Tributes to Victor G. Springer

In celebration of his 94th birthday

June 2022

Edited by Carole C. Baldwin and Katherine E. Bemis

With contributions from Vic's friends and colleagues

Washington, D.C.

June 2022

Cover Image:

Victor G. Springer with the *Megalodon* at Smithsonian Institution National Museum of Natural History, 17 June 2019. Photograph by Carole C. Baldwin.

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Foreword

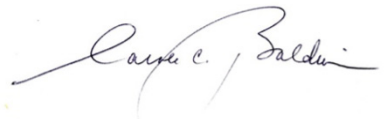
On June 2, 2022, Victor G. Springer celebrated his 94th birthday. Prior to the COVID-19 pandemic, Vic, although long retired, commuted to his office at the museum nearly daily. Since the museum re-opened to staff, including to Curator Emeriti such as Vic, he has not been able to return to work due to various health issues. We miss him. Division of Fishes staff at the Smithsonian's National Museum of Natural History decided to prepare a gift in the form of a tribute volume dedicated to his outstanding career in systematic ichthyology. We did this by reaching out to colleagues and friends of Vic's for messages, photos, and anecdotes, and this document is the result of those efforts.

Vic has published a phenomenal body of peer-reviewed research, worked with numerous collaborators both in museums and in the field, openly shared his remarkable personal library with others, and entertained many with limericks and stories. As you will see from the contents herein, his impact has been extensive. If you have not read David Smith's excellent Historical Perspectives article about Vic published in Copeia in 2005, I encourage you to do so. We include it here in the Appendix.

I thank Kate Bemis for compiling the messages received into a single formatted document; Kris Murphy, Dave Johnson, Lynne Parenti, and Ai Nonaka for assisting in the planning of the volume; and especially all of you who contributed.

Vic, we are honoured to share this tribute volume with you and hope that each message brings back fun (or at least interesting!) memories of your stellar career at the Smithsonian.

Happy birthday and enjoy.



Carole C. Baldwin
Curator of Fishes & Chair
Department of Vertebrate Zoology
Smithsonian Institution
National Museum of Natural History

My Great Memories With You!

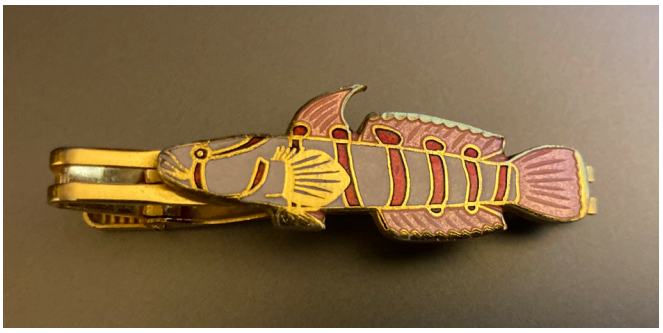
Itziar Aguilar-Roa

Smithsonian Early Enrichment Center

(2016–2018)

Key Elementary School, Arlington, VA

(2019–2022)



Fish tie-clip given to Itzi by Vic.

Hi Vic,

I am Itzi, in case you do not remember me. I have so many great memories with you! For example, the yummy and humongous chocolate shark you gave for easter. I also have in my treasure box the fish pin you gave me. I know it was very special for you and now is mine! It was so funny that the bird that I sent you was “a new family, genus, and species of legless insect” for you ;) I left long time ago a surprise in your office door. Did you see it?

I hope you have an amazing birthday and enjoy your day! Love, Itzi

Itzi Aguillar-Roa and Vic in his office, *circa* 2018. Photograph by A. Roa-Varón.

Marathons, Maps, and More!

Carole C. Baldwin

Smithsonian Institution, National Museum of Natural History

1988-Present

My first interactions with Vic were at NMNH during my visits from VIMS in the late 1980s to work with Dave Johnson on what were then known as epinepheline serranids. Vic hired me on a contract to x-ray blennies for him and offered me $1 per fish. Being a poor grad student at the time, I quickly realized that I could put a LOT of blennies on one big piece of x-ray film, sometimes as many as 100! I was raking in the money until Vic caught on and (correctly) realized that he was paying me way too much. So it was back to Stouffer's turkey tetrazzini for dinners (instant ramen noodles didn't yet exist).

Decades later I finally got to work with Vic on blennies, specifically *Ecsenius*, and it was truly an honor to work with and co-author a paper with him. On that project, we helped a young, female, Iranian graduate student complete her master's thesis, and she was a co-author on the paper. In my graduate-school days, Vic always treated me with kindness and as a colleague, not as a lowly student, and I witnessed him treat the Iranian student with equal respect. At the time the pandemic hit, we were working with colleagues on another paper, the description of a new species of *Ecsenius* from Socotra. I truly hope this work eventually gets published (he passed first authorship off to a Russian colleague), especially some versions of Vic's crazy but phenomenally informative distribution maps (Fig. 1)!

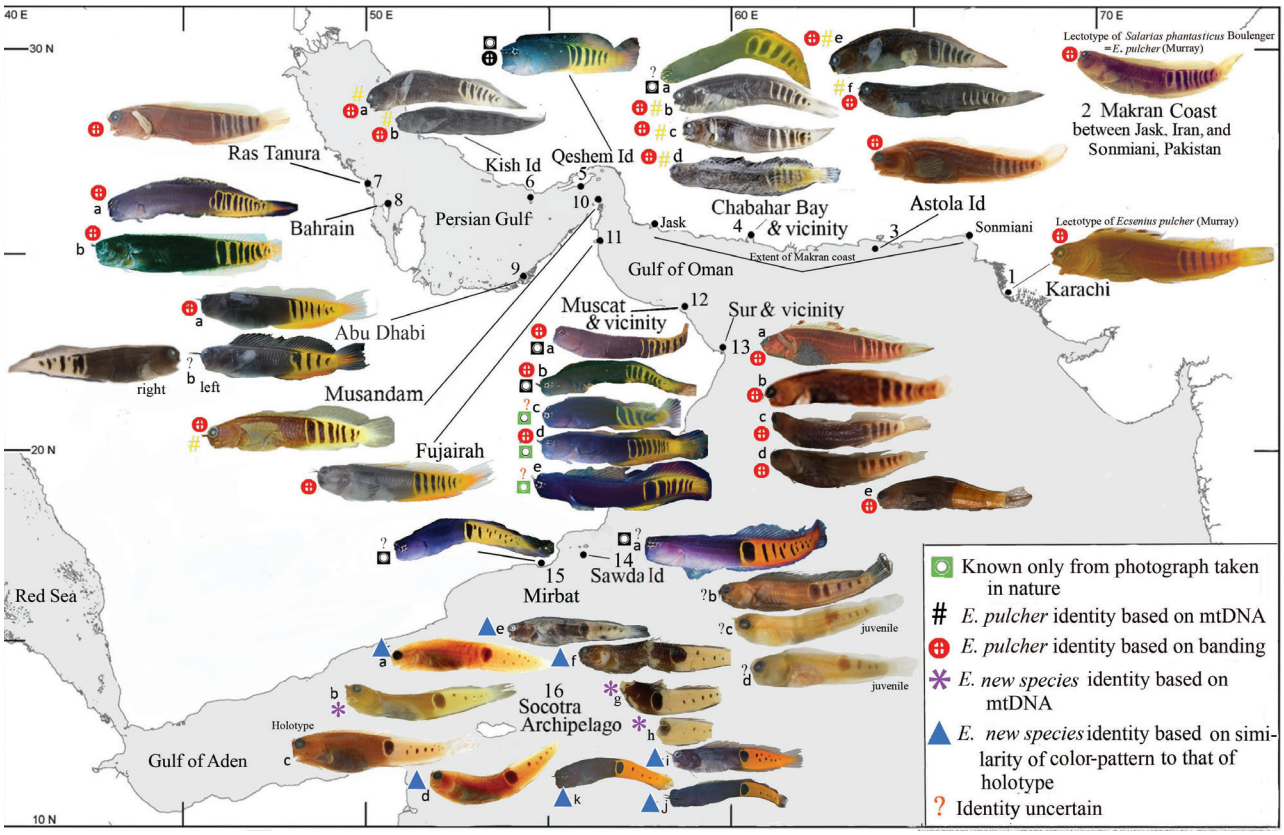


Figure 1. Unpublished draft of one of the *Ecsenius* distribution maps that Vic (with huge help from Ai Nonaka) created just prior to the pandemic.

Somewhere between my x-raying blennies for and studying blennies with Vic, we became friends, inside and outside of the museum, and I treasure that friendship deeply. I must because although I'm more of a 10-k distance runner, I agreed twice to run the second half of the Marine Corps Marathon to cheer him on (Fig. 2). He was nearly 70 years old on these runs, and it was impressive watching him soldier on and complete them.

So, Vic, I hope you enjoy the messages in this tribute volume, which was really fun to compile. While I know you well enough to know that you'll disagree, in many ways you ARE still perfect after all these years (Fig. 3). With enormous respect and lots of love,

Carole

Figure 2. Marine Corps Marathon, late 1990s. In this picture, I had just joined him near NMNH to run the second half of the marathon with him and cheer him on.

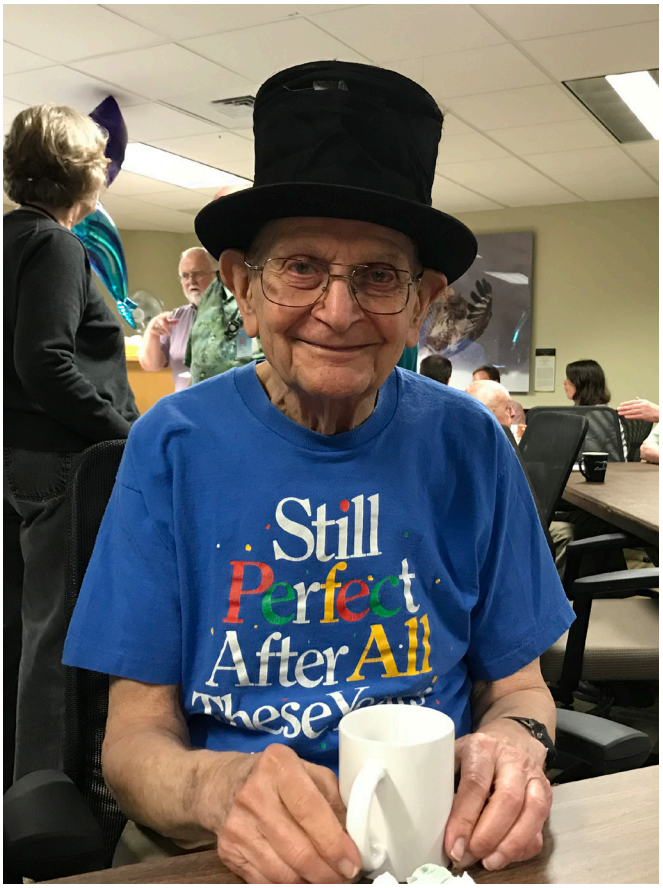


Figure 3. June 2018, celebrating Vic's 90th birthday at a NMNH Vertebrate Zoology party.

Adjoining Offices

Katherine E. Bemis

National Museum of Natural History,

Smithsonian Institution

2014 onward

Dear Vic,

Although we have not been able to interact much, I am so happy that our offices are adjoining. Especially because it means I am right next to your expertise and wonderful fish library!

In early 2020, I was looking for a paper by Rosén on inflation in tetraodontiforms and asked you if you might have it. Without missing a beat you said to me "you mean Rosén who surveyed fishes of Bahamas?" I replied that I didn't know, but that I could not imagine that was same person because I only knew of Rosén's anatomical works. You went straight to your reprint card catalog and with ease pulled from your library a copy of *Contributions to the Fauna of the Bahamas* published in 1911 – authored by the very Niels Rosén. After we found the paper, you kindly explained your cataloging system to me so that should I need anything in the future I could look for it myself. Subsequently I have used (and returned!) reprints and books from your vast and well organized collection. Thank you for sharing it with me.

The Rosén paper you found – while not the one I was originally looking for – ended up being an important reference for my work with Jim Tyler. This interaction gave me great insight to your command of the literature and value of a strong cataloging system.

I have enjoyed learning so much about you in working with Carole and contributors to put together this book of stories. Happy 94th!

Rather My Impression

Sergey V. Bogorodsky

Station of Naturalists (Omsk) and

Senckenberg Research Institute (SMF),

Frankfurt at Main

2007 onwards

I have known Vic since 2007 via e-mail through another famous ichthyologist, Jack Randall. I communicated with Vic many years mainly on discussions of the taxonomy of blennies of the Arabian seas region. He always answered all my messages, and we ex-changed photos. I am greatly impressed with how Vic is still active during his long career as a great ichthyologist, and especially I still cannot understand how Vic and team were able to collect a huge collection in 1969 in the Red Sea for USNM. I have used/am using his material in my publications. Fortunately I had a chance to meet him personally at USNM in 2019. I was surprised about his good memory at his age, and he told me some stories of about 60-years ago. We discussed also our joint article on a new Socotra *Ecsenius*. Vic really was fully occupied by this study, and I found a lot of papers on his table. When he wanted to show me a map of distribution (see Figure 1 in Baldwin Tribute), many papers were down on the floor. I wanted to help him, but Vic told me that he needed to do everything himself. In that moment I thought, we are alive while we move.

I hope we can submit this MS soon, and we have ideas with him to produce two more articles on *Ecsenius*. Vic is great person and ichthyologist, and USNM must be proud to have such great man.

I wish him on his birthday all the best!!!

Best regards, Sergey Bogorodsky

The Best Morning Coffee Group

David J. Bohaska

Department of Paleobiology, Smithsonian Institution, Washington, DC

Paula W. Bohaska

Department of Vertebrate Zoology, Smithsonian Institution, Washington, DC

Circa 2003-present

Vic Springer is a member of a morning coffee klatch, going back decades. The diversity of interests makes it an educational experience; many work-related questions and problems are resolved before 8:00 am at the table, originally in the staff cafeteria. When things got tough, we could consult the second-best coffee group at the next table, heavy on botanists, anthropologists, and museum conservation staff and interns. Of course, visiting researchers attended frequently, with many repeat visits. The combined remnants of the two groups still meet in the Fish Division break room. Vic keeps statistics on money saved by making his own coffee.

Vic's limericks about staff are well known, and most of the coffee group were honored one morning with limericks he wrote about them. Vic can also recite from memory a number of long classic poems, thanks to a grade school teacher who assigned them.

Vic completed several Marine Corps Marathons. He brought to coffee a typed summary of his

Morning coffee group in NMNH staff cafeteria. Left to right: John Pojeta (US Geological Survey, fossil mollusks), Robert W. Purdy (Smithsonian [SI] Paleobiology fossil vertebrate collections manager and fossil fish), Richard Benson (SI Paleobiology, fossil ostracods), Victor G. Springer, David J. Bohaska (SI Paleobiology, fossil marine mammals), James G. Mead (SI Vertebrate Zoology, modern marine mammals), and Oliver Flint (SI Entomology, caddisflies). Photograph by J. Gold, pre 2003.

training for one of them, at age 70, to embarrass DJB's, then 69, fitness level. Regretfully Vic injured his foot during a 10 mile run while training, and missed that marathon.

Happy 94th!

Vic as babushka, although the story behind this is lost to our memory. Dave Adamski (US Department of Agriculture, lepidoptera) to left. Photograph by P. W. Bohaska.

Happy Birthday

Bruce Collette

Smithsonian Institution, National Museum

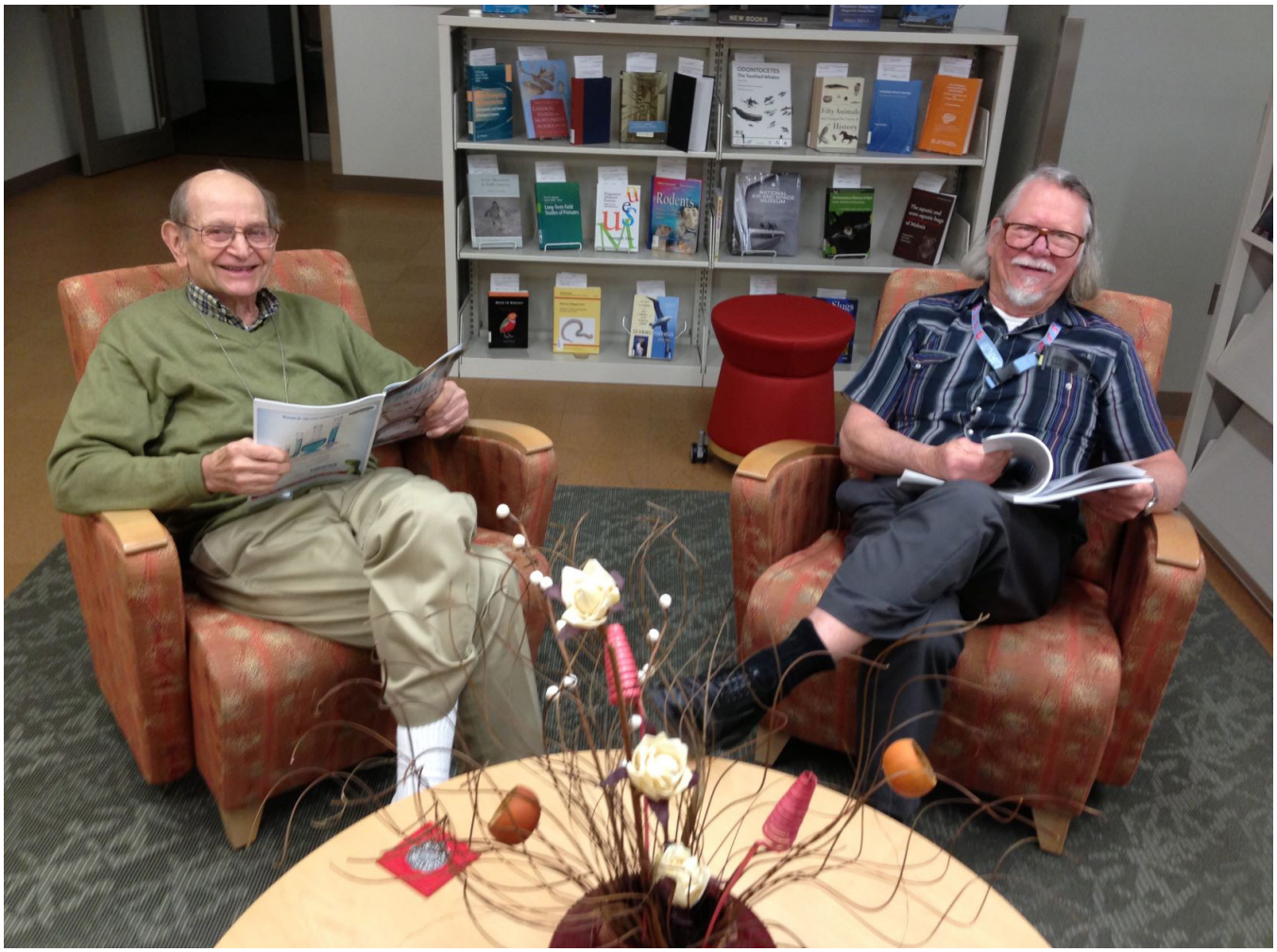
of Natural History

1960 onwards

Vic,

With best wishes for a wonderful birthday!

Bruce



Vic and Bruce Collette, two great users and supporters of the NMNH Library. Photograph by P. Lasker.

Gill Arches (ad nauseam)

Karolyn (Karie) Darrow

Smithsonian Institution

1997-2001

It is said that a picture speaks a thousand words.

If so, then the nearly seven hundred gill arch muscle illustrations we created together speak volumes. Volumes, that is, on the value of working together, the value of commitment, and the value of perseverance. You personify those values and I am ever grateful to have had the opportunity to work with you on that epic project. After twenty (plus) years, those drawings stand out as the probably the most important and certainly the most beautiful contribution I have managed to make to science. I'm ever grateful for the opportunity... it was, and still is, an honor and a privilege.

Cheers, Karie

Vic relaxing at home in Alexandria, Virginia, 2011.

Vic, Karie Darrow, and Dave Johnson raise a toast. 2011.

Thanks for the Inspiration

Alessio Datovo

Museum of Zoology, University of São Paulo, Brazil

2009 onwards

Dear Vic,

I was at the end of my undergraduate school, beginning to study catfish muscles, when I first saw your and Dave's study on dorsal gill-arch muscles. I had a mixture of amazement and fright. Amazement because it was one of the most beautiful studies I had ever seen; fright because I was sure that nothing could be more difficult than studying those intricate muscles in so many taxa. I have spent the next almost 20 years studying fish muscles, and those feelings persist. In the meantime, I have also learned about so many other studies of yours that have only increased my admiration for your work. Thank you for inspiring me and so many other generations of fish anatomists.

Dear Dr. Springer

Vinicius Espíndola

National Museum of Natural History, Smithsonian Institution

2020

Springer's studies on branchial muscles have influenced my academic life in no small way. In 2019, Vic entered my office and asked if I like to study eels, and I prompted and answered him: "Of course, I do love to study them." Suddenly, he moved his arm behind his back and threw a hard copy of "Leptocéphales des poissons Anguilliformes dans la zone sud du golfe de Guinée" on my desk and said, "Start with this!" His generosity motivated me more in my first year of the post-doctoral. May you remain a significant influence on all researchers forever.

Thank You

Sanaz Estekani

Ferdowsi University of Mashhad,

Mashhad, Iran

Dear Professor Springer,

You are the greatest teacher influential in my life.

You believed me, you helped me pursue my goals since 2015 and helped me grow confidence and learn new skills. You do not know how much I would like to visit you and your office at the USNM close up.

Vic, I will always remember that I had an excellent coach, and everybody please remember Vic is a great person and ichthyologist

I wish on your birthday all the best!!!

Yours sincerely,

Sanaz Estekani from Iran

Sanaz Estekani, Master's student who worked with Vic.

Eschmeyer's Catalog of Fishes

Ronald Fricke

Staatliches Museum für Naturkunde in

Stuttgart, Germany

1966-2019

Vic:

I wish you a very happy anniversary, full of nice memories and happy thoughts.

For the occasion, I provide a little excerpt out of Eschmeyer's Catalog of Fishes:

So far, you published:

3 new family-group names (Lateolabracidae Springer & Johnson 2004, Omobranchini Springer 1968, Phenablenniini Springer & Smith-Vaniz 1972);

20 new genera (*Alloblennius* Smith-Vaniz & Springer 1971, *Cirrisalarias* Springer 1976, *Crossosalarias* Smith-Vaniz & Springer 1976, *Dodekablennos* Springer & Spreitzer 1978, *Eschmeyer* Poss & Springer 1983, *Haptogenys* Springer 1972, *Larabicus* Randall & Springer 1973, *Lithobranchus* Smith-Vaniz & Springer 1971, *Medusablennius* Springer 1966, *Mimoblennius* Smith-Vaniz & Springer 1971, *Nannosalarias* Smith-Vaniz & Springer 1971, *Nemaclinus* Böhlke & Springer 1975, *Oman* Springer 1985, *Omox* Springer 1972, *Paralticus* Springer & Williams 1994, *Parenchelyurus* Springer 1972, *Phenablennius* Springer & Smith-Vaniz 1972, *Platygobiopsis* Springer & Randall 1992, *Rotuma* Springer 1988, *Tyson* Springer 1983;

111 new species in the families Blenniidae, Carcharhinidae, Chaenopsidae, Clinidae, Gobiesocidae, Gobiidae, Labridae, Labrisomidae, Poeciliidae, Pseudochromidae, Symphysanodontidae, Synanceiidae, Xenisthmidae.

The Springer fishes:

Two genera were named in your honor: *Springeratus* Shen 1971; *Springerichthys* Shen 1994;

as well as 23 species: *Abbottina springeri* Banarescu & Nalbant 1973; *Alabes springeri* Hutchins 2006; *Blennius springeri* Bauchot 1967; *Cirripectes springeri* Williams 1988; *Coralliozetus springeri* Stephens & Johnson 1966; *Diancistrus springeri* Schwarzhans, Møller & Nielsen 2005; *Ecsenius springeri* Allen, Erdmann & Liu 2019; *Eviota springeri* Greenfield & Jewett 2012; *Glyphododontops springeri* Allen & Lubbock 1976; *Gobiopsis springeri* Lachner & McKinney 1979; *Helcogramma springeri* Hansen 1986; *Hypleurochilus springeri* Randall 1966; *Lepadichthys springeri* Briggs 2001; *Norfolkia springeri* Clark 1980; *Paragunnellichthys springeri* Dawson 1970; *Paraxenisthmus springeri* Gill & Hoese 1993; *Petroscirtes springeri* Smith-Vaniz 1976; *Pseudamiops springeri* Gon & Bogorodsky 2013; *Pseudochromis springeri* Lubbock 1975; *Pteropsaron springeri* Smith & Johnson 2007; *Starksia springeri* Castillo & Baldwin 2011; *Synchiropus springeri* Fricke 1983; *Thysanophrys springeri* Knapp 2013.

Thank you for this outstanding body of ichthyological work, which widened and deepened our knowledge on marine fishes.

All the best for you; greetings from the Old World,

Ron

Thanks for the Support, Encouragement, and Inspiration

Anthony C. Gill

Chau Chak Wing Museum, The University of Sydney, Australia

1981 to present

It is difficult to single out an anecdote, so I'll offer a big thank you to Vic for all the support, encouragement and inspiration you have provided throughout my training and career. I first became aware of your work as a first-year student at the University of New England when sifting through the various issues of United States National Museum Bulletin and Smithsonian Contributions to Zoology held in the university's library, I stumbled on your works on blennioids, pseudochromids, gobioids and biogeography. Those papers stood out in many ways: the excellent illustrations; the attention to detail in the descriptions; the historical information. Perhaps too, I was impressed by the honesty in your writing, the admission that sometimes there was ambiguity in your observations, that more research or specimens were needed. I didn't realise at that time that I would be working on some of those same groups, benefitting from your important groundwork. Your papers continue to be a source of inspiration and information.

I very much doubt I would have had a career in fish taxonomy without your encouragement and support. There are the obvious things, like the initial funding support for my PhD visit to the Smithsonian (which ended up leading to a tour of North American and European museums), and of course your sponsorship and supervision of my postdoctoral fellowship (with generous sharing of space in your lab). Equally important were the words of encouragement when I was still an undergraduate student, or later when I was still finding my place as a researcher.

One anecdote that comes to mind. When I presented you with a draft of my first paper for comment, you presented it back to me a little later, in a somewhat annotated state, along with a copy of Strunk and White's The Elements of Style and a suggestion that I should read said text before attempting to rewrite my ms! One of the best pieces of advice I've ever received in my career. (And reading over what I have clumsily written here, perhaps it's time to reread that little book.)

Below is an essay I wrote for International Taxonomists Day:

The 19th of March marks Taxonomists Appreciation Day. The day was created in 2013 to celebrate the work of taxonomists, a group of biologists who specialise in defining and classifying the world's biological species. Taxonomic knowledge is critical for all other fields of biology. Without accurate species identifications, knowledge about each species would not accumulate and we would not be able to effectively conserve and manage natural populations. It is also critical to our fundamental

understanding of the natural world, for example as to which species are edible or dangerous. One aim of Taxonomist Appreciation Day is for taxonomists to highlight a fellow taxonomist who has been influential in their career. For me as a fish taxonomist, the most influential was Dr. Victor Springer, Emeritus Curator in the Division of Fishes at the Smithsonian's National Museum of Natural History (NMNH).

Vic's research has concentrated on blennioid fishes, a large world-wide group of over 800 small reef-dwelling species. It has spanned over seven decades, laying the groundwork for our understanding of the anatomy, composition and classification of the group, as well as clarifying the identity of many of the species (including description of more than 90 new species). He has also made similar contributions on the taxonomy and anatomy of other groups of reef fishes, from tiny gobies to sharks. Vic's research is typical of the very best taxonomists: meticulous and very carefully planned and argued. Landmark studies include one with fellow Division of Fishes curator Dr. David Johnson on the musculature of the gills of fishes. As a result of these studies and of his important fieldwork aimed at building the NMNH's collections of reef fishes, he noted that marine species often show repeating distribution patterns, with species confined to surprisingly small areas. He at tributed these patterns to earth history events, such as plate tectonics, and published several key studies that summarised fish distributions and associated geological information.

Representative blenniod fishes. Top, ring scale-triplefin (*Enneapterygius atrogulare*); bottom, horned blenny (*Parablennius intermedius*). Photographs by A. C. Gill.

I arrived at the University of New England in 1981 to find there were no courses in taxonomy or ichthyology (the study of fishes), but I had the good fortune of being mentored by Dr. David Woodland, an ecologist and fish taxonomist who later supervised my Honours and PhD research. He encouraged me to make use of the university's library, which housed, among other important ichthyological works, many of Vic's publications. These helped me develop an understanding of not only what to do, but a standard of research to aspire to. Early in my PhD on dottyback fishes, Vic offered me a visiting fellowship to work on the dotty back collections at NMNH. I was able to gather additional funding for a trip to visit the NMNH as well as other North American and European museums critical for my PhD work. After completing my PhD, I was fortunate to be one of only two postdoctoral fellows sponsored by Vic (the other was Dave Johnson, who served as my co-sponsor). Thirty years on, I still consult his works for information and inspiration.

Dear Dr. Springer

Matthew Girard

National Museum of Natural History,

Smithsonian Institution

2021

Although we have only met once, you have served as a role model to me for many years. Your 2005 monograph on the gill-arch muscles of fishes was the first item in my library, followed closely by your carangid pterygiophore paper, and I revisit your many incredible works daily. You continue to inspire me and the next generation of ichthyologists to achieve as many great things and be surrounded by as many wonderful people as you. It was an absolute honor to meet you and I hope I can say hello to you again someday.

With the utmost gratitude,

Matt Girard

NMNH Postdoctoral Fellow

Sharks in Question

Joy P. Gold

1980s onward

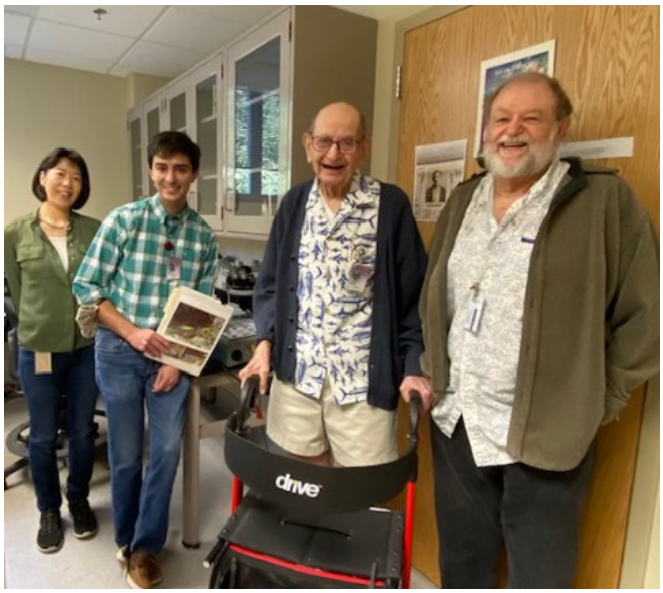
Dear Vic,

It was a wonderful experience working with you at the Smithsonian while I had the pleasure of collaborating with you on our book, *Sharks in Question*.*

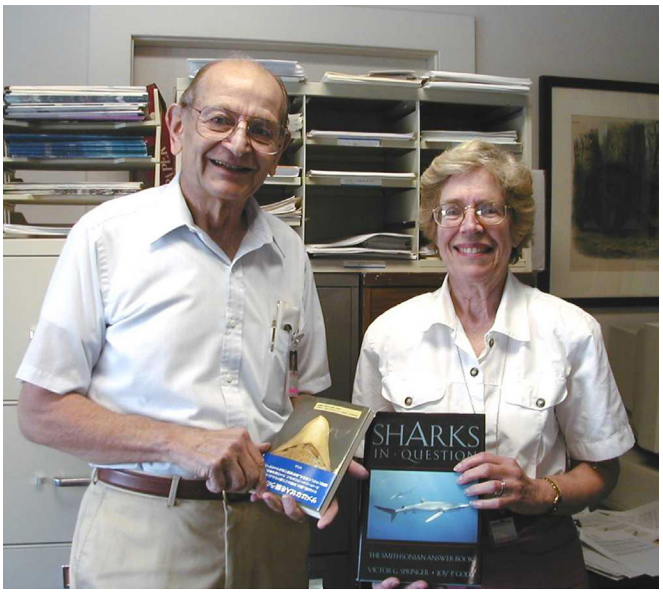
You are a perfectionist. It was an experience that I treasure.

Joy. P. Gold

* Victor G. Springer and Joy P. Gold. 1989. *Sharks in Question.* The Smithsonian Answer Book. Smithsonian Institution Press, Washington, DC



Ai Nonaka, Matt Girard, Vic, Dave Johnson. 2021. Photograph by C. C. Baldwin.



Vic and Joy Gold. Date unknown. Photograph provided by S. Raredon.

Baby Steps

Martin F. Gomon

Museums Victoria, Melbourne, Victoria,

Australia

1971-74

Vic, I can't thank you enough for guiding me through my infancy as a hopeful, prospective systematic ichthyologist in the making, during my early years as a newly appointed museum technician in the USNM's Fish Department, 1971–1974. My assignment to you and Ernie Lachner as a day a week technical assistant (for each), part of my expected duties, was a stroke of luck, albeit it quite a daunting one working so closely with recognized experts in the field. Even though my training under Dick Robins had certainly been top drawer, until I sat at the microscope in your little lab I hadn't experienced the scrutiny of my work you so freely offered. Many of the meticulous details and unflinching consistency you insisted on were new, but I eventually discovered their vital importance. I was extremely proud of our co-authored revisionary publications, more new experiences for me. The absolute highlights of my time with you and the USNM were the two scientific expeditions to Indonesia where in 1973 we first participated in sampling inshore waters near Ambon during the First International Rumphius Expedition, accompanied by an international team of scientists. Initially billeted in an unfinished dormitory that were part of an equally incomplete Russian financed university in Ambon foretold the start of a new adventure. Your intensity and dedication to the task taught me a great deal about what is required to get field work done successfully under less-than-ideal conditions. The second Indonesian adventure, which ended in a trip to Pulau Seribu (Thousand Islands) north of Jakarta, contrasted dramatically, striking out from a desert island complete with thatched hut shelter. Sometimes I wondered if the quiet kid that was tagging along wasn't more of a burden than a useful contributor. Those experiences truly set me up for life as a museum scientist on the other side of the world. I wish you only the very best with your continuing contributions and lasting happiness in reflecting on them . . . . as we all do.

Martin Gomon in Indonesia during field work with Vic, circa 1974.

Thanks for your Professionalism

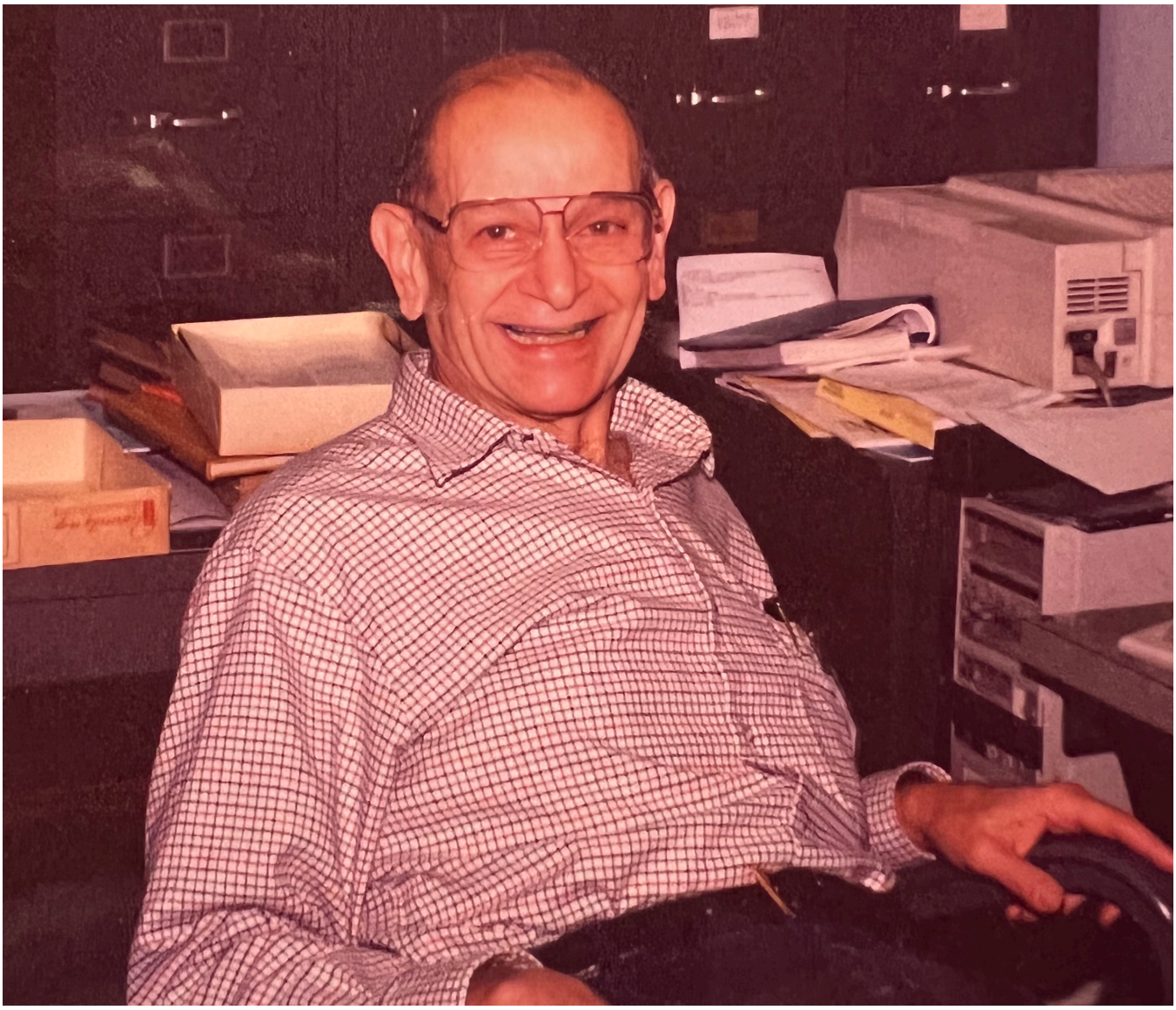
Karsten Hartel

Retired collection manager

Museum of Comparative Zoology

Decades!

Vic always treated me as a professional... not just a clerk/manager as some others have done. I appreciated that very much coming from him.



Photograph *incertae sedis*. Happy at work. Date unknown. Provided by S. Jewett.

An Inordinate Fondness for Blennies

Phil Hastings

Scripps Institution of Oceanography

University of California San Diego

Early 1990s

Vic freely shared his extensive knowledge of blennioid fishes with me and provided encouragement at a key time in my career, stoking my own obsession with these marvelous fishes. His thoroughness and rigor in data collection is evident in all of his work. In the early 1990s we collaborated on a revision of the enigmatic genus of worm blennies (*Stathmonotus*) in combination with a morphology-based phylogeny of the Chaenopsidae. During a visit to the Smithsonian, he insisted that we review the data matrix of over 100 characters that I had constructed for over 50 species. We spent hours and hours pulling out tiny specimens and even tinier cleared-and-stained bones from numerous vials to be examined one by one by both of us to be certain that we were correctly interpreting what was there. As it turns out Stathmonotus has a head resembling a chaenopsid and a body similar to that of a Paraclinus. Being adherents of parsimony, we concluded it was a chaenopsid because we had many more characters from the head region. Molecular data has since refuted that placing it within the Labrisomidae near Paraclinus. But there are worse things than providing carefully documented support for an incorrect phylogenetic hypothesis.

I also appreciated Vic's way of gently pushing and inspiring me to work a bit harder on this project: letter dated 8 April 1992 - “I am eager to get this project finished.” and letter dated 27 August 1992 - “I am still awaiting my dilatory photographer so that I can obtain the last photos. I should think, even without them you could manage a first final draft of the manuscript pretty quickly, and I look forward to same. Don’t you think this is beginning to drag?”

Thanks, Vic, for your inspiration as well as your devotion to ichthyology and blennies in particular.

Personal Memories of 50 Years of Knowing Vic Springer

Susan Jewett

Retired Collection Manager

Division of Fishes

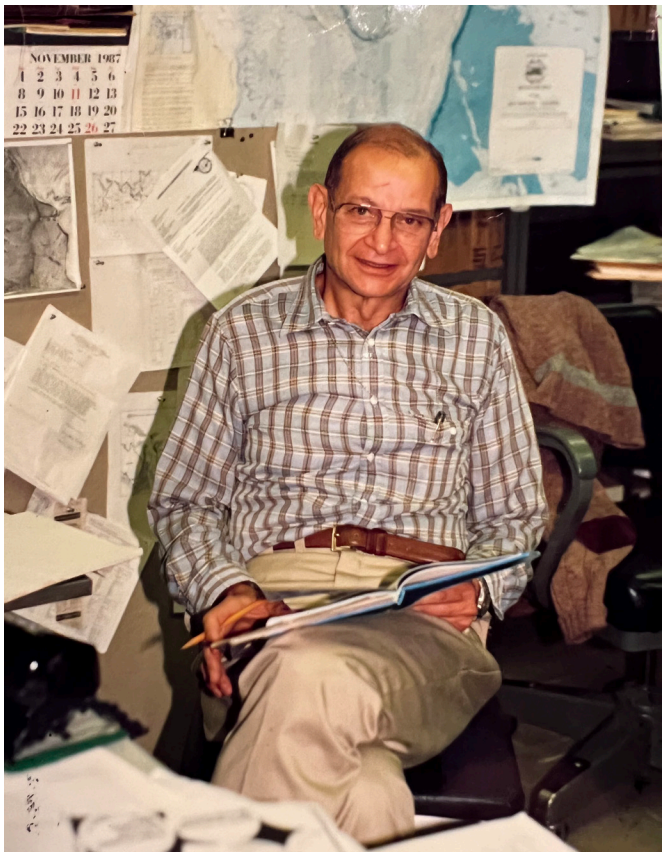
National Museum of Natural History,

Smithsonian Institution

~1969-2022

As I reflect back on the years I've known Vic Springer (since 1969 or early 1970) I conjure up a mix of memories. Vic has mellowed greatly over the years, and I long ago came to appreciate him. But when I first knew him he was a much less approachable man. He was stern, a bit mean at times, a real task master, and somewhat feared or at least shied away from by the junior staff. I recall a time when I was a technician working in the collection topping off jars with other techs when we were talking about Vic … and not in a favorable way … when a voice arose from a couple of aisles over. "I'm here!" Oops!

Over the years I came to greatly appreciate and respect Vic. I always felt that of all the curators, he cared the most about the collection and put the most energy into guiding us and ensuring it was well taken care of. He contributed greatly to the collection, not only in terms of new specimen additions but also general oversight. Of course, in those early days I longed to go in the field with him but, sadly, that was not to be.



Typical office views, 1987. Photographs provided by S. Jewett.

Vic and Susan Jewett dance at Tony and Molly Gill's wedding, early 1990s. Photograph provided by L. Parenti.

In my later years I grew quite fond of Vic and remain so today. He was a curator I could approach and be frank with. I also enjoyed knowing his wife, Shirley, and to this day continue to use her recipe for crunchy granola. Speaking of food, Vic always enjoyed the sweets be it from the vending machine or at Friday's coffee hour. I liked to bake and one year baked a challah for him … only to discover when I gave it to him that it was Passover and he wasn't to have leavened bread. Another oops.

Another memory that keeps popping up in my mind is when Sandra Raredon hosted a party at her now husband's bar in NE Washington. I forget what the celebration was but Vic attended and I believe had quite a lot of fun. He was always one who liked to dance … as occasionally happened during social times at the meetings .. and we got him dancing and even made him the recipient of a "sandwich" dance with two of us, each on an opposite side of him, slowly tightening the proximity. Wow we felt ….this was really different for Dr. Springer!

Late in my career I got involved with coelacanth work when a coelacanth was discovered in an Indonesian outdoor market. Vic's initial reaction was that someone dumped it there after having been caught off the coast of Africa. But he came around to realizing it indeed was caught off of Sulawesi, and he was very supportive of my efforts to work with Mark Erdmann to assist Mark's efforts and to arrange to obtain a second specimen, should one become available, for the Smithsonian. Vic also went on to propose a hypothesis as to how coelacanths came to occur in both locations.

So I've shared a bit a trivia for Vic's living memorial but I'll end by reiterating that he is a man of great integrity, fair and honest, an outstanding scientist, dedicated to his work and the institution he spent his career working for, and someone I feel honored to have known and worked (and danced) with.

Photograph *incertae sedis.* June 14, 1994, NMNH Executive Conference Room. Vic Springer presents Akihito, the Emperor of Japan, an original illustration of a species of Japanese goby, *Astrabe lactisella*, during an official visit to the museum. The Emperor and Vic are both experts on goby systematics. Photograph provided by S. Jewett.

Not the First Choice

Dave Johnson

Smithsonian Institution, National Museum of Natural History

1984-Present

I first met Vic Springer at the 1975 ASIH Annual meetings in Williamsburg. I had been invited to present a 30-minute talk in Ray Birdsong's Teleostean Phylogeny Symposium. It was my first professional meeting and my first chance to meet many famous ichthyologists with whom I had briefly corresponded as a humble graduate student, Donn Rosen, Stan Weitzman, Bill Gosline, Gary Nelson, etc. and of course, Vic Springer. I was painfully nervous, particularly after I saw what seemed to me to be a stadium-sized auditorium in which I would be speaking along with all these illustrious folks. As I was pacing in the lobby awaiting my turn, learning that Vic had slipped out to his car to sneak to a quick shot of whiskey before his talk was a great comfort to me – even the highly respected "pros" get nervous. Little did I know that Vic would play a pivotal role in my professional life from that day forward.

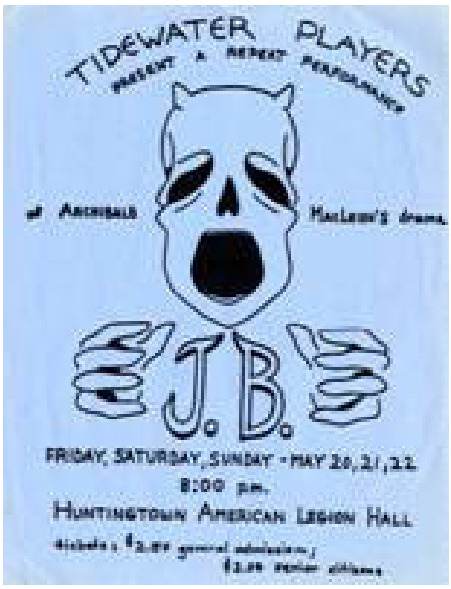
That same year, I moved to the Chesapeake Biological Laboratory in Solomons, MD, where I would spend two plus years working on a guide to larval fishes of the Mid-Atlantic Bight. During that time I paid frequent visits to the NMNH Fish Division, where I had many discussions with curators there about my passion for anatomy and relationships of percoid fishes. I particularly enjoyed and benefitted from my interactions with Vic, and I guess the feeling was mutual. I say that, because when my application for a Smithsonian Postdoctoral Fellowship was unsuccessful, Vic offered to provide the necessary funds to support it. Vic accommodated me in his side office, where his large and growing collection of cleared and stained specimens was stored, and he insisted that I use his treasured Leitz stereomicroscope – that was a revelation! It gave me a lifetime appreciation for superior optics and lighting that has carried through my career. Little did I know at that time that much of my research would be on tiny larval fishes. I now have several of those old scopes (no zoom) and encourage my fellows and visiting colleagues to use and experience their superiority – thanks Vic!

As a postdoc, I became a kid in a candy store, exploring the incredible NMNH fish collection and talking fishes and osteology with Vic. AND learning a few things about Vic…..I took an apartment in Old Town Alexandria which turned out to be three blocks down the hill from a corner that Vic passed by on his way to the Museum every morning at 6:30. That was early for me,

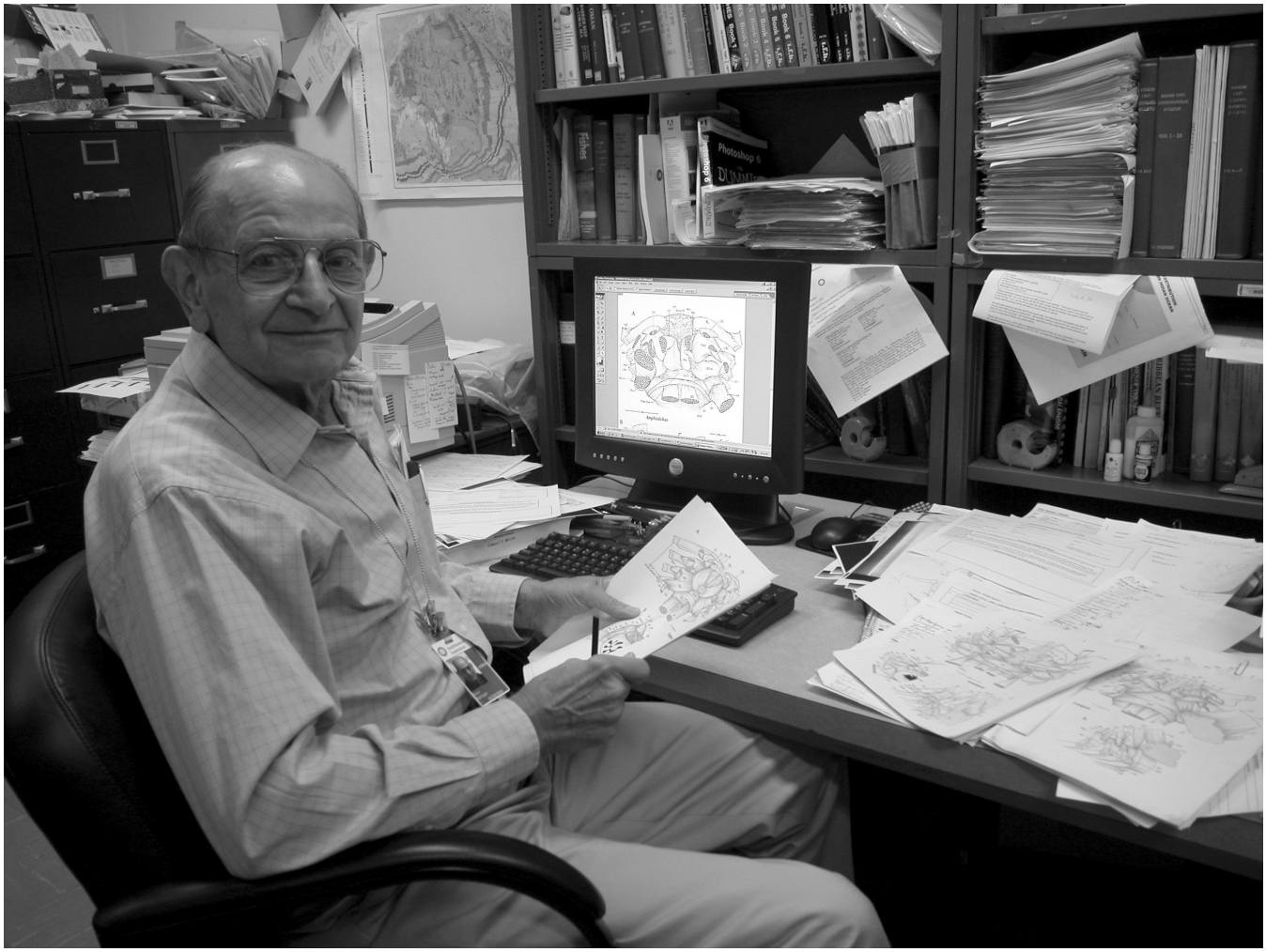
The famous silver bullet!

but I decided I would take him up on his offer of a daily ride in. You learn a lot about a person's patience riding in early-morning traffic…, but all went well until, on several occasions, I watched Vic pass by the corner without even turning his head as I was just approaching, but not at the corner! It became obvious that I should provide my own transportation. Thanks again Vic, for all the exercise I got over the next few months on my new bicycle.

Of course, I did have another life, including evening rehearsing for a local Little Theater role for several weeks, and I made the mistake of sharing that with Vic. To this day he has never let me live that down – he clearly felt I should have been burning the midnight oil at every chance.



Tidewater Players.



Vic working on the gill arch muscle manuscript. Early 2000s. Photograph provided by K. Murphy.

As the end of my one-year tenure approached I needed a job and accepted a position running a fisheries-related ichthyoplankton program in Charleston, SC. Vic was away on an extended collecting trip in the Indo-Pacific. Snail mail was our only means of communication, and it was only after I accepted the job that a letter came from Vic saying that he wanted to extend my fellowship. Too late, but I was elated that he thought I was worth keeping around, despite what he called my "libertine" tendencies.

Five years later I applied and interviewed for a curatorship at the NMNH. I wasn't a SCUBA diver at the time but promised Vic I would get certified if I got the offer. He hoped that the new curator would join in and continue his extensive fieldwork in the Indo-Pacific (in the end, Jeff Williams filled those shoes much better than I). As I waited ominously for word from DC I got a phone call - it was Vic. These are his exact words, "Dave, I've got some good news and some bad news. The good news is that you got the job. The bad news is that you were not the first choice of *anyone* in the Fish Division!" Thus began my long-term personal and professional relationship with Victor Springer, and forty years later, I'm still not convinced that he ever changed his mind…!

Vic has been an integral part of my NMNH experience, and I had the opportunity to collaborate with him on two important projects. These gave me the opportunity to understand firsthand how Vic works, and I learned that he is not the easiest person to have an intense collaboration with. He is meticulous with details and insists on accuracy almost to a fault – if one or two fibers of a muscle bundle inserted on a different bone, that had to be described and illustrated. We are both strong willed and we certainly had our ups and downs. The completion of the muscle monograph definitely put our friendship to the ultimate test – I had been on an extensive absence, and, on my return Vic gave me one day to review and comment on the entire manuscript, and I was not allowed to remove it from his office. I was also not allowed to read proof on it (ha! check the length of the subsequent errata sheet). But, with time, our friendship mended, enough so that we collaborated on a similar, smaller project, which we both enjoyed (well, at least I did). In recent years I have interacted with Vic daily, sometimes only to see how he was doing and what latest "issue" he was dealing with, hoping that I could help at least with words of encouragement. The *Ecsenius* map (see Carole's tribute) is forever burned into my memory. I really miss not seeing Vic everyday.

Despite some ups and downs, Vic has remained a close friend and invaluable colleague throughout my days at NMNH, an inspiration really. I have the highest esteem for him not only as an eminent scientist, but as a caring, painfully honest person who, above all, has had the interest of the Division of Fishes and the collection at heart throughout his career. Among many things, this is evident in his efforts to facilitate the Axelrod Chair, which has provided exceptional, vital funding for all the curators. In the same spirit Vic facilitated the first major award for excellence in Systematic Ichthyology – the ASIH Gibbs Award, as a tribute to his good friend Bob Gibbs (here's to those end-of-the-day cheap rum sessions the three of us shared). These are an important part of his legacy along with the impressive body of work Vic has given us. I very likely would not be at the NMNH had it not been for my relationship with Vic Springer, and I often wonder if he ever thinks about that as part of his legacy, for better or worse….

A Tenure Half the Museum's Age!

Kirk Johnson

Sant Director

National Museum of Natural History,

Smithsonian Institution

2012-2022

I had the great pleasure of meeting Vic early in my tenure at the museum. I was deeply impressed by his knowledge and his long and productive service to the museum. It is not every day that you meet someone who has worked at the NMNH for fully half of the time that the building has existed. Given the Smithsonian's history with the U. S. Fish Commission, and Spencer Baird's and George Brown Goode's sequential roles as the Commissioner of Fish and Fisheries, the NMNH has maintained a long and very productive research effort in fishes. Vic's systematic work on blenny fishes and his research on Indo-Pacific plate biogeography are globally renowned, and his work with the museum's scientific illustrations of fishes has resulted in the curation of thousands of gorgeous images that themselves form a collection of which we can be proud.

Happy Birthday!

Rebecca Johnson

Associate Director for Science/Chief

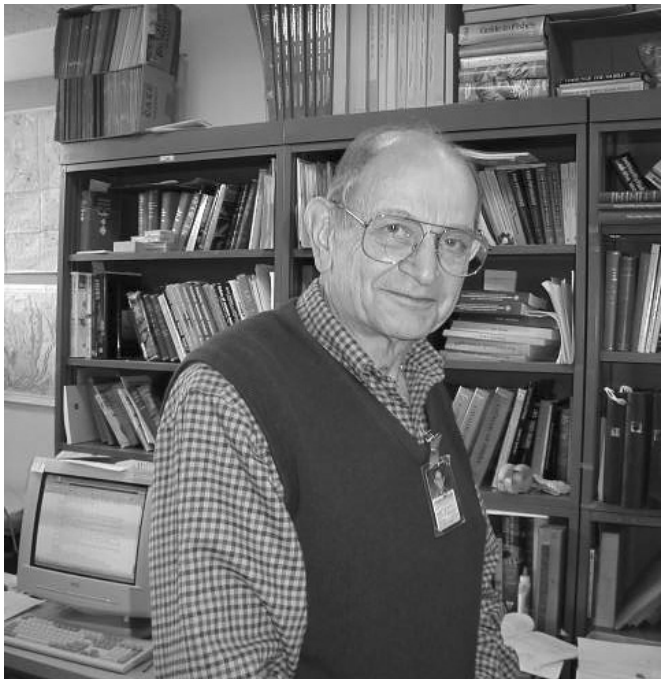
Scientist

National Museum of Natural History,

Smithsonian Institution

Congratulations on your incredible tenure at NMNH, Vic.

While the pandemic has prevented us from meeting in person your reputation as a giant contributor to the fish world reached me many years ago via the AMS Ichthyology folks. It is clearly echoed here through your many colleagues and this wonderful recognition of your lifetime contribution to advancing knowledge. I look forward to meeting you in person and hearing of your most memorable fishy stories.



Photograph *incertae sedis*. Vic in his office, date unknown. Provided by K. Murphy.

Happy Birthday, Vic!

Polly Lasker

Retired Smithsonian Libraries librarian

Just a quick appreciation of you on your 94th birthday. Since you were such a valued supporter of the Smithsonian Libraries, I relied on your guidance and recommendations to stock (get it?) the Fishes Division library collection (and other collections!) with research-rich material. You have been so kind to compliment me in my role, I just hope I was truly able to live up to your estimation!

I've included a photo of you and me on the last day you were in (what a day!).

Great library friends, Polly Lasker and Vic, 2020.

Cryptic Blennies

Oscar Miguel Lasso Alcalá

Museo de Historia Natural La Salle,

Caracas Venezuela

June 9, 2022

Clarifying the taxonomy of some cryptic blennies (Blenniidae) in their native and introduced range. Scientific Reports, June 2022. https://doi.org/10.1038/s41598-022-12580-z

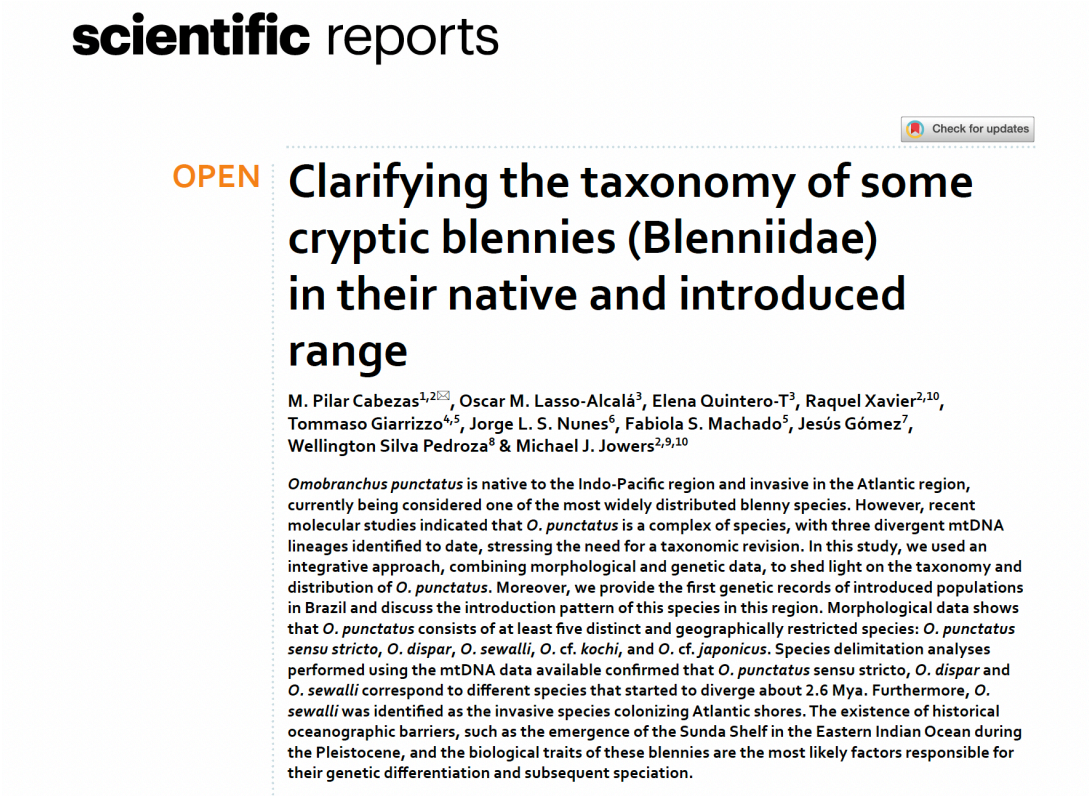
The article listed above has just been published. I was waiting to publish it so I could write to you. In this article we study the blenny *Omobranchus* punctatus group from an integrative taxonomy approach. We study the morphology (meristic), genetics, ecology and finally the nomenclature, to revalidate some species that were previously synonymous with *O. punctatus*.

One of these species, *O. sewalli*, is a very particular case, because I think it is the first time that a species is described and named based on a population of an introduced species, then it is passed to the synonym of *Omobranchus* punctatus and finally rescued as valid. This article that I am sending you would not have been possible, without the great work of the appreciated and admired ichthyologists Victor Springer and Martin Gomon.

Springer, V. G. & Gomon, M. F. (1975). Revision of the blenniid fish genus *Omobranchus*, with descriptions of three new species and notes on other species of the tribe Omobranchini. Smithson. Contrib. Zool. 177: 1–135.

It is a good opportunity to recognize and congratulate Dr. Springer for one of his great works.

With best wishes



scientific reports

Check for updates

OPEN

Clarifying the taxonomy of some cryptic blennies (Blenniidae) in their native and introduced range

M. Pilar Cabezas[1,2], Oscar M. Lasso-Alcalá[3], Elena Quintero-T[3], Raquel Xavier[2,10], Tommaso Giarrizzo[4,5], Jorge L. S. Nunes[6], Fabiola S. Machado[5], Jesús Gómez[7], Wellington Silva Pedroza[8] & Michael J. Jowers[2,9,10]

Omobranchus punctatus is native to the Indo-Pacific region and invasive in the Atlantic region, currently being considered one of the most widely distributed blenny species. However, recent molecular studies indicated that *O. punctatus* is a complex of species, with three divergent mtDNA lineages identified to date, stressing the need for a taxonomic revision. In this study, we used an integrative approach, combining morphological and genetic data, to shed light on the taxonomy and distribution of *O. punctatus*. Moreover, we provide the first genetic records of introduced populations in Brazil and discuss the introduction pattern of this species in this region. Morphological data shows that *O. punctatus* consists of at least five distinct and geographically restricted species: *O. punctatus sensu stricto*, *O. dispar*, *O. sewalli*, *O.* cf. *kochi*, and *O.* cf. *japonicus*. Species delimitation analyses performed using the mtDNA data available confirmed that *O. punctatus* sensu stricto, *O. dispar* and *O. sewalli* correspond to different species that started to diverge about 2.6 Mya. Furthermore, *O. sewalli* was identified as the invasive species colonizing Atlantic shores. The existence of historical oceanographic barriers, such as the emergence of the Sunda Shelf in the Eastern Indian Ocean during the Pleistocene, and the biological traits of these blennies are the most likely factors responsible for their genetic differentiation and subsequent speciation.

New paper published June 2022 that draws on Springer and Gomon (1975).

Ichthyology is a Great Career!

Jeff Leis

Australian Museum and University of Tasmania, Australia

1970s onward

Hi Vic – Thanks for your impressive contributions to our fishy science. I really did (and still do) appreciate your willingness to spend time interacting with a wet-behind-the-ears grad student who shared your interest in Indo-Pacific fish zoogeography in the 1970s. Receiving your latest publication way out in the mid Pacific was always very welcome, and was a great lesson in how to do things. I arrived in Australia in 1979 for a 2-year postdoc, retired from the Australian Museum in 2014, and am still doing fish science in Tasmania. Ichthyology is a great career!

With Gratitude and Admiration

Sara Lourie

Redpath Museum, McGill University, Canada and currently Cambridge, Vermont

Just this morning I was going through my Smithsonian Contributions to Zoology and I came across your *Escenius* and Indo-West Pacific blenniid fish revisions. At this point I am passing along my entire collection to a colleague, but I paused at yours and decided to hold onto them. They elicited such good memories of your encouragement of an insecure pre-graduate student newly introduced to the world of fish taxonomy. I deeply admire your work and am grateful for your open-heartedness and your help during my time working on seahorses at the Smithsonian. Wishing you all the best!

Sara Lourie at the NMNH Fish Collection.

Hey Vic, Don't Read This

Douglas F. Markle

VIMS & Oregon State University

1973-1974 (So, this is dated)

Back in time, you asked authors for paper reprints of their articles by sending-post cards! And in this unknown place to his south (VIMS) in the early 70's, there were a lot of "ichthyologists" checking paper journals every week and sending post cards … to Dr. Victor Springer. My recollection is that Dr. Springer informed Dr. Jack Musick that his students were draining his reprint supply and he would no longer send reprints to Gloucester Point. Jack proudly posted the letter on his door and asked that we send Vic more postcards. I did, and my library has been passed down, proudly including many, many Springer Classics.

Dr. Victor Springer, a Kind and Expert Mentor

Gordon McGregor Reid

Past President, Linnean Society of London

Research Associate, Natural History Museum, London

In 1988 l came to the Smithsonian Institution, Washington, on a USNM scholarship. This was organised by the late Dr Richard P. Vari (Vic's close friend and work colleague) so that l could identify and catalogue my large collection of fresh and brackish water fishes. These came from the Korup Rainforest National Park, Cameroon, West Africa (where l was doing hydrobiological survey work for WWF), and l had donated them to the Smithsonian. With numerous and diverse taxa, hundreds of specimens and limited time, this was proving to be a daunting task. At a coffee break l expressed my concerns over completion of the project to Rich and Vic, who were both very sympathetic and supportive. Indeed Vic very kindly volunteered to help me roughly sort and provisionally identify some of the problematic brackish water taxa. Me being a relatively inexperienced taxonomist, this was a great help. I struck up a good relationship with Vic and we had many chats and often humorous exchanges on this and other topics. To further assist me, he gave me reprints of many of his own research publications. I did actually complete my work on time and the results were published (Reid 1989, 1990, 1995, 1996; Teugels, Reid and King, 1992). I hugely appreciate the early kindness and expert support from this truly great ichthyologist. It is a privilege to know you.

Vicariance Biogeography of the Two Coelacanths

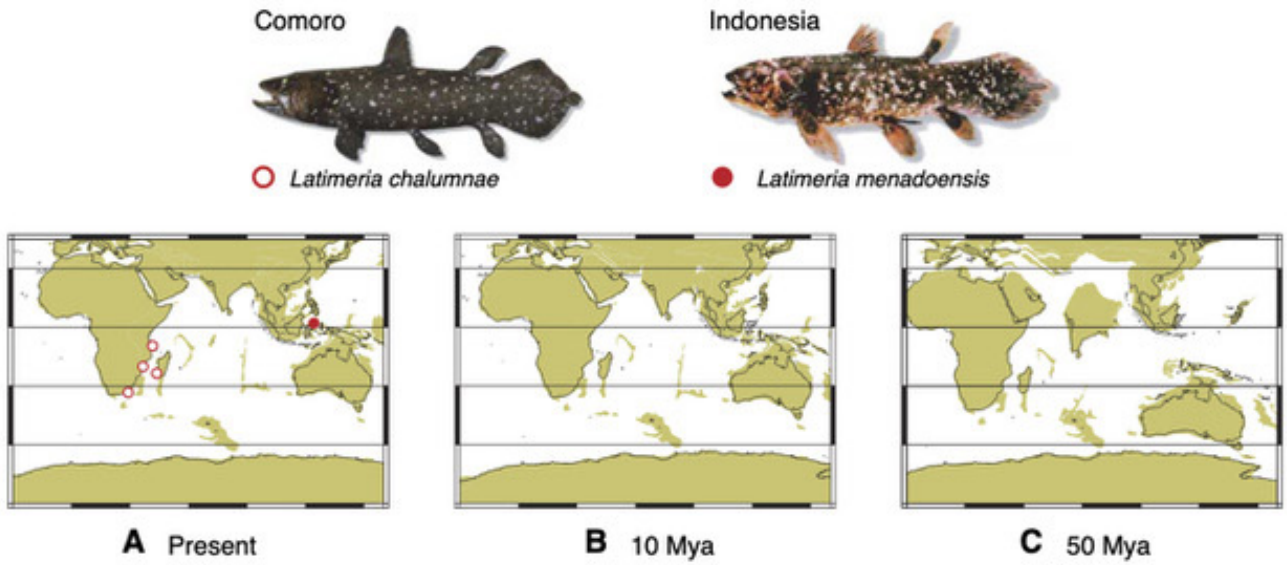
Masaki Miya

Natural History Museum and Institute,

Chiba, Japan

2005

I am very happy to hear that you are actively working on fish systematics at Smithsonian! In your name, I immediately remembered our coelacanth paper based on the mitogenomes (Inoue et al. 2015), which is completely concordant with your prediction of the vicariance biogeography of the two coelacanths (Springer 1999). I sent that paper to one of your colleagues, and he or she (I cannot remember) let Vic know our conclusion on the phone. I heard that Vic was quite excited about our paper and shouted something! Congratulations on your 94th birthday!!!



Biogeography of two coelacanths. Figure from Inoue, Miya, Venkatesh, and Nishida. 2005. The mitochondrial genome of Indonesian coelacanth *Latemeria menadoensis* (Sarcopterygii: Coelacanthiformes) and divergence time estimation between the two coelacanths. Gene 349: 227–235.

Happy Birthday, from Winnipeg of All Places

Randy Mooi

The Manitoba Museum, Winnipeg,

Manitoba, Canada

My entire career (i.e., ~1984 to today)

I can't recall a time working on the systematics and biogeography of coral reef fishes that Vic's work did not play a role - not only for the valuable observations and interpretation therein, but also for his influence on how I think, how I prepare and look at specimens, including the breadth of comparison amongst taxa, and how I write and illustrate papers. His fish collections have always been instrumental in my work, whether through the honour (and pleasure) of perusing his treasured cleared and stained library just outside his office or describing a new species from a specimen he collected during an Indo-Pacific expedition. And I would be remiss in not mentioning his introduction of persimmons to my palate – a treat from his own garden.

Happy birthday, Vic, and thanks for all the fish!

VGS

Kris Murphy

USNM/MSC/Fishes

1993–Present

What can one say about Victor Gruschka Springer, or VGS as I refer to him? I met VGS in 1993 when I joined the Fish Division and was asked to be his research assistant, and I was thrilled! I did not know Vic yet, but I learned quickly that he was serious, more energetic than folks 30 years younger, punctual, compassionate about his work and fish, and full of great stories from past and present. I worked for him one day a week for years x-raying specimens and filing reprints, organizing gobies, etc. VGS is a famous ichthyologist and adds character and professionalism to the Division of Fishes.

One time, VGS told me there was a mouse in his office and asked if I could "take care of it." VGS learned quickly how I felt about that because I was probably more afraid of mice than anyone alive. Luckily, I found out who to call to set traps and remove any trace. He never mentioned mice again.

Eventually, I assisted VGS with a publication of the scientific illustrator, Charles Bradford Hudson, and together we really enjoyed this work. VGS taught me how to use the National Archives, Smithsonian Archives, the Library of Congress and the California Academy of Sciences to obtain sources for this publication. This research gave me such an appreciation of the work involved in creating a biography.

I am sad that VGS is not able to visit the fish division because of the pandemic as well as some health issues, but he is thought of often and missed and is a dear friend.

Vic at the microscope. Photograph provided by K. Murphy.

Why I Have Always Found Vic Springer To Be So Inspiring

Gavin Naylor

Florida Museum of Natural History

1984-1994

I have always looked up to Vic Springer. I first met him when I was a Ph.D. student at the University of Maryland with Eugenie Clark, co-advised by Geerat Vermeij and doing starch gel electrophoresis in Dick Highton's lab. I would visit the fish collection at the USNM from time to time. On many occasions I would encounter Vic either in his office or in the collection. He was intimidating. He was always serious and always direct. He would ask me questions about the work I was doing on sharks and where I had been collecting. He would usually have some interesting observation about an attribute of one of the species I was looking at. I had a sense that behind this man's gruff exterior was someone deeply kind, that just wanted to be sure he wasn't wasting his time with some transitory sophomoric wannabe. In 1986 I was working in Sierra Leone sampling carcharhinid sharks at the Sierra Fisheries in Freetown. I realized that this was a poorly sampled region of the world and that many of the marine teleosts that were being landed in coastal villages were probably poorly represented in Museum collections. I contacted Vic to see if the Smithsonian might be interested in my sampling a representative collection of teleosts from the fish markets. Vic responded immediately and put me in touch with Susan Jewett and the people in shipping and receiving to organize shipment and logistics. That was a turning point in my relationship with Vic. Every time I would subsequently see him at the USNM he would come up to me smiling and ask what I was up to, and every time I would go to the museum, I would try to stop by his office to check in with him although it seems looking back that on most of these occasions Vic was out for his daily "run". (Evidently, he would run several miles every day around lunch time!). While my relationship with Vic was always cordial it was not especially close. He is a private person and so am I. However, this changed when I published a paper on the structure of shark tooth variation in the genus Carcharhinus with Les Marcus as an AMNH Novitates in 1994. Evidently, Vic read it and, as someone who had worked on sharks and had an interest in characters that were useful to discriminate among sharks, thought it was useful. I presume that this was the point at which Vic considered that I might actually be serious about ichthyology (after knowing him for 9 years!) Ever since then Vic has been an incredibly supportive advocate. Vic is not one to be overly effusive nor, it seems, someone who will tell you directly that he thinks a piece of work is good. However, he makes his opinions known indirectly through others which somehow conveys more sincerity.

I admire Vic for many reasons but perhaps most because he is someone totally focused on scientific content. He is deeply humble, self-critical to a fault and reluctant to take credit. He seeks out people who he believes are as serious about ichthyology as he is. He is one of the few people I have come across in my career who is totally committed to the discipline and to doing careful, meaningful and enduring work.

Trick AND Treat!

Ai Nonaka

NMNH, Division of Fishes

2018-2021

A few years ago, Vic came to my lab and showed me a painting by a Japanese artist, which I had never seen before. So I asked him who painted it, and he told me it was done by Kako Morita. At the same time, he asked me if I knew this painter. I replied that I had never heard of him, but this is Ebisu, the fish god, and Vic said "That's correct." I somehow knew about his love of Japanese paintings, so I thought he had this painting because of his passion. But when I asked him about it, he said that he was researching this painter and asked me if I would be interested in studying him. He briefly showed me the material he had researched in his own way, and I told him I would search for it in Japanese. At the time, I was confident that Googling in Japanese would give me information more quickly than his search, but I was wrong. I could find little information about Morita in Japanese, except that his paintings were being auctioned on the Internet, and there was nothing on Wikipedia about him. This was the beginning of my desire to find out more about Morita. That was Vic's intention. He wanted me to take over his project….me? seriously?? I knew he had published two excellent biographies about scientific illustrators, Charles Bradford Hudson and Kumataro Ito.

As I began my research, I learned that the NMNH collection has 98 original drawings of his fish illustrations, and I remember being very impressed by their precision and beauty. My investigation on Morita went on as Vic sometimes directed me to check some publications where Morita's illustration were published. Also Vic told me that a botanist from NMNH was also studying Morita. We all were convinced that we should publish a paper about him (currently in preparation).

Now, the plot thickens. Vic initially told me how he found this Ebisu drawing. He said he was walking around some used bookstores in San Francisco about 60 years ago and saw this drawing for sale for $5. He liked it and bought it, partly because Ebisu was holding a fish.

"What a cool story!", I thought. And I decided to tell this story as an introduction in our MS. Here is an initial introduction as of Feb 2021:

"About 60 years ago, Victor G. Springer (VGS) discovered a Japanese drawing at a bookstore in San Francisco. The drawing features a chubby, middle-aged Asian male with huge earlobes, who is dressed in a noble kimono robe. He is cradling a large fish in his right arm and has a fishing pole over his left shoulder. This is a very famous figure in Japan, so when VGS showed this drawing to Ai Nonaka (AN), she was immediately able to identify it as an image of Ebisu, god of fishermen and luck. However the fish in this drawing (Tai in Japanese, Pagrus major) intrigued VGS, who has always been fascinated by historical fish illustrations. As VGS recalled, he paid about five dollars for this drawing. Furthermore he noticed hand writing on the back of the drawing, which reads, in part, ""Ebisu, the fish god. (This is Kako Morita's original sketch. It was copied to my "Guide to the study of fishes". DSJ". DSJ

Vic with Ebisu illustration, looking guilty.

undoubtedly stands for David Starr Jordan, one of the most prominent American ichthyologists at the turn of the century."

Of course, we sent this version to Vic and he read it. In May 2021, I was able to visit Vic at his apartment during the pandemic. He started with "We need to discuss." I took my computer with a lot of data, images and the most recent MS to share with Vic. I was so sure that he wanted to know more about Morita, but instead he asked me to read his letter. It says "Victor G. Springer and "Kako Morita" It is time to get the relationship correct.". As I read, I found out that Vic did not buy the Ebisu drawing, he just found it in the USNM fish archive collection some of which were not yet registered back then. Among all fish illustrations in the collection, the Ebisu drawing caught his eyes and he decided to keep it for his projects. Meanwhile the rest of Kako Morita's drawings were registered as USNM.

As we all know, Vic has a clever sense of humor. He tricked me with his Ebisu story. On the other hand I received the Morita project as a treat. Look at Vic's expression in the picture I had taken earlier – what do you think he is thinking?

Ai Nonaka celebrating Vic's 90th birthday in 2018.

Vic Springer – A Mentor, Colleague, and Friend

Thomas Orrell

NMNH Smithsonian

1987-2022

I started working at the Division of Fishes in December 1987 - just before Vic lost his best friend, Robert Gibbs. Soon after that somber time, I became Vic's research assistant working for him one day per week until I left for graduate school in 1993. During that time, not only did I learn how honest and decent Vic was, but what a detailed and through researcher he was; his critical eye and deep knowledge were an inspiration. He guided me towards working on two publications with him – both type catalogues. When I left for graduate school Vic gave me a copy of the Drawn From the Sea exhibit poster which I still have hanging in my home. On returning to NMNH in 2001 as a postdoc, I had the pleasure to work again with Vic not just as a colleague but as a friend. Having coffee with him each morning with our Coffee Group and stopping by his office to talk about life and family or get updates on his research or tell him about mine. Vic is a warm, kind and caring person – and a true friend with a great sense of humor. His ability to recall and recite poems he learned as an a student amazed me and his limericks about friends and colleagues kept the Coffee Group laughing. He wrote members of the Coffee Group – with this limerick about me given on the following page (shortly after an article in the Smithsonian Magazine about my work on Snakeheads).

I won't try and write a limerick – but I will say to my friend - Happy Birthday Vic!

Celebrity Snake-Head TOM ORRELL

Does nothing we know that's immoral.

But his mood's not always the nicest,

'Cause he suffers from computerITIS.

Shun publicity, Tom, that's the moral.

by Vic Springer

Greetings from Peru

Hernan Ortega

Museo de Historia Natural/Universidad

Nacional Mayor de San Marcos

I am a Peruvian ichthyologist who spent a few months at the Fish Division in 1985.

I was studying Amazon fishes with Richard Vari and Stan Weitzman. I would just like to give my regards to Dr. Victor Springer.

All the best for Dr. Springer, his family, and the researchers from the Fish Division.

Photograph *incertae sedis.* Passport photograph from 1994 provided by S. Raredon.

Cartophilia

Lynne R. Parenti

National Museum of Natural History,

Smithsonian Institution

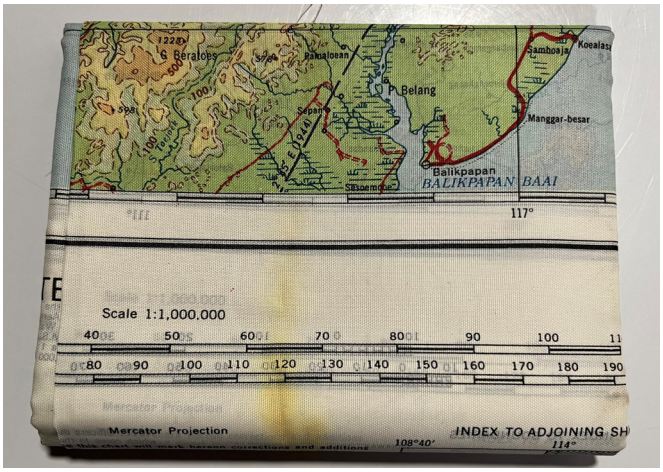
1982 onward

Vic Springer and I are cartophiles. We love maps. Although Vic included distribution maps in his earlier publications, I was newer to the field and date the sharing of this passion to 1982. That year, Vic published his monumental treatise on Pacific Plate biogeography in the Smithsonian Contributions to Zoology, long out-of-print but available via download*. It is rich with informative and detailed maps of both biology and geology. Also that year, I was living in London as a postdoctoral fellow at the British Museum (Natural History). I purchased a world atlas at a bookshop in South Kensington on 3 March 1982, as I wrote on the flyleaf. Even with Google Earth, I often flip through this atlas which, after 40 years, falls open naturally to pages 72-73, the "East Indies". This is a magical part of the world for map-loving biogeographers, home to some of the world's largest biologically and geologically complex islands (Borneo, Sulawesi, and New Guinea) and parts of its grandest bodies of water (Pacific and Indian oceans, and South China Sea).

Vic delights in giving his friends and colleagues items of special, personal interest. Vic gave me a map. It is a 1945 silk escape map of East Borneo (one side) and West Borneo (the other). Folded, the map measures about 3.5 by 5 inches and could fit in an airman's front shirt pocket or the bottom of his boot. Open, it measures about 27 by 30 inches. These synthetic silk maps would also be worn by WWII airmen as neck scarves. They are called escape maps because they were designed to be used to navigate to safety if an airman was shot down behind enemy lines. They are lightweight and strong and remarkably detailed. They do not require an Internet connection. I could have used one on my fieldtrips to the region in the 1990s. My large paper maps became torn when wet and folded and re-folded.

Thanks, Vic, for your generosity and kindness. Your attention to detail. And thanks for all the maps.

*Springer, V. G. (1982). Pacific plate biogeography, with special reference to shorefishes. Smithsonian Contributions to Zoology, 367, 1–182. https://doi.org/10.5479/si.00810282.367. Shown in Pawson Tribute.



Folded WWII escape map of East and West Borneo.

Open WWII escape map of West Borneo.

Almost-Humble Congratulations

David L. Pawson

National Museum of Natural History,

Smithsonian Institution

1964–Present

Dear Victor,

On this auspicious occasion, I can't help but cast my tiny mind back to early in 1964, when my wife and I were packing our belongings in New Zealand to travel over to the USA, where I was to take a job at the NMNH as a curator in what was soon to become the Invertebrate Zoology Department. At that time, a dear old mutual friend of yours and mine, and perhaps some other people, Jack Garrick, had just returned to New Zealand, and resumed his career as a professor of Zoology in the Victoria University of Wellington.

Jack had been a Fulbright Fellow, for three years, in the Fish Division at NMNH, where he studied deep-sea sharks. He had enjoyed the company of Drs. Schultz, Gibbs, Taylor, Weitzman, Lachner, and, most particularly, Springer! Jack advised me to meet you as soon as I arrived at the NMNH, and this I did, and I have thoroughly enjoyed knowing that Springer guy for the past 58 years, including Leap Years.

Back in those days, when we had hair, but it was of a different color (see Figure below, I look like an axe murderer; you look like a murderer of another stripe….) controversy was rife, mainly because you, Victor, had published your 1982 magnum opus, your piece de resistance, your fin de siècle, your aux armes, your droit de seigneur, your wonderful paper on Pacific Plate Biogeography, Smithsonian Contributions to Controversy, Number 367 through 375. After studying your paper, I found that the patterns of fish distribution that you observed did not conform to the patterns of echinoderm distribution, and vice versa… I even mentioned this difference in a publication,

Victor G. Springer, 1961 **NHB** **357-2610**
Curator
Department of Vertebrate Zoology

Tropical marine ichthyology

Emory University, B.A.; University of Miami, M.S.; University of Texas, Ph.D.

David L. Pawson, 1964 **NHB** **357-2553**
Curator
Department of Invertebrate Zoology

Systematics and ecology of echinoderms, especially echinoids and holothuroids; deep-sea biology

Victoria University, New Zealand, B.Sc., M.Sc., Ph.D.

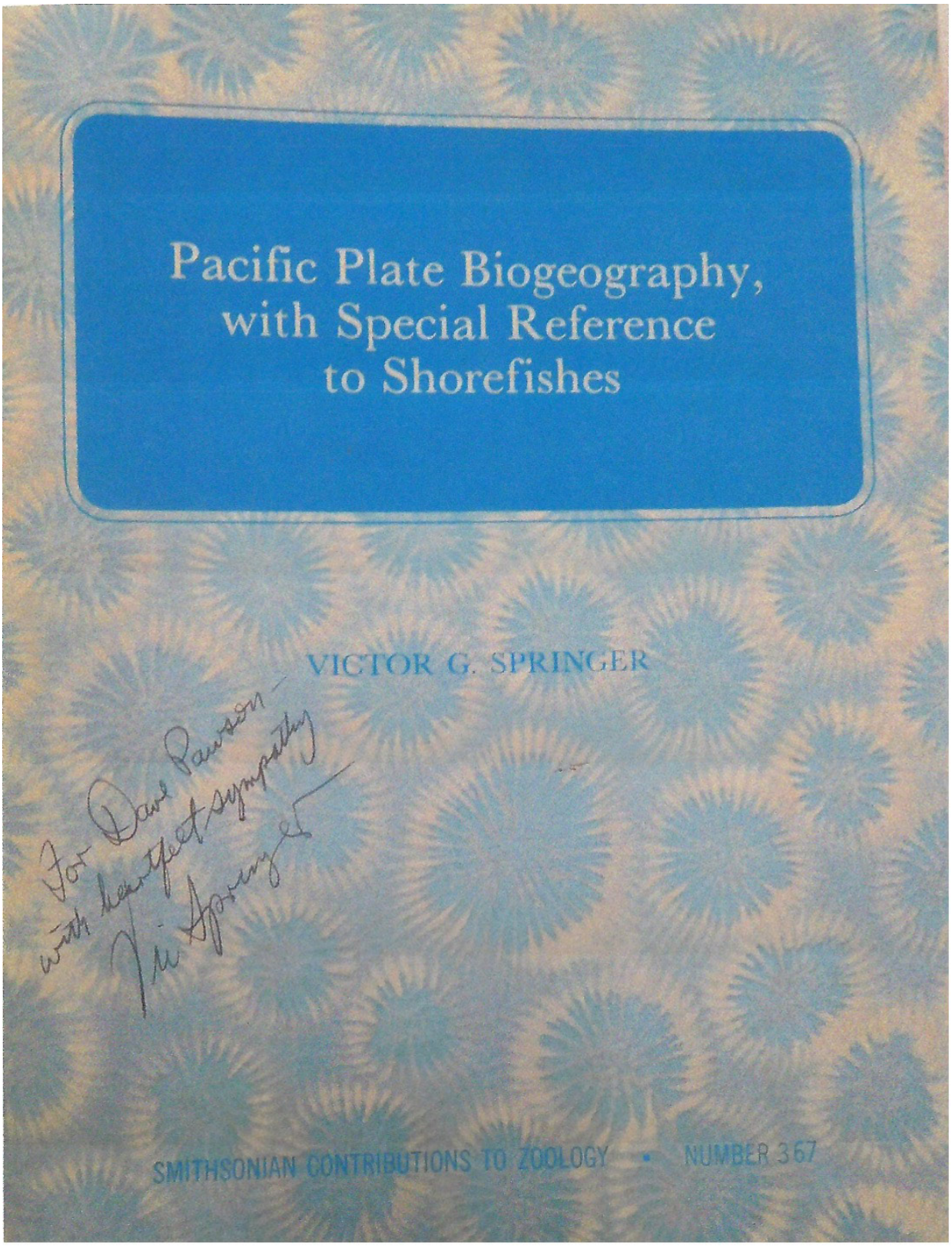
which was rejected six times, but finally made it into a privately printed journal of my own. Is this discrepancy between fishes and echinoderms obliquely referred to in your dedication when you gave me a copy of your paper: “For Dave Pawson with heartfelt sympathy, Vic Springer”? Or did this mean something else?

Well, as I have mentioned to you approximately nine times in recent years, so another couple of times would not go amiss: Recent comprehensive studies of echinoderms, made by authors other than myself (I don’t “do” comprehensive; in fact, my stuff is barely - in the nicest possible way - comprehensible), based upon molecular-level analyses, have shown that the taxonomy of Pacific Ocean echinoderms needs to be seriously revised. The new data show that distribution patterns of echinoderms DO conform to your fish patterns. Please accept my almost-humble congratulations, and my apology, but not necessarily in that order.

And so, Victor, you have surely made your mark in the world of fishes, and, above all, of course, also in our hearts!

Much love, Dave.

6/15/2022



Dave Pawson's copy of Springer (1982), signed to Pawson from Vic "With Heartfelt Sympathy".

Memories with Vic

John Paxton

Australian Museum Research Institute,

Sydney Australia

1966 onward

Dear Vic,

It is indeed a pleasure to join this celebration of your career. You and I must have met a number of times at various Ichs & Herps meetings. My first one was in Vancouver in 1961, but these were too long ago to remember many details. I first came to SI as a graduate student in Dan Cohen's lab for the summer of 1966. I have returned to the Fish Section a number of times, the last in 2014. I know we have been together at numerous conferences and meetings through the decades. The following memories are the ones that stand out.

Exercise on the Mall, 1986-87

One visit you encouraged me to 'join' you for lunchtime exercise on the Mall; you ran around the edge and I slowly jogged, cutting off the ends so we finished together. You were a serious daily runner, while by then I was a reluctant plodding jogger. However, I did agree it was good for my health, both physical and mental.

Birdwatching at Huntley Meadows Park, 2000

You generously invited me to stay overnight so 'we' could go birdwatch at this famous Arlington park. Your activity was to guide me down the boardwalk to where the action was, then you returned to the car and heater on this very cold morning. I had no complaints, as we had been to the Collette's the previous day and did some touring on the way to your place.

Morning coffee in Vic's office, 2007-8

I stayed with Dave Johnson for a couple of weeks as we continued work on whalefishes. I recall many mornings started with coffee/tea in your work area. I can't remember all we talked about, but do remember it was a very congenial atmosphere, a great way to start the day.

This tribute is well deserved and your accomplishments are many. I appreciate that Carole and Kate have made it possible. It is good to celebrate a friend and role model.

Warmest regards,

John

Venerabilis Amice, Gratulationes et Gratias Tibi Pro Omnibus

Mario de Pinna

Museu de Zoologia, Universidade de São Paulo, Brazil

Vic, it was such a privilege to interact with you during my several séjours at Smithsonian. Beyond your contributions to science, one thing I can say is that you always treated me with the same level of attention and informality, were I a young student or established professional. That set an example to me of how a truly generous and confident personality behaves. Thank you for everything and congratulations on your career and accomplishments, both as a professional and as a human being.

I'm a Dragonfly

Diane Pitassy

National Museum of Natural History, Smithsonian Institution

2006

I owe my career in the Division of Fishes in large part to Vic. When he retired, Vic stipulated that in lieu of replacing his curatorial position, two collection management positions should be created. This decision is a complete reflection of Vic's respect for collections and knowledge that the staff who are completely focused on collections care are vital to vibrant museums. I was one of the individuals selected for those positions and the rest, as they say, is history. As the bulk of the Fishes Collection moved from downtown DC to the Museum Support Center in Maryland soon after I arrived in the Division, I did not have much face-to-face time with Vic, but one memory stands out. It was 2006, I was at work at NHB and I just learned my sister was expecting her first child. As I was sharing this news with the group who worked in the corner office, Vic walked in and asked what the celebration was about. I loudly proclaimed "I'm an aunt!!" Vic, without missing a beat, replied, "Hi, I'm a dragonfly!" So needless to say, I cannot look at a dragonfly without thinking of Vic.

Man of the Century!

Sandra Raredon

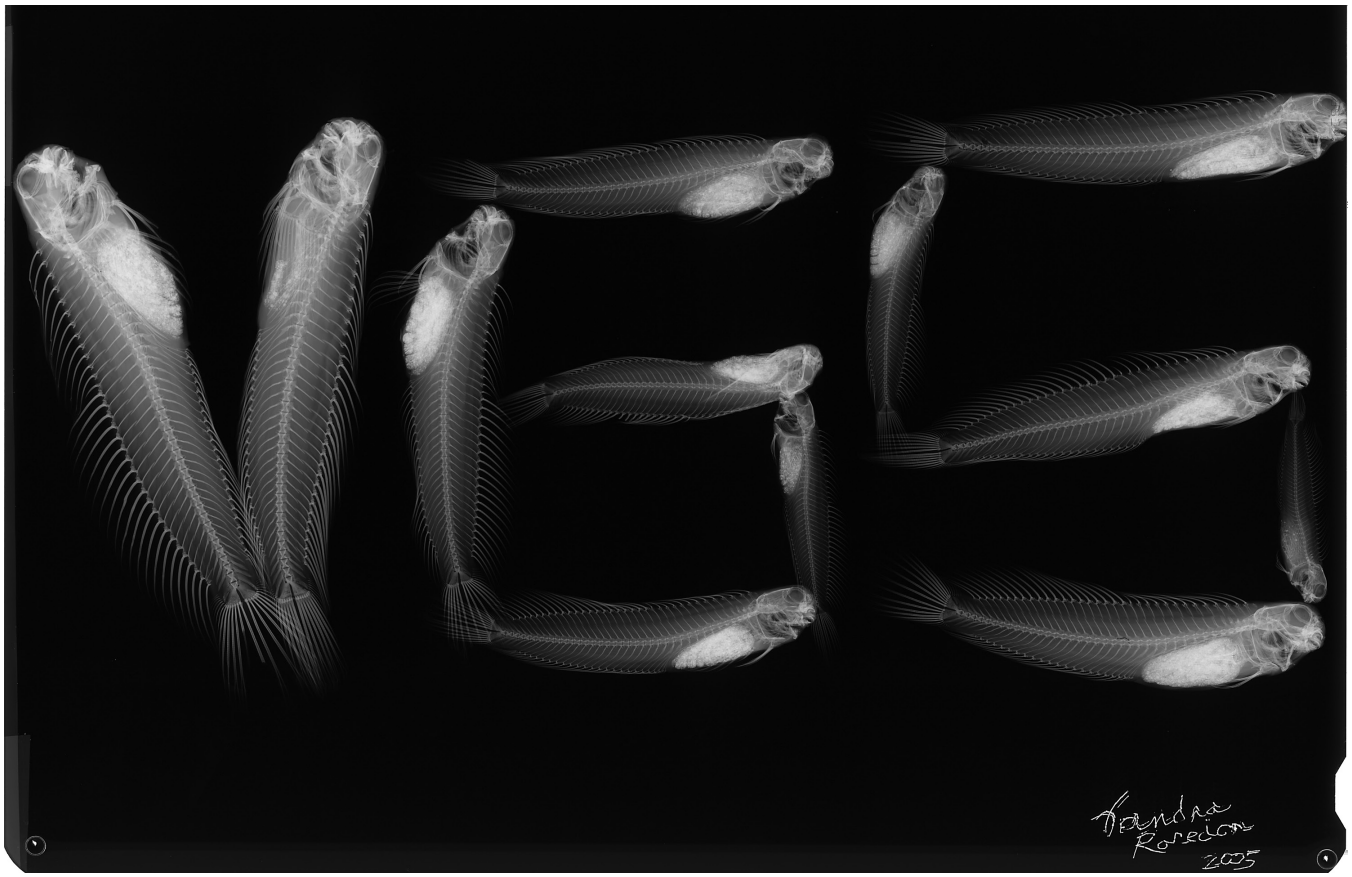
Smithsonian Institution, National Museum of Natural History

1988–Present

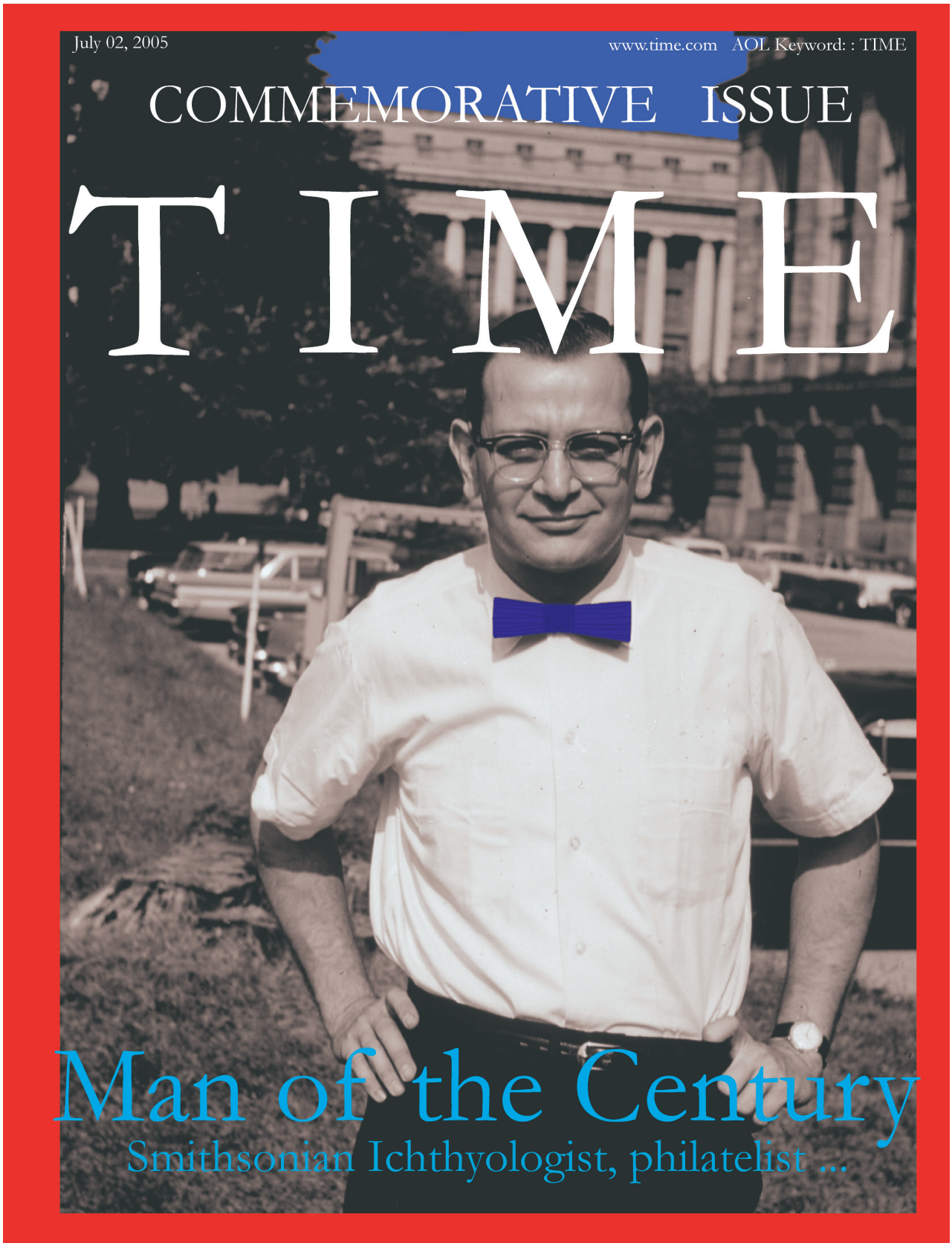
Dear Dr. Springer,

Back in 2005, I wrote in your Retirement book that even after knowing you for 17 years I would always refer to you as Dr. Springer! Now, June 2022, after another 17 years in the Fish Division, I still prefer to call you Dr. Springer. We are all so privileged to have been part of your entourage and so thankful for your enthusiasm and devotion to Ichthyology and our museum. You truly are The Man of the Century and worthy to grace the cover of Time Magazine, which I enjoyed creating for you back in 2005!!!

Most sincerely, Sandra (aka Sandy!)



Film x-ray of VGS "written" in Fishes. X-ray by Sandra Raredon, 2005.



Man of the Centry cover of Time magazine made by Sandra Raredon in 2005 for Vic's retirement.

To Vic Springer on his 94th birthday, June 2022
from Ross Robertson

Live color patterns of some of your ***Malacoctenus*** species from the Tropical Eastern Pacific

Malacoctenus mexicanus male
Baja, Mexico
(Photo: Allison & Carlos Estapé)

Malacoctenus tetranemus male
Baja, Mexico
(Photo: Allison & Carlos Estapé)

Malacoctenus ebisui spawning pair
Zihuatanejo, Southern Mexico
(Photo: Ron Woheau)

Malacoctenus ebisui spawning pair
Coiba, Panama
(Photo: Allison & Carlos Estapé)

Malacoctenus zonifer, male
Zihuatanejo, Southern Mexico
(Photo: Ron Woheau)

Malacoctenus sudensis
Coiba, Panama
(Photo: Allison & Carlos Estapé)

And Then There's That

Mary Sangrey

Smithsonian Institution, National Museum

of Natural History

Many will talk about Vic Springer, the scientist. All his contributions to science and especially ichthyology. Many others will talk about Vic Springer the mentor and advisor. All the students and young professionals he mentored and advised across the years. All the visitors he welcomed. All his professional accomplishments. But then there's that person, Vic Springer. That person with a heart of gold, or in my case gold flowers. You see, sometimes Vic came to me for help, or with a question, or whatever that may have had him befuddled in the moment. Honestly, it all started when he got perturbed by policy, and I don't think I ever went much out of my way to help, but to show his appreciation he started bringing me a plant for my desk, with yellow flowers, because the first time he asked if I liked what he brought. I said I did, and the yellow flowers were lovely and cheery – I loved them. From that time on, every year, appearing on my desk sometime in the spring would be a beautiful yellow-flowering plant. His thank you. Because in addition to being a top scientist and mentor and colleague, he's also that person with a heart of gold – and flowers.

Thanks for Your Welcome of a Junior Scientist!

Brian Sidlauskas

Oregon State University

2003-2008

Dear Vic, thank you for so frequently extending a warm scientific welcome (and even an occasional ride) to me when I was a graduate student and postdoc studying the osteology and relationships of Anostomidae with Richard Vari. It meant a great deal to me that such a respected and well-known scientist would take an interest in my efforts, or even knew who I was. I try to follow your and Rich's gracious and attentive models now that I welcome, host and train students in my own right.

Fish Celebrity

Veronica Slobodian

University of Brasília, Brazil

2012

My dearest memory of Dr. Springer was from when I was a Master' student, back in 2012. It was my first trip abroad and I spent one week visiting the Smithsonian's fish collection. I was a bit shy when I entered his office, presented myself and asked for some copies of his papers. When he saw I didn't work with the fish groups he mostly published, he asked why I wanted his papers. I said he is a fish celebrity, so that receiving one copy of his papers, from his very hands, would be incredible. Even if they were from a group I don't work with. He not only separated a copy of several of them, but signed a bunch and thought it was funny I called him a 'fish celebrity'.

Happy Birthday

David G. Smith

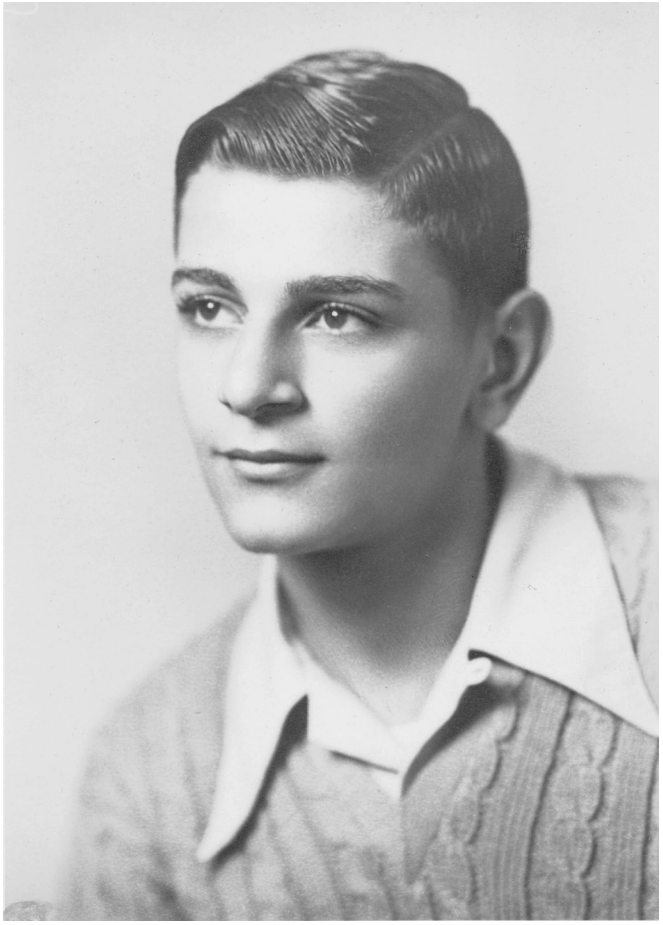
National Museum of Natural History,

Smithsonian Institution

Vic: I am pleased to add my name to those honoring you on your 94th birthday. Although I arrived at the Smithsonian too late to join you on your collecting trips, I did participate in one that you had a role in planning, the one to Mauritius that took place in 1995. The specimens that you collected on your many expeditions played an important part in my research.

Inci joins me in this tribute and sends her best wishes. We very much enjoyed interviewing you for our Historical Perspectives article (Copeia, 2005 [2]: 431–439). That was only the second interview we did for the series and our first for the Smithsonian Archives oral history project. As you recall, we did the interview at your house, and Shirley prepared a nice lunch for us. We still have fond memories of this occasion. It gave us a chance to know you better and to appreciate all your contributions to the Smithsonian and to ichthyology.

…….. Dave



Vic at age 16. The Historical Perspective article published by Smith (2005) documents Vic's early life and career. Smith (2005) is included in the Appendix below.

Smith (2005) is included in Appendix 1.

Does Victor G. Springer Really Think Graduate Students Are Expendable?

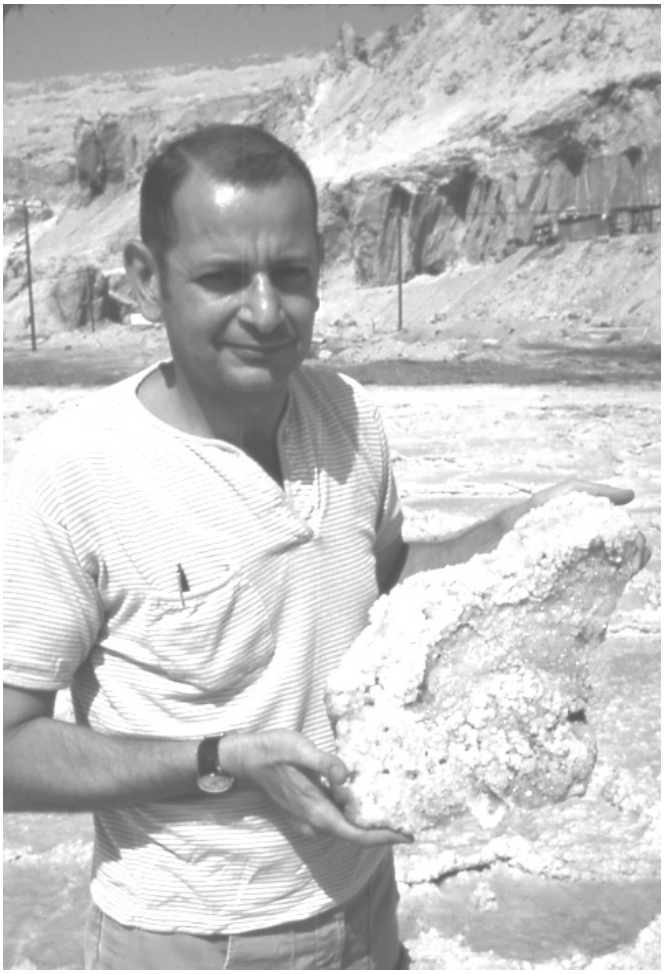
William F. Smith-Vaniz

Florida Museum of Natural History,

University of Florida

In 1970 I had the great privilege of accompanying Vic on a month-long collecting trip to the Gulf of Eilat, Israel, to study mimicry in blenniid fishes. We were primarily interesting in investigating mimicry in a triad of blenniid fishes, the sabertooth blenny, *Meiacanthus nigrolineatus* Smith-Vaniz, which was the first new species I had described, *Plagiotremus townsendi* (Regan), and *Ecsenius gravieri* (Pellegrin), and their various interactions. We were aware that all these sympatric species have remarkably similar life colors, and that *Meiacanthus* is unique in having prominent glands associated with grooved dentary canines. The function of these glands had never been investigated in the field or laboratory. Based on many field observations we determined these species were mostly free from predation and that the defenseless *Ecsenius* frequently swam out in the open away from protective cover. We suspected that glands of the *Meiacanthus* might be toxic and that the close appearance of the other two blennies gave them protection as a result of Batesian mimicry (we later determined that the scale-eating *Plagiotremus* also benefited from Müllerian mimicry). We conducted numerous aquarium experiments at the H. Steinitz Marine Biological Laboratory in Elat where we subjected naive predators (mostly serranids) to a *Meiacanthus*. The typical reaction of the predator was to ingest the *Meiacanthus*, then rapidly spit it out unharmed, followed by quivering of the head and gaping of the jaws. In subsequent aquarium encounters the same fish would not attempt to eat the blenny clearly indicative of a strong negative experience. When *Meiacanthus* with their canines removed were fed to predatory fish, they were readily consumed.

This left us wondering whether the substance injected by the *Meiacanthus* glands was venomous or only distasteful. In an attempt to make that determination Vic decided that we should let a *Meiacanthus* bite one of us. We were both reluctant to allow a *Meiacanthus* to bite us because in addition to a potentially adverse reaction, the blenny has relatively large canines. I told Vic because he was the senior investigator of our study he should be the victim. He countered somewhat forcefully that because I was a single graduate student and he was married with two children that I should be the "guinea pig." Thus, the title of this anecdote.



Vic in Eilat, Israel in 1970. Photograph provided by K. Murphy.

Our mimicry study was published in 1972 (Smithsonian Contributions to Zoology number 112). Casewell et al. (2017) in a report in Current Biology 27, titled "The Evolution of fangs, venom, and mimicry systems in blenny fishes," determined that the venom gland of *Meiacanthus* does not induce substantial pain in mammals but in fishes confers a distastefulness and probably negatively affects their coordination and/or swimming performance thus facilitating escape from predators.

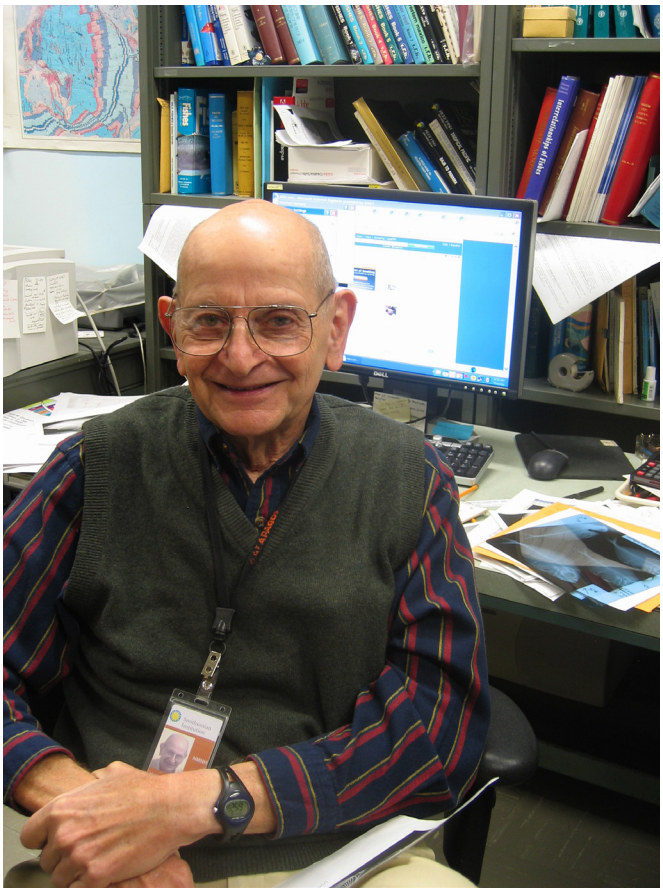
He was Probably Right…

Melanie L. J. Stiassny

American Museum of Natural History

Ca. 2000 – onwards

Vic is an inspiration - what an ichthyologist and what an anatomist! And what a decent person, I will always remember his generosity with time, advice (and rum) during visits to the Fish Division. I consider him a star in the ichthyological firmament and am proud to have been on his radar – if only for his short summation of my contributions. It was told to me that Vic once famously declared that 'everything that Melanie has ever written has turned out to be wrong'. And you know what, he was probably right about most of it, and that's fine. I've had a hell of a good time coming up with some of those ideas, and right or wrong in the end it's all progress – and I absolutely know that Vic would agree with that. Looking forward to raising a "virtual" glass to him and all that he has done for our field.



Photograph *incertae sedis* (although note copy of *Interrelationships of Fishes* editted by Stiassny et al. on Vic's bookshelf). Photograph taken by S. Raredon in 2006 shortly after Vic's retirement.

Sharks Through the Ages

Ray Troll

2013

I'll always treasure the time we spent with our lively discussions of sharks through the ages. I especially am fond of the day in December of 2013 when you and Carole toured me through the Smithsonian fish collection and showed me all the marvelous fish art that is stored there.

I asked you to hold up this lovely pair of jaws and you happily obliged me.

Thank you for all the incredible work you've done over the years expanding our knowledge and appreciation for sharks.

Wishing you all the best,

Ray

During Ray's visit in 2013, Ray recorded a short video of Vic talking about illustrator Charles Hudson (see Springer and Murphy 2010). The video can be watched here:

https://youtu.be/hXbS0M2h318

Springer, V. G. S. and K. A. Murphy. 2010. Drawn to the Sea: Charles Bradford Hudson (1865-1939), Artist, Author, Army Officer, with special notice of his work for the United States Fish Commission and Bureau of Fisheries. Marine Fisheries Review 71: 1–116.

Screenshot from video of Vic talking about Hudson's illustrations.

Vic and shark smiling for a photograph. Photograph by R. Troll.

Beautiful Blennies

James C. Tyler

Curator Emeritus

National Museum of Natural History,

Smithsonian Institution

Dear Vic – What an exceptionally fine and long career of high-quality publications, as well as field work, you have had and from which your beautiful blennies have so wonderfully benefitted – Best wishes into the future – Jim Tyler

Victor G. Springer: Mentor, Colleague, Friend

Jeffrey T. Williams

National Museum of Natural History

Smithsonian Institution

Washington, DC USA

National Museum of the Philippines

Manila, Philippines

1974-2022

Vic in scuba gear off Ono-I-Lau, Fiji, ready to make a dive to collect fish. Note the modern BC we used in 1986.

I first met Vic in the early 1970's at an ASIH meeting when I was beginning my post-graduate studies on the taxonomy of blennies. This was to be the beginning of our almost five decades long relationship. Vic was my mentor during graduate school as he helped to guide my studies of blenny taxonomy and served on my dissertation committee at the University of Florida. I had finished most of the requirements for my Ph.D. by 1982 when a Museum Technician position came open at the National Fish Collections at the Smithsonian's National Museum of Natural History. Vic strongly encouraged me to apply. I decided to apply and was selected. I started the job in early 1983. I had previously conducted fieldwork in the Gulf of Mexico, but had not collected fishes in the Indo Pacific. Vic was planning a field trip to Aldabra in the western Indian Ocean for 1984 and he asked me to participate so he could teach me his techniques of field collecting. I jumped at the opportunity!

Vic, Dave Johnson and I travelled via Africa with a 2-night layover in Nairobi, Kenya on the way to the Seychelles Islands. We decided to organize our own short, day safari during our layover in Nairobi. We found a taxi driver who was willing to drive us onto the plains and we were on the way. The driver was quite nervous when we entered the open plains and kept his window closed for fear that a lion would attack. It was a fabulous experience! Then back to Nairobi for the next flight. After arriving on Mahe Island, Seychelles we prepared for our boat trip to Aldabra. After loading our gear on the boat, we started the trip south. The seas were very rough and the boat was a cement-hulled roller. Lucky for me that I don't get seasick, but the others were not as fortunate. The seas ended up being too rough for the boat to handle the trip loaded with all of our gear and the Captain decided to head back to port. We waited several days on Mahe, but the seas remained rough. Terry Gosliner was also on the trip to collect nudibranchs, so he and I managed to make a few small collections around the island while we were waiting for the seas to calm. We finally aborted the effort to continue and left without ever making it to Aldabra. My training would have to wait until the next trip.

Vic planned a trip for 1986 to the remote island of Rotuma, Fiji, which was on the Pacific geological plate, not the continental plate like the other Fiji Islands. Vic, Dave and I would be on the trip along with the Smithsonian Dive Officer, Joe Libby. We

Vic and Jeff Williams sorting a fish collection in our outdoor processing area at Rotuma, Fiji, 1986.

Vic, Jeff Williams and Dave Johnson wrapping fish at Rotuma, Fiji, 1986.

would be testing the hypothesis that the Pacific plate margin serves as a distributional boundary for fishes that separates continental versus oceanic ichthyofaunas. Vic would use this opportunity to teach Dave and me his collecting techniques. We travelled to Suva on Viti Levu Island to meet with Vic's local contact and attend the traditional kava ceremony that is typically a requirement for getting permission to do anything in the region. We then flew to Rotuma on a small plane. After organizing the supplies and equipment and setting up a processing area by the house we were staying at, we began the sampling. The SCUBA diving was challenging as we were doing decompression diving by the Navy decompression tables in the days before dive computers, but the rotenone collections were excellent. Vic taught Dave and me his techniques and all was going well until later into the trip, Vic had a problem on a dive and damaged his eardrums. Vic couldn't dive anymore on the trip and it turns out that the damage to his eardrums would mark the end of Vic's SCUBA Diving. The trip went well though and Vic was able to keep up his jogging routine with Sesewa, the Fijian Fisheries officer assisting us. The conditions were rugged though. I had a small cut on my ankle that was fine while I was diving every day and the salt water could keep it clean, but at the end of the trip when we stopped collecting, it got infected and turned into blood poisoning with red streaks moving up my leg to my groin. Vic had antibiotics for this kind of situation. He started me on tetracycline and it quickly controlled the blood poisoning. We went back to Suva and were preparing to fly to Honolulu to spend a few days with Jack Randall and visit the Bishop Museum. The day before we were to leave, a small coral cut on Dave's wrist became infected and red streaks started climbing up his arm. I shared the antibiotics with Dave to control his blood poisoning! We flew to Honolulu and Jack Randall met us at the airport. After seeing our poor condition, he drove us directly see a friend of his who was a medical doctor. The doctor treated all three of us. We would survive!

Despite the rigors of our fieldtrip, Vic not only trained me to follow in his steps as a field collector, but he fueled my desire to organize and conduct biodiversity surveys around the world. I spent the remainder of my career travelling to some of the most remote areas of the world to conduct biodiversity surveys with Vic always there as a boss, colleague and friend to support and encourage my efforts. I am forever in his debt.

Vic and Sesewa jogging at Rotuma, Fiji, 1986.

Happy Birthday, Vic

Richard Winterbottom

Department of Natural History, Royal Ontario Museum, Toronto, Ontario

Hi Vic,

I hope you have a wonderful 94th birthday, with lots of happiness and health ahead of you (along with many more b/d's). Although we never actually published together, I was always influenced by your thoroughness and attention to detail, and I did my best to copy it. And I was (and still am) hugely impressed with your work and publications on the Andesite Line and on gill arch muscles (both being areas that I was especially interested in). I would view them as essential reading for any and every future ichthyologist. Your extensive works on blennioids has provided one of the most stable foundations for systematic ichthyology that has ever been made. So, congratulations, and, wherever possible, keep up the great work!!

Best wishes,

Rick Winterbottom.

Congrats Professor Springer!!

Leandro Yokota

Brazilian ichthyologist specializing in Chondrichthyes, visitor of the Smithsonian's Fish Collection

2010 and 2012

Dear Dr. Springer,

You are a legend and an inspiration to us! Sending from Brazil a lot of positive energy, and the wish that, despite all the legacy left by you and your immense knowledge, the fish continue to arouse your curiosity and interest!

Photograph *incertae sedis*. "Sharksonian Institute." Date unknown. Photograph provided by S. Jewett.

Fiji

George Zug

National Museum of Natural History

1982 & 1984

After my nearly 10 years of exhibits work and a long chairmanship, Vic's inquiry (early 1984) to accompany his expedition to Tonga was avidly accepted. Because of Vic's always attentiveness to details and Pacific weather, he had all the expedition's gear off the Tongatapu docks and aboard a boat on its way to Fiji, when a monster cyclone hit and flattened Tonga. An auspicious start to the Blue Dophin's successful trip to the southern Lau group of islands.

It was this trip that initiated my research on Fiji lizards. One question before I proceed – Why do all fish expeditions embark in bad weather and high seas? This is from a "sailor" that requires days at sea to obtain his sea-legs.

Two years later, we were again in Fiji and staying at the Capricorn Hotel in the seedier section of downtown Suva. I cannot remember whether Vic was running during our first visit, but we definitely were in 1984. Well not we, but Vic was, and I was along as an escort.

Queen Elizabeth Drive runs along the Suva Bay from downtown to the just beyond the University of the South Pacific. It is border on the seaside by a macadam path along a stonewalled breakwater. We would quietly depart from the hotel in the morning dark (~0500h). I would drive Vic to just beyond the Grand Pacific Hotel. He was out of car and immediately began his run. I would drive a third to half a mile to await his footsteps and passing, and repeat and repeat. We did this leapfrogging to slightly beyond the university. He never was harassed during his runs. I got my sea-side air with little effort and the assurance that our expedition leader stayed safe.

Appendix

HISTORICAL PERSPECTIVES

Copeia, 2005(2), pp. 431–439

VICTOR GRUSCHKA SPRINGER

DAVID G. SMITH

VICTOR GRUSCHKA SPRINGER was born in Jacksonville, Florida on 2 June 1928. His father was Leon Gruschka (1896–1968), an Austrian immigrant who came to the United States in 1913. His mother, Rae Dayan (1899–1992), was born in what is now Lebanon and came to the United States with her family in 1912. Leon joined the army the same year he immigrated and served with General John J. Pershing during the Mexican campaign, in France in World War I, and in the U.S. Coast Guard in Key West after WWI. On being discharged from the army in 1919, he became a citizen and changed his name to Springer, his mother's maiden name. Leon and Rae met in Jacksonville and were married in 1923.

Vic and his older sister, Cecelia, grew up in Jacksonville, where Leon worked in a variety of businesses, with differing degrees of success. The family lived through hard times during the Depression, with Leon away much of the time traveling or looking for work. "The first house I can remember," Vic recalls, "was an old wooden bungalow badly in need of repairs and whose roof leaked in several places when it rained. We put buckets around the house to collect the leakage. I suppose until about 1940 things were pretty tough, but I don't recall ever thinking about that." Vic worked at a number of part-time jobs. He delivered newspapers early in the morning; he worked in a mixed pawn shop/sporting goods/clothing store for a number of years, on weekends and holidays; he sold magazines door to door.

Jacksonville was a good place to grow up and had an important influence on Vic's life. The house was located near the St. John's River, a natural playground for a boy to explore and develop his interest in nature. Directly behind the house was an old World War I shipyard that had become an overgrown jungle housing a wide variety of animals: birds, snakes, lizards, mammals, amphibians. He enjoyed fishing in the river and on nearby beaches, and here he first became acquainted with the fishes that he would spend his life studying. The family occasionally visited Miami, where they had close friends. Vic remembers fishing there and visiting the old Miami Aquarium, where he saw many colorful tropical fishes. Later, he visited Marineland, the first of the commercial oceanariums; he watched the many varieties of fishes and recalls envying the hard-hat diver who went into the big tank to feed them.

In spite of his developing interests, the thought of becoming an ichthyologist–or a natural scientist of any kind–never occurred to him. "I didn't know that such professions existed," he says. If one was interested in biology, the natural course was to go into medicine. So, with his father's encouragement, he entered Emory University in Atlanta as a pre-med student.

Vic soon learned, however, that he was not cut out to be a doctor. In his sophomore year, he attended some autopsies at a local hospital with a friend in the medical school and made rounds with him as the friend patched up injured patients who were brought into the emergency room. "That did it," he says. The blood and gore thoroughly turned him off.

By his senior year, he was at loose ends, not

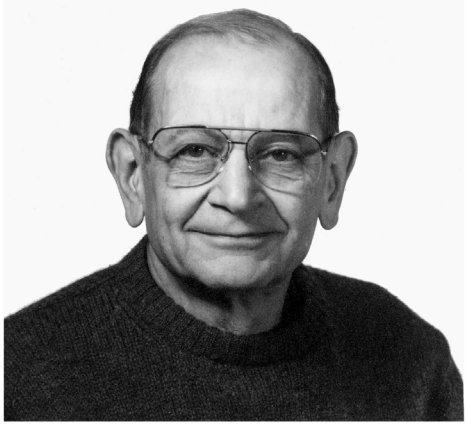


Fig. 1. Victor Gruschka Springer

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knowing what he would do. Then one day, he saw an announcement on a bulletin board about marine biology at the University of Miami. That caught his interest. He applied and was accepted, based on an excellent score on the Graduate Record Exam and recommendations from his professors.

In 1948, the University of Miami was only 22 years old and still building its programs. The Marine Laboratory had been founded six years earlier and then consisted of a small house and laboratory-workshop in the North Campus (a converted hotel) and a boat, the PHYSALIA, used only as a sea-side laboratory moored along the causeway to Miami Beach. Vic arrived cold, so to speak, not knowing any of the faculty and having no previous contact or experience with the university. Money was tight, but he was able to get a research assistantship, which paid his tuition as well as a small stipend to cover living expenses. The subject of his project was the effect of light on marine borers, including shipworms (highly modified bivalve mollusks) and wood piddocks (crustaceans of the genus *Limnoria*). It was the first real research he had ever done, and it resulted in his first scientific publication, as a third author (Isham et al., 1951). It was here in the course of these studies that he made his first dive, in Biscayne Bay from the moored vessel PHYSALIA, using a mask with an air hose attached to a pump at the surface. He became so intrigued watching the fish that he momentarily forgot his mission and about his buddy on the surface, who was working the pump and impatiently waiting for Vic to come up.

At Miami, he took his first course in ichthyology, taught by Luis R. Rivas (1916–1986). Although most of the other students did not like Rivas, Vic did. He was thoroughly entranced with ichthyology and found Rivas to be a great professor. Originally from Cuba, Rivas was "a very dynamic kind of guy," Vic recalls, well spoken and proud of his English composition. Rivas had studied for his Ph.D. and actually completed his dissertation (on Cuban Goodeidae), but was denied the degree when he refused to study German so he could pass the language requirement. He was fluent in English, Spanish, and French, and clearly demonstrated his competence in research, so he failed essentially on a technicality, though one of his own making. Rivas was always very supportive of Vic and eventually gave him a part-time job cataloguing fish in the collection.

Vic's career as a graduate student at Miami proceeded in fits and starts. One summer he took a job with the Florida Game and Freshwater Fish Commission in central Florida, monitoring the commercial catch in Lake George. Then as now, Vic was characterized by a blunt honesty. When he saw serious problems with the monitoring program, he told his boss exactly what was wrong with it. Although Vic was right, his message was not welcomed, and he was soon eased out of his job. He returned to Miami in 1950, but shortly thereafter he was drafted into the Army for a two-year tour of duty.

Fig. 2. Vic Springer as a graduate student at the University of Miami, 1953

His army career did not go well at the beginning. As Vic tells it, he was assisting a sergeant who was not doing his job. Vic refused to cover for him, and in retaliation the sergeant maneuvered to have him transferred to Korea. What was intended as a punishment, however, turned out to be one of the best favors he could have done for Vic, as the reassignment became, in effect, his first scientific expedition. In Korea, he started out as a typist in a medical battalion working in a relatively secure area. There was a small stream running through the bivouac, and there were fish in it. He collected and preserved some of them in isopropyl alcohol, which was all he had available. They looked like *Gambusia*,

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but Vic knew that *Gambusia* did not occur in cold-temperate Asia, so he sent them to the Smithsonian for identification. "I didn't know anybody up there, so I just sent them and asked them what they were." Eventually, he got a letter from Ernest A. Lachner (1915–1996) explaining that they were ricefishes (*Oryzias*).

He succeeded in getting himself transferred to a preventive medicine unit, and this move got him out from behind a desk and into the field. During his last six months in Korea, he traveled all over the southern half of the country, including some islands, with an interpreter, collecting mice, rats, fish, snakes, and frogs. Lachner sent him a six-foot minnow seine, and he started collecting more fish. Years later, one of the species he collected was described as new and named for him by the Romanian ichthyologist Petru Banarescu.

Upon leaving the Army in 1952, Vic returned to the University of Miami. It was too late to get in for the semester, but he went down to Miami anyway, and got a job as a warehouseman at Burdine's Department Store. The following semester he was readmitted to graduate school, where he came under the tutelage of Gilbert L. Voss, a marine biologist (or "biological oceanographer," as Voss preferred), who would make his reputation studying cephalopods and as a marine conservationist. Vic found Voss's course in marine biology stimulating, especially when the class read Ekman's *Zoogeography of the Sea*. He became very interested in biogeography at that time. Voss introduced Vic to shells and shell collecting and was very supportive of him throughout his time at Miami.

After considering and rejecting several possibilities for a thesis topic, he settled on a revision of a group of blennioids. While he was away, Rivas had taken his ichthyology class to Cay Sal Bank and brought back a collection of fishes. The students in the systematics course were each given a project to sort and identify the fishes of a particular family and to write a term paper on them. One of the students had sorted the blennies and asked Vic to check his work. Vic saw that what the student had lumped into one species actually consisted of several. This was the beginning of his lifelong interest in blennies.

He started out on a revision of *Paraclinus* but switched to *Stathmonotus*, which he could complete more quickly. During this period, he visited the Smithsonian in Washington for the first time (1953) and met Ernie Lachner, with whom he had corresponded from Korea, and Leonard P. Schultz (1901–1986), the curators of ichthyology at the time, and also Isaac Ginsburg (1886–1975), Bureau of Commercial Fisheries. There, he found all the specimens he needed for his studies on both *Paraclinus* and *Stathmonotus*.

Miami at that time did not have a Ph.D. program, so after receiving his master's degree, Vic decided to go to the University of Texas and get his doctorate under Clark Hubbs, who had worked on blennioids for his own Ph.D. at Stanford. Vic had tried to meet Hubbs while in the Army in Texas, but he was shipped overseas before he could arrange it. After he returned, he got in touch with Hubbs and informed him of some literature that Hubbs had missed. They wrote a joint paper (Hubbs and Springer, 1954), and Hubbs invited Vic to be his graduate student.

By the time he got to Texas, Vic had matured and settled down a lot, and his academic career proceeded smoothly. During his first summer there, he accompanied Hubbs on a collecting trip to West Texas and Mexico. They camped out and collected fishes in every wet spot they could find in West Texas: the Rio Grande, the Pecos, sewage disposal plant outlets, etc. In Mexico, they collected fishes in some warm springs from which Clark's father, Carl L. Hubbs (1894–1979), had earlier described species.

For his dissertation, Vic revised *Malacoctenus* and the Atlantic species of *Labrisomus* (Hubbs had done the Pacific species). He was one of only three Ph.D. students in fishes at the University of Texas at the time (Kirk Strawn and an Iraqi named Hilmi Saber Al Uthman were the others), but there were a number of mammalogists and herpetologists studying under Frank Blair, including Ralph Axtell and Aaron Wasserman, who later became treasurer of ASIH. Vic enjoyed his time at Texas, which he considers some of the best years of his life.

In 1957, near the end of his graduate work, Vic attended his first ASIH meeting, in New Orleans. He won the Stoye Award in ichthyology for his dissertation work. His fellow student, Axtell, won the award in herpetology, giving the Texas group a clean sweep. Vic twice received honorable mention for an NSF predoctoral fellowship and was awarded a Southern Fellowships Foundation fellowship during his last year as a graduate student.

His next task was to find a job, which turned out to be difficult. He applied to some thirty universities but got no offers. He took a summer job teaching marine biology at Corpus Christi University, and he was offered an unsolicited teaching position at a Texas junior college. The former was temporary, and the latter required a 22-hour teaching load that would allow no

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time for research. Then he learned of an opening for an ichthyologist with the Florida State Board of Conservation (FSBC, now the Department of Natural Resources) in St. Petersburg. The contact for this job turned out to be Robert Ingle, an oyster biologist turned administrator, who had been a fellow student of Vic's at Miami. Vic had apparently made a favorable impression on Ingle, who gave him the job.

When he arrived in Florida, he felt in some ways as if he had regressed. The facilities were more primitive than those at the University of Miami Marine Laboratory had been in 1948, and this was 1957. The opportunity for research was excellent, however, and Vic got right to work. His job was to make assessments of various habitats as nursery grounds for young fish, because the Board of Conservation was concerned about the developers who were filling in bays and reclaiming estuarine habitat for real estate. He set up stations in different habitats in the Tampa Bay area to sample the fishes at least monthly. That resulted in an important study of the ecology of the fishes of the Tampa Bay area (Springer and Woodburn, 1960). It also led to one of his favorite studies, the life history of the Code Goby *Gobiosoma robustum* (Springer and McErlean, 1961).

He met a number of ichthyologists while he was there: Eugenie Clark, C. Richard Robins (and his graduate students, Walter Courtney, William Eschmeyer, and Walter Starck), John E. Randall, Donn E. Rosen (1929–1986), and Daniel M. Cohen. Another was Robert Harrington (1911–1975), who worked on *Rivulus* at Vero Beach, across the state from St. Petersburg. Vic feels that Harrington was the most intellectual ichthyologist he has known in his lifetime. "He was a classicist, and he was just a wonderful source of information, and his work was as precise and fine, I think, as anybody's I know." Then there was Gordon Gunter (1909–1998), who directed the Gulf Coast Research Laboratory in Mississippi. Vic became good friends with the eccentric Gunter and has many stories about him, which, for the sake of time, space, and propriety, will not be repeated here.

Vic's nemesis was the difficult director of the FSBC marine laboratory, Robert Hutton (1921–1994), a fish parasitologist and a contemporary of Vic's when both were graduate students at the University of Miami. In the end, Vic was asked to leave his job, despite unanimous vocal support from his fellow workers. Ultimately, Hutton himself was forced out and Vic was asked to return with an increase in rank and salary, a position which he declined. In fairness, Vic points out that Hutton subsequently went to Massachusetts to work for the state fisheries agency there and seemed to turn over a new leaf. He later became the first executive secretary of the American Fisheries Society and also its president, and did a superb job. Some leopards apparently do change their spots.

Meanwhile, Vic was once again applying for jobs. Donn Rosen was leaving his job at the University of Florida's natural history museum for the American Museum in New York and had recommended Vic as his replacement. Vic applied for the position, but he felt that Hutton's opposition tipped the odds against him, and the job went to Carter R. Gilbert instead. There was a silver lining to this cloud, however; in light of subsequent events, it might even be called a golden lining. When Gilbert took the job in Gainesville, he left his job at the Smithsonian, a Navy-supported contract for work on the systematics of sharks. The grant was still open, and Leonard Schultz, who had met Vic on the latter's earlier visits and was familiar with his work, contacted him and offered him the job. Vic jumped at it and in mid-1961 found himself in Washington.

The subject of his work was to be a revision of the genus *Scoliodon*, which Vic found comprised two other genera: *Loxodon* and *Rhizoprionodon* (Springer, 1964). J. A. F. (Jack) Garrick, who had come from New Zealand to work on *Carcharhinus*, was also there. Garrick had more experience than Vic with sharks and was able to give him much good advice. He and Vic became good friends. They worked in the old mezzanine, along with curator W. Ralph Taylor (1919–2004) and Bruce B. Collette of the Bureau of Commercial Fisheries. During that period Vic traveled widely to Europe and Australia to see types, something that ichthyologists were not doing then at the National Museum. Because he was on a Navy contract, he was able to use military planes for his travel.

Halfway through the three-year contract, the Navy decided, on six weeks notice, to cancel it. Vic was once again out on the street, so to speak, and looking for work. But by this time the fates must have tired of playing with him and decided to show him mercy, though not without some last-minute teasing.

The Division of Fishes had two permanent slots opening. One had already been offered to Robert H. Gibbs, Jr. (1929–1988) but the other was up for grabs. Vic was one of several applicants, but in the end the job went to Stanley H. Weitzman. All was not lost, however. As it happened, the Department of Invertebrate Zoology (I. Z.) had an opening that it had been unable to fill. In a deal resembling two football teams

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trading draft choices, Schultz got I. Z. to give its position to Fishes. In return, I. Z. would get the next two positions that came up. As Fishes would now have a full stable of five curators (six, counting Schultz, who would soon retire), it would lose nothing by giving up those next two openings. The deal was made, and Vic was hired as an Assistant Curator.

After finishing up the shark work, Vic turned his attention once again to the blennies. His first project was an osteology of the Blennioidei. He wanted to learn about the osteology of the blennioids in support of future work and classification, and he wanted to learn osteology in general better than he did at the time.

Along with that project, he also undertook a revision of the blenniid genus *Entomacrodus* (Springer, 1967). These studies brought home to Vic the critical importance of illustrations, and his papers have been characterized by the quality of the art work. He recognized long ago that for any taxonomic work, illustrations are probably as important as, or more important than, the written descriptive material. Like many of us, Vic suffers an acute lack of artistic talent, so he began working with professional illustrators. He has gained a reputation among them–most would say well deserved–as a stern taskmaster. "I got some darn good artists," he says, "and they all considered me very overly demanding of accuracy, and some complained bitterly; some would try out for the job and leave after a while." Although his strict standards might have driven some of them to early burnout, he got excellent results. He is particularly proud of the illustrations done for the *Entomacrodus* paper, which have been reproduced many times in many different venues.

The *Entomacrodus* paper brought him back to another subject that had caught his attention earlier in his career: biogeography. While doing that study, he began to see a problem in the distribution of the *Entomacrodus* species in the Indo-Pacific. He found that if he drew a line around the islands on the periphery of the Pacific, some of those species were only found along that line. That intrigued him, but he didn't know what to make of it. As he expanded his revisionary work to other blennioid groups, he continued to notice interesting distributional patterns, particularly that many taxa were restricted to continental coasts, not entering the Pacific basin east of the andesite line. In a paper by Bruce Collette, he learned of a species that was found only in Oceania, which was the complementary distribution. He decided that he should start plotting the distribution of everything he could find, to see how the distributions fell out.

This period coincided with the plate tectonics revolution in geology, and Vic began to see a connection between the distribution of his fishes and the configuration of plates. It became apparent that he had to look at the tectonic history of the area, and he became well grounded in Indo-Pacific plate tectonics. He had to read a lot of the original literature on plate tectonics, because there was no readily available summary of what had gone on in the Pacific. He began to discuss his work with geologists but found it difficult to get through to them. "They couldn't understand what I was up to or why I was doing it," he says of his first efforts. He persisted, however, and eventually published his paper on Pacific Plate biogeography (Springer, 1982).

One of his more interesting projects involved the genus *Alabes*, an eel-like fish of uncertain affinities. It had long been allied with the Synbranchiformes, although Gosline (1968) had suggested a relationship among the blennioids. Looking at a cleared and stained specimen one day, Vic noticed a process on the cleithrum that somehow seemed familiar, although at first he couldn't quite place it. Then he remembered that he had seen it in the clingfishes, Gobiesocidae. After close examination, he finally noticed that one species of *Alabes* had a vestigial sucking disc. It was delicate, and the papillae would rub off if touched, but it was definitely there. Vic had never worked on clingfishes before, so he joined with Thomas H. Fraser to write a paper synonymizing the Alabetidae with the Gobiesocidae (Springer and Fraser, 1976).

Vic's laboratory work has been complemented by his extensive field work. One of the great strengths of the Smithsonian fish collection is its holdings of Indo-Pacific coral-reef fishes, collections that began as far back as the Wilkes Expedition (1838–1842), and continued through David Starr Jordan's work in Hawaii and Samoa in the early 1900's, and Schultz's collections in the Phoenix, Samoa, Marshall, and Mariana Islands in 1939 and 1946–1947. Vic has gone on to exceed any of his predecessors in the quantity and quality of fishes collected from this vast area.

Vic had started scientific collecting in Miami and the Bahamas with Rivas. When he worked at the Florida Board of Conservation in St. Petersburg, he spent about half his time collecting all over southern Florida from Clearwater to Key West. He points out that he established and built the collection there, which still exists. When he came to Washington and started working on Indo-Pacific blenniids, he naturally want-

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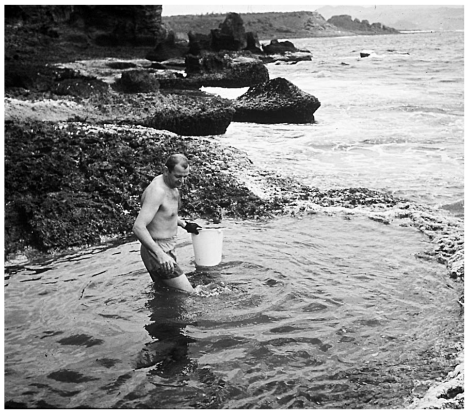

Fig. 3. Collecting fishes in Taiwan, 1968

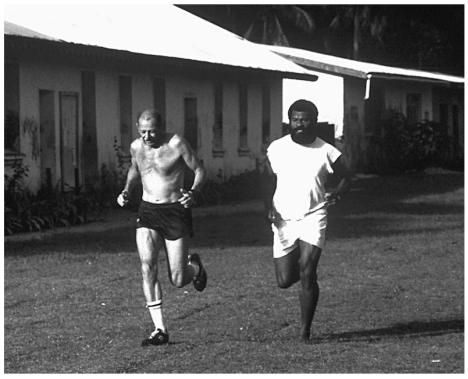

Fig. 4. Staying in shape between dives at Rotuma, 1986

ed to go out and collect them. His first collecting trip under Smithsonian auspices was to the island of Dominica in the West Indies in 1964, but thereafter he devoted all of his efforts to the Indo West Pacific until he ceased field work in 1986. Up to that time, possibly no one besides John E. Randall had collected fishes more extensively on Indo Pacific coral reefs than Vic. The sheer volume of his collections is probably unmatched. At one point, he calculated that nearly 15% of the lots in the Smithsonian fish collection resulted from his field trips. His efforts have resulted in many papers by Vic and others, and future workers will continue to draw on his collections for their research.

His first Indo-Pacific collecting trip was to Australia in 1966, with Frank Talbot, then director of the Australian Museum (later California Academy of Sciences and National Museum of Natural History), the two of them sharing expenses. The site was the small and isolated One Tree Island on the Great Barrier Reef. Despite the primitive conditions, they had a wonderful time and made collections down to 105 feet.

The next trip was to Taiwan in 1968, with J. Howard Choat, then a graduate student, with whom Vic had worked on One Tree Island. The following year he made one of his longest expeditions, to the Red Sea for three months. He collected at both the northern and southern ends, in the Gulf of Aqaba and off Eritrea. In addition to the systematic work, he also discovered an interesting case of mimicry involving three genera and species of blennies: *Ecsenius, Meiacanthus,* and *Plagiotremus.* The *Meiacanthus* has venomous fangs, the bite of which causes it to be rejected by predators, and the *Plagiotremus* is unpalatable. The *Ecsenius* lacks venom and is palatable, but avoids predators by mimicking its relatives (Springer and Smith-Vaniz, 1972).

Next came back-to-back trips to Indonesia in 1973 and 1974, with Martin F. Gomon; and to St. Brandon's Shoals and Agalega Islands in the Indian Ocean in 1976, with Thomas H. Fraser and C. Lavett Smith. There was an expedition almost every year during that period. In May–June 1978 it was to the Philippines and in October–November to the Hermit and Ninigo Islands near New Guinea, in 1980 to Pohnpei in the Caroline Islands, and in 1982 to Fiji. The 1982 destination was intended to be Tonga, but at the last minute his collecting permit was revoked, and Vic redirected to Fiji. There was also a trip to Aldabra in 1984 that was aborted in the Seychelles.

Vic's last expedition was in 1986 to the island of Rotuma, politically a part of Fiji but of uncertain geological relationships. One question he wanted to answer was whether Rotuma is part of the Samoan hotspot chain, which is on the Pacific Plate, or whether it is part of the Fiji Plate, which is a different geological formation. Rotuma had not been drilled, so geologists had no data on its history. Vic found that the blenniids of Rotuma showed a relationship to those of Samoa rather than Fiji and concluded that Rotuma is part of the Samoan hotspot chain.

After Rotuma, Vic refrained from active participation in field work. He almost lost his hearing in one ear as a result of diving with an infection, and on the recommendation of an M.D. specializing in barotrauma of the ear, he decided to defer to his health. His diving career, which began in Florida in 1958, spanned 28 years and covered the far corners of the Indo-Pacific. The end of his personal participation

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did not mean the end of his involvement in fieldwork, however. Jeffrey T. Williams became the principal field collector, with Vic contributing to the planning and funding. They obtained grants that enabled Jeff and others to make a number of trips to places to which Vic had been unable to go himself, including Tonga, Loyalty Islands, Vanuatu, Wallis Island, Rapa Island, Mauritius, and several spots in the Philippines. Jeff's photography has added a new dimension to the collections, and so the work has gone on. Vic suggests that Jeff's collections now probably exceed his.

Vic has always had an ability to generate support from wealthy patrons. His greatest success in this regard has probably been his relationship with Herbert R. Axelrod. Axelrod had worked closely with Leonard Schultz, and they had published a book together on aquarium fishes. Shortly after Vic arrived at the Smithsonian, Axelrod approached Schultz about setting up a fund to support ichthyology in the Division of Fishes, which would derive its income from the sale of Axelrod's donation of reprinted out-of-print important ichthyological works. Vic was the only one in the Division besides Schultz who was willing to work with Axelrod. Everyone advised him to have nothing to do with Axelrod, but Vic determined to make his own judgment. As it turned out, everything went smoothly, and Vic maintained excellent relationships with Axelrod from the beginning. The fund has been extremely beneficial for the Division and ichthyology in general.

The first work to be reprinted was Jordan and Evermann's "Fishes of North and Middle America." A whole generation of ichthyologists was thus enabled to buy an affordable and durable copy of this classic reference. Among the many works subsequently reprinted were the fish papers from the Philippine Journal of Science and the nine folio volumes of Bleeker's Atlas. The latter included a new volume, co-edited by Vic and Warren E. Burgess, of previously unpublished plates that Bleeker had left when he died.

Vic had early broached the idea of endowing a chair of ichthyology at the Museum, but it was not until 1997 that Axelrod and his wife, Evelyn, volunteered to do so. As it turned out, the money offered by Axelrod was insufficient for a fully supported chair. Vic suggested instead a research chair that would rotate among the division's curators every three years and would cover research expenditures. This was approved, and Vic was the first recipient. Vic's contacts with Axelrod also led to the latter's donation of a rare quartet of Stradivarius stringed instruments and endowments for music to the Smithsonian.

Vic first joined ASIH in 1951, when he was in the Army. Shortly after coming to the Smithsonian, he agreed to serve as the Society's Treasurer, a position he held for three years before giving it up because of time constraints (he was simultaneously serving as editor of the Proceedings of the Biological Society of Washington). He continued to serve the Society in many other capacities, however, among them the Nominating Committee, Local Committee, Stoye Award Committee, Rotenone Committee (ad hoc), Gibbs Award Committee, Board of Governors, Copeia Editorial Board, committee to review student award policies, nominations committee for honorary foreign members, committee to review editorial policy of Copeia, Raney Award Committee, Resolutions Committee, and the ASIH-NSF Australian travel grant committee. Additionally, he prepared two editions of the Society's pamphlet, Career Opportunities for the Ichthyologist.

One of his most important contributions to ASIH was in helping to establish the Gibbs Award, in memory of his close friend and colleague, Robert H. Gibbs, Jr. Gibbs's widow, Frigga, wanted to make a contribution of some kind as a memorial to her husband. She suggested funding a research project on deep-sea fishes, but Vic had another idea. He had long thought that there should be an award to recognize and bring attention to systematic ichthyology. Vic wrote up the terms of the award. Frigga liked it and doubled the amount she initially had planned for the research project. The award is made annually to a Western Hemisphere ichthyologist in recognition of an outstanding body of published work in systematic ichthyology. Vic was asked to chair the award committee for the first three years, and the first awardee (1989) was Bruce Collette. Vic himself received the award in 1993.

Vic has mentored relatively few graduate students, several for M.S. degrees, but only two for Ph.Ds. He was unofficial co-chair of the dissertation committees of William F. Smith-Vaniz and Jeffrey T. Williams. He says that he does not encourage students to go into ichthyology, but if they are determined to do so, he does all he can to support them. His main reason is that he has seen so many Ph.Ds. in ichthyology fail to get jobs or else get positions that are unworthy of their training and abilities. On the other hand, he has sponsored two post-doctoral fellows, G. David Johnson and Anthony C. Gill, and chaired the search committees that employed Richard P. Vari and Johnson.

Around 1990 he became interested in philately and began collecting stamps with images of

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fish or fishing. Vic seldom undertakes any activity in a halfway or haphazard fashion, and stamp collecting was no exception. He began publishing articles in a philatelic journal. Along with Maynard S. Raasch, a retired chemist and fish enthusiast, he published a booklet (Springer and Raasch, 1995) that contained an annotated list of all such stamps that were issued from 1865 through 1992, with all of the species correctly identified. The booklet won a silver-bronze medal from the Chicago Philatelic Society. They continued adding to the list through 1998, although they never published the addenda. By the time they finished, the list contained about 10,000 entries.

After more than 43 years at the Smithsonian, and at an age when many would be slowing down and taking it easy, Vic usually maintains a six-day work week, one of those days at home.

His most recent project began when he received the rotating three-year grant from the Axelrod endowment. It began as a study of the relationships of *Pholidichthys* but grew into a survey of the dorsal branchial musculature of fishes. He wanted to trace the muscles back phylogenetically as far as he could, to learn how they evolved. The study is now complete (Springer and Johnson, 2004).

Vic met his wife, Shirley, on a date arranged by his sister. They hit it off immediately, and after a quick courtship, they were married in 1965. "Shirley's probably regretted it ever since," he says, laughing. He admits it has not been easy on her. He works late and in the past he traveled a lot, and he brings a lot of his work home with him. Although Shirley's interests are not in ichthyology, she has supported him wholeheartedly. She even helped make the dip nets he used when collecting. Shirley was an elementary school teacher, but since their marriage, she has taught Sunday school for many years in the local Jewish Temples. She also teaches ritual Hebrew to bar mitzvah and bat mitzvah students. That, plus raising a family, has kept Shirley fully occupied over the years when Vic was occupied with his own work.

The Springers have two daughters, Jessica (b. 1966) and Eden (b. 1968). Neither has followed her father into ichthyology. "I guess I didn't bring them along like Carl Hubbs brought his family along," Vic laughs. Eden, with an M.A. in sociolinguistics, worked in that field for a while, but now is working on another masters in speech pathology. Jessica's interests lie in art. Vic and Shirley have two grandsons, seven and nine, living in Spotsylvania, Virginia. "They live off the Chancellorsville Battlefield in a thickly wooded area, and they're always collecting bugs, snakes, spiders, and stuff," he says. Perhaps the Naturalist Gene will reassert itself in the next generation.

One reason Vic stays in such good physical condition is because he exercises regularly. He started out bicycling, but in 1977 he and Shirley moved into their current house, which is on top of a hill. Cycling up the hill proved too difficult, so he gave up cycling and turned to running, which he found gave him as much exercise in half the time. Eventually, he worked his way up to marathons, the first of which he ran when he was 66. He ran marathons in each of the next two years and planned to do it for a fourth time when he was 70. He trained hard, doing a 20-mile run every two weeks during the month before the marathon. Two weeks before the race, however, he damaged his foot and was unable to enter. Because of the foot, he doesn't run any more, but he does try to walk briskly three to five times a week.

When asked how ichthyology has changed from his early days to the present, Vic says that the major factors have been the rise of phylogenetic and molecular analyses. He points out that two of the major players in the phylogenetic revolution were ichthyologists, Donn Rosen and Gareth Nelson. On the other hand, he worries about the lack of opportunity for young ichthyologists today. And he worries about the pressure to do applied rather than basic research. But then Vic has always been a worrier. In spite of his worries, life has been good to him, and few of his worst fears have been realized.

Postscript.—Vic Springer was interviewed in July, 2003 at his home in Alexandria, Virginia by David Smith and Inci Bowman as part of the Smithsonian Institution's oral history project. The present paper was condensed from that interview. In October 2004, Vic updated and amended his remarks.

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