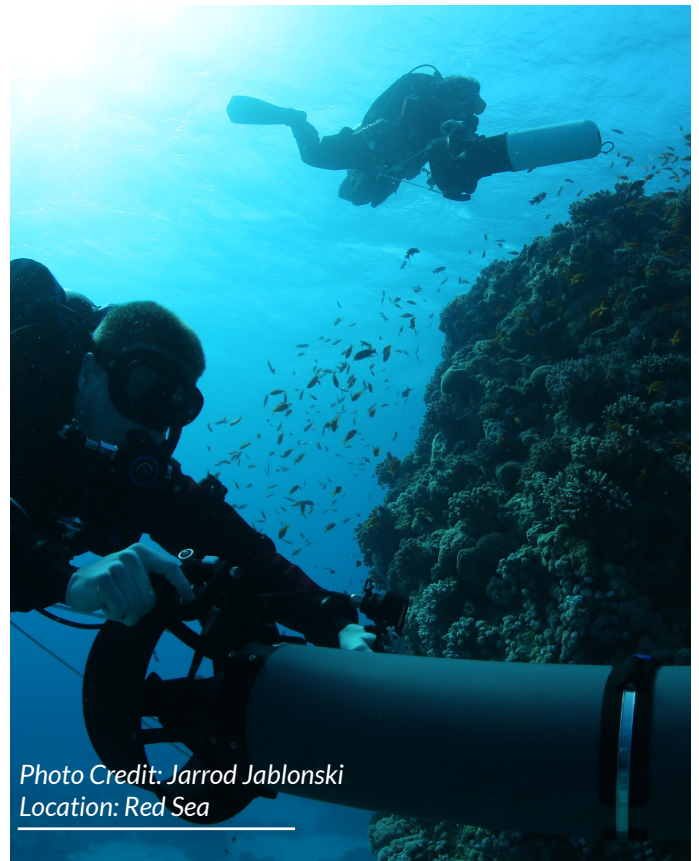
The GUE Recreational Diver Level 2 course now includes a rescue component, GUE Rescue Primer, that will be part of a newly restructured Rec 2 class coming in 2017. A newly created GUE Instructor Assistant status supports interns by allowing them more access to working with real students, which is especially valuable while learning to teach non-divers, and is a category required in some countries.

Working toward development of the GUE recreational curriculum in 2017, we are planning the launch of a dedicated GUE recreational website that will specifically engage distinctly recreational as well as non-divers. This development process will also focus on strengthening the GUE facility program and establishing key dive destinations for GUE-trained recreational divers, including attractive programs and packages catering to GUE divers, instructors, and members.

2017 materials revision plans also include student reading materials, expansion of existing online resources, and instructor teaching materials. Part of

this restructuring includes an expanded ITC training program that provides recreational GUE instructors the ability to teach a wider range of classes (Rec 1, Rec 2, Primers, DPV 1, etc.). These enhancements will include business and marketing support with online and in-person courses by specialists in these fields.

It is somewhat difficult to develop a broad-based view of student struggles in a given program because different students can have vastly different levels of preparation before entering GUE classes. However, it appears that most students are able to pass their GUE Fundamentals course in the first attempt with an average success rate of 72%. There is some variability in the use of provisional vs. fail categories over time and between instructors but over the last five years, the average failure rate was 6% with an average of 22% of students earning provisional status.

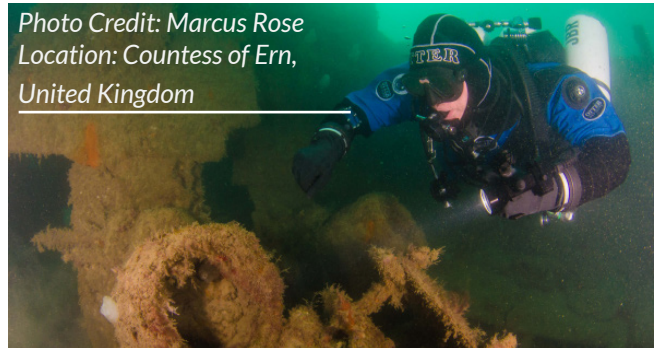


*Photo Credit: Jarrod Jablonski
Location: Red Sea*

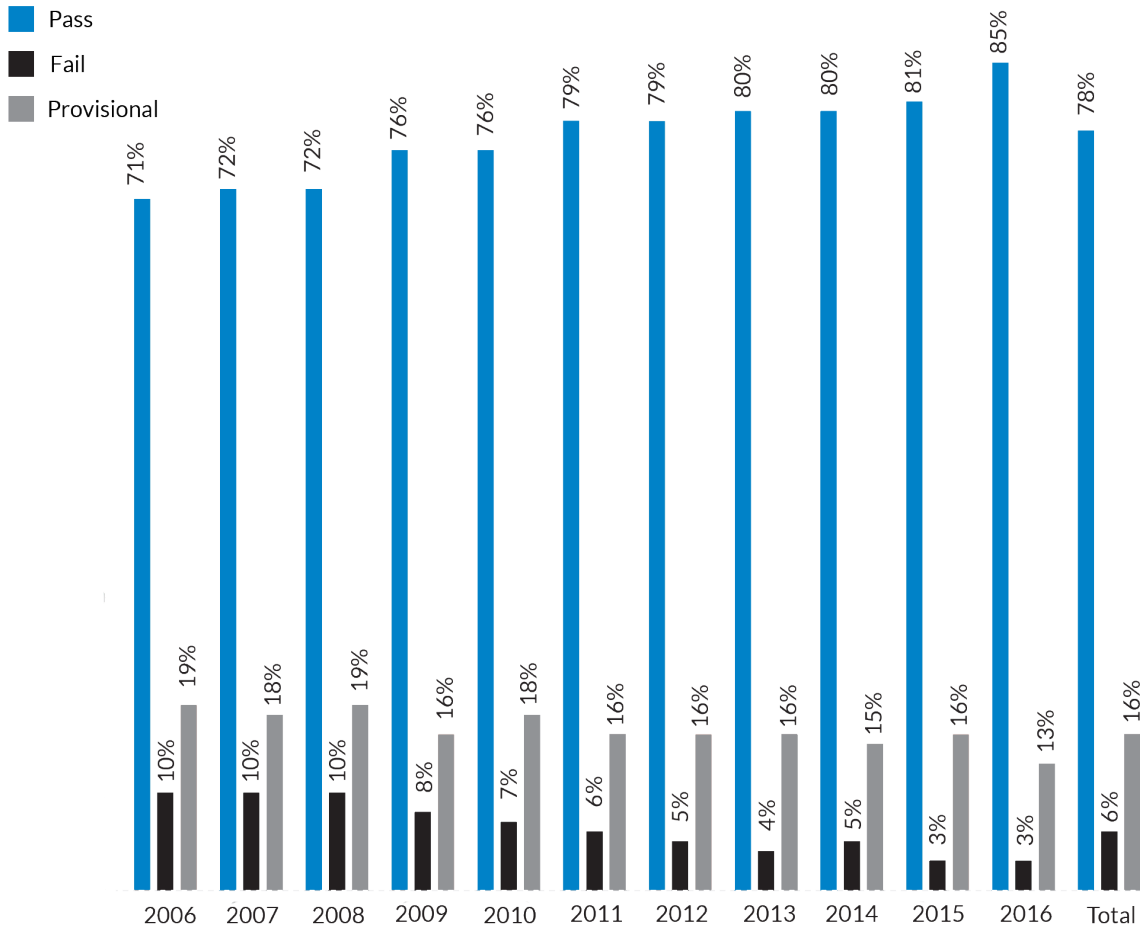
Photo Credit: Jarrod Jablonski
Location: Red Sea



Photo Credit: Marcus Rose
Location: Countess of Ern,
United Kingdom



Fundamentals: Pass, Fail, & Provisional



In 2016

Of the students who took Fundamentals for the first time and passed:

62% earned a Rec pass

and

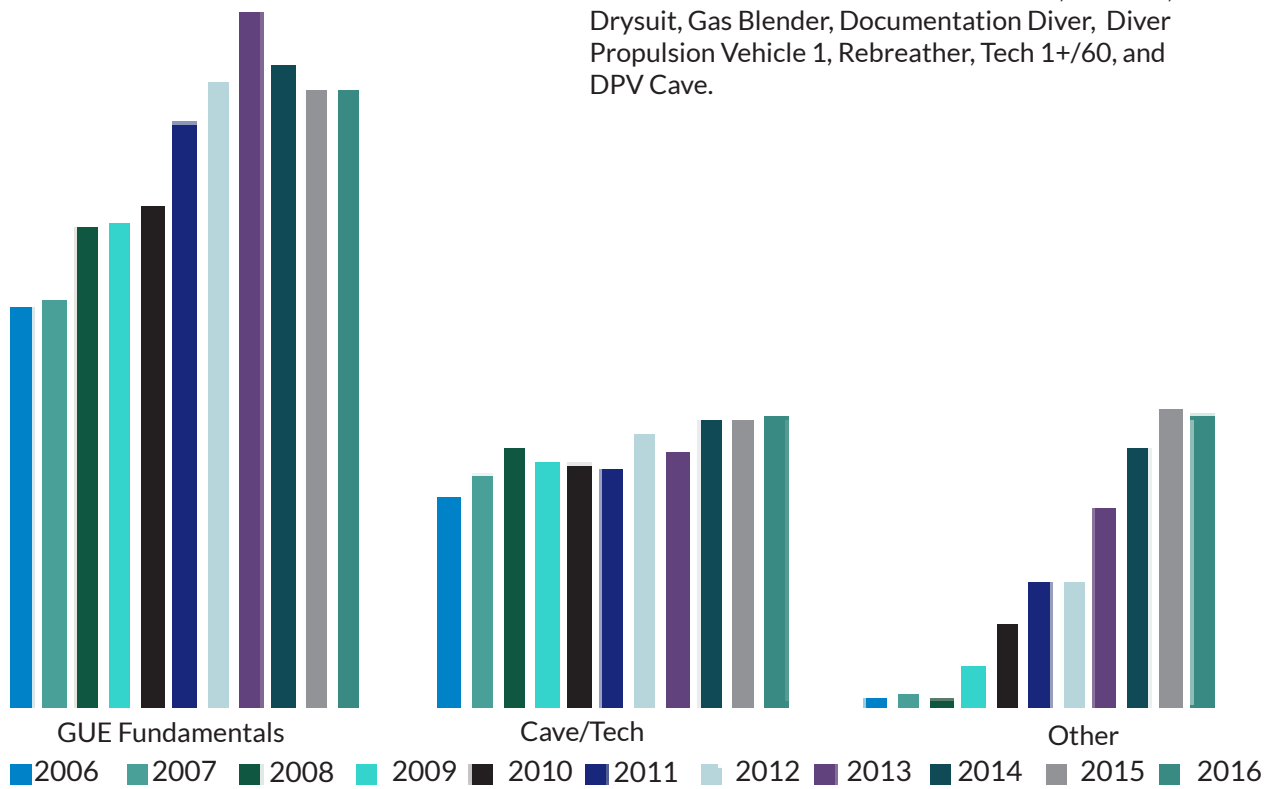
38% earned a Tech pass



Photo Credit: Coastal Technical Divers
Location: Inchcape Wreck, Fujairah, UAE

Training Comparison

*Other includes: all Recreational courses, Doubles, Drysuit, Gas Blender, Documentation Diver, Diver Propulsion Vehicle 1, Rebreather, Tech 1+/60, and DPV Cave.



In 2016

Of the returning Fundamentals students who passed:

26% earned a Rec pass

and

76% earned a Tech pass

Exploration Report



Photo Credit: Kirill Egorov
Location: Big Cave, Twin Dees, Florida

Exploring Earth's Waters

One of the pillars of Global Underwater Explorers is exploration. Over 70% of the Earth's surface is covered in water and we know less about our oceans than we do about outer space. That is why GUE is leading the way in the exploration of our water systems. From springs, caves, and lakes to rivers and oceans, our members are diving below the surface to explore and share with the world what is right in our own backyard.

Small groups of highly skilled GUE divers are working on these exploration projects worldwide. In 2016, projects were occurring in over 17 countries. These projects included the continued exploration of caves in Mexico, Croatia, Australia and more; the continued exploration of a mine in Germany; and shipwreck projects like the Wrecks of the Battle of Jutland, in which GUE divers were tasked with videography under the wing of UNESCO. In Norway, a team has been collecting marine species on behalf of the German marine museum, Ozeaneum, yearly since 2007. In France, members of the Hidden River Project spent more than 60 hours exploring and documenting the Reseau de L'Ouyse system.

GUE members around the world continue to remove discarded fishing nets through their work with the Ghost Fishing project. Partnerships with other organizations, governments, and universities are gradually adding to what we know about our planet's water systems.

Today, the bulk of our conservation and exploration efforts fall under the umbrella of Project Baseline. The overarching mission of Project Baseline is for participants worldwide to survey and record their local aquatic environments with photos, videos, and

data logs as a baseline against which future changes can be measured. This goal was accomplished through four missions in the 2016, two of which were in conjunction with the National Oceanographic and Atmospheric Administration (NOAA) to document shipwrecks in North Carolina and Lake Michigan.



*Photo Credit: Su Eun Kim
Location: Bermuda*

As of 2016

40 Exploration projects
In worldwide

17 Different countries



*Photo Credit: Kirill Egorov
Location: YP-389 wreck, North Carolina*

Conservation Report

Photo Credit: Su Eun Kim
Location: Bermuda

Project Baseline

Efforts in 2016

In 2016 we have grown our global network of projects by 25% and are closing in on 100 active projects, a goal that is now within reach in 2017. A growing number of our teams (28% now) are actively working with external organizations to collect the data needed to effect real and positive change in our underwater environments.

We also significantly advanced our efforts to organize Project Baseline collaborations with scientific and conservation entities. Once again, Brownies Global Logistics (aka GlobalSubDive) made substantial contributions to this effort by raising private donations to partially fund three collaborative missions aboard the *r/v Baseline Explorer* in which Project Baseline brought together the highly skilled divers required to achieve the mission objectives.

In 2017, we'll be working to transition to a new database platform that we hope will include the long awaited and requested data upload interface. It will also allow for a new level of regional participation and control over Project Baseline's endeavors, new collaboration opportunities for GUE/PB divers, and reaching new highs for citizen scientist involvement through the ongoing efforts of our community of global underwater explorers.



Photo Credit: Brian Walker
Location: Southern Florida

As of 2016

110 Projects worldwide

4525 Images uploaded as of this year

Station visits **1816**

913 Stations established within sites

Aboard the *Baseline Explorer*

In March of 2016, we teamed up with Miami Waterkeeper for a two-day event to increase understanding and awareness of coral reef conditions near Port Everglades, Florida in advance of dredging to expand the port. A special guest appearance by renowned explorer and environmental advocate Philippe Cousteau brought international attention to the project and the problem. Scuba and submersible divers collected valuable baseline data from sections of the Florida Reef Tract surrounding the Port Everglades shipping channel.

Divers: Todd Kincaid, Meredith Tanguay, Rick Thomas, Kathy Dicker

In July and August, *Baseline Explorer* traveled to Bermuda where we teamed with scientists from several universities including Oxford and Stanford to execute the first mission of the XL Catlin Deep Ocean Survey. GUE divers explored and documented 5 sites at depths between 15 and 90 meters: submersibles at 300, 200 and 150 m. During the project we identified

In 2016

- 122** Scuba and submersible dives
- 68** Submersible passengers
- 18** GUE divers from all over the world
- 7** Photogrammetric and laser surveys
- 25** Kilometers of underwater video transects

as many as 300 new species of coral, sponge, and algae, and carried journalists and UNESCO representatives to depth to announce the world's first High Seas World Heritage Site, the Sargasso Sea.

Divers: Todd Kincaid, Meredith Tanguay, Martin McClellan, Susan Bird, JP Bresser, Graham Blackmore, Kevin Dow, Su Eun Kim, Kyungsoo Kim

In August and September, *Baseline Explorer* traveled to North Carolina where we worked with scientists from NOAA's National Marine Sanctuaries, the Bureau of Ocean Energy Management, and the Office of Ocean Exploration and Research. There, submersibles and divers worked in water depths of 90 - 240 m to conduct laser and photogrammetry surveys of wrecks that sank in WWII's Battle of the Atlantic off of North Carolina. The work they completed will advance NOAA's goal of expanding the Monitor National Marine Sanctuary and foster ongoing Project Baseline collaborations.

Divers: Todd Kincaid, Meredith Tanguay, Jarrod Jablonski, Richard Lundgren, Kirill Egorov, and JM Lee

In November, GUE organized a follow up collaborative mission with NOAA in the Thunder Bay National Marine Sanctuary leveraging NOAA's dive boat and support facilities. There, our GUE team developed photogrammetric models of two shallow shipwrecks in Lake Huron that NOAA will use to record changing conditions through time. We anticipate that this year's successes with NOAA will open the door to regular mission opportunities for GUE divers and Project Baseline in the National Marine Sanctuaries.

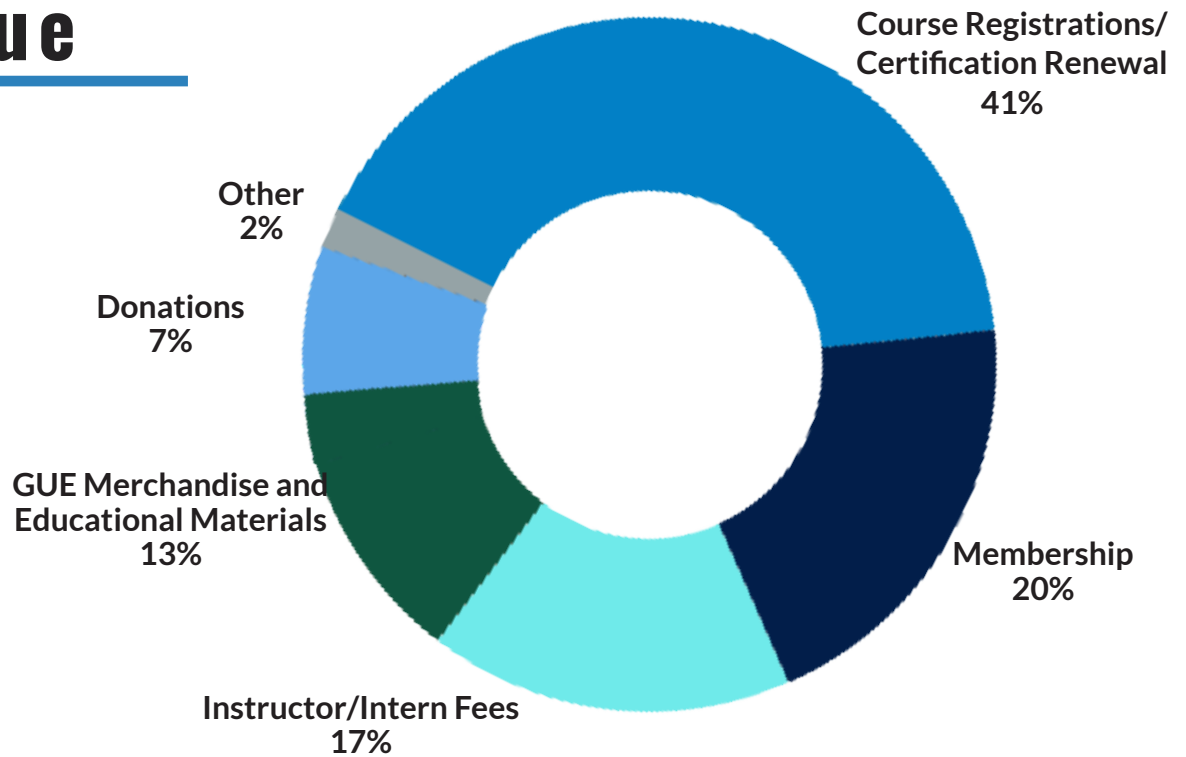
Divers: Todd Kincaid, Martin McClellan, Rich Denmark



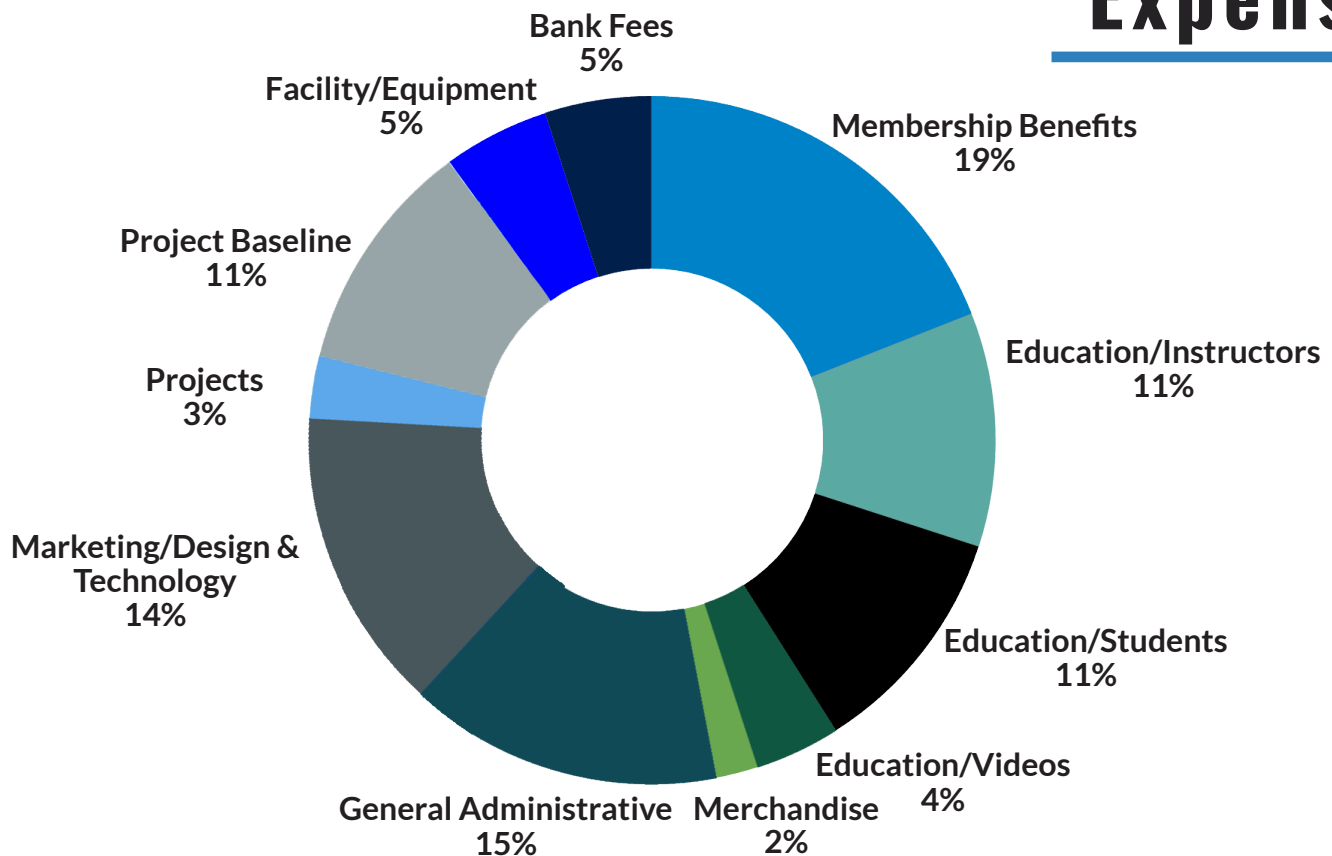
Photo Credit: JP Bresser
Location: Bermuda

Financial Report

Revenue



Expenses





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