

Published for the Congress of the United States and to the Governors and Legislatures of Washington, Oregon, California, Alaska and Idaho

# 54th Annual Report of the Pacific States Marine Fisheries Commission

To the Congress of the United States and the Governors and Legislatures of the Five Compacting States, Washington, Oregon, California, Idaho, and Alaska, by the Commissioners of the Pacific States Marine Fisheries Commission in Compliance with the State Enabling Acts Creating the Commission and Public Laws 232; 766; and 315 of the 80th; 87th; and 91st Congresses of the United States Assenting Thereto.

Respectfully submitted, PACIFIC STATES MARINE FISHERIES COMMISSION

RANDY FISHER, Executive Director

Headquarters 205 SE Spokane Street, Suite 100 Portland, Oregon 97202-6413

> Kathy Shimojima EDITOR

**Cover Photo:** Lighthouse at Coquille River entrance **Location:** Coquille River, Oregon. **Photographer:** Commander Bruce Hillard, NOAA Corps

# **Pacific States Marine Fisheries Commission Members**

	Commissioners A	Coordinators		
Alaska	David Benton Dale Kelley Georgianna Lincoln David Benton Don Lane Matthew Moir Gabe Sam Stephanie Madsen Lloyd "Bud" Perrine		Herman Savikko Alaska Dept. of Fish and Game	
	Dede Alpert Robe Martin Basch Hans Robert Hight Roge	L.B. Boydstun California Dept. of Fish and Game		
California	Roy Moulton Marcus Gibbs Alex Irby Rod Sando		Sharon Kiefer Idaho Dept. of Fish and Game	
	Capt. Lindsay A. Ball Paul Heikkila Ken Messerle	Joe Easley Ginny Goblirsch Frank Warrens Rod Moore	Kay Brown Oregon Dept. of Fish and Wildlife	
Idaho		Liz Hamilton Bob Jacobson Steve Fick		
Oregon	Dr. Jeff Koenings Harriet Spanel Jim Buck	Mark Cedergreen Bill Robinson RonSchulz Terry Wright Robert Zuanich	Phil Anderson Washington Dept. of Fish and Wildlife	
Washington				



54<sup>th</sup> Pacific States Marine Fisheries Commission ANNUAL MEETING September 17-1S, 2001

Due to the events experienced by the United States on September 11, 2001, and the days that followed, the Pacific States Marine Fisheries Commission cancelled the annual meeting of its commissioners, advisors and coordinators. Issues that were scheduled to be discussed were postponed until the Executive Sub-Committee meeting, to be held the following spring.

California is the host of the 55<sup>th</sup> Annual Meeting which will be held at the

Fess Parker DoubleTree Hotel Santa Barbara, California September 22-25, 2002

### 2001 PACIFIC STATES MARINE FISHERIES COMMISSION AWARD

### FOR CONTRIBUTION TO PACIFIC COAST FISHERIES



"Throughout our history, the health of our coastal fisheries has been critical to the health of the coastal economy. . . . it is especially important that we focus on reviving those fisheries."

# Oregon State Senator Joan Dukes

The Commission's 2001 award for outstanding contribution in support of Pacific coastal marine fisheries resources was presented to Oregon State Senator Joan Dukes.

Senator Joan Dukes has been a leader in the Pacific States Legislative Task Force where she has served as one of the Legislature's representatives and as a former chair.

Senator Dukes' efforts to revive marine fisheries also include active support in the Oregon Legislature for the state's salmon hatchery program. Sen. Dukes has also served with fishermen, the agricultural and forest industries, tribal and environmental representatives, and other interests on a task force to reorient Oregon's coastal hatcheries toward changes in the fishery. During the 2001 legislative session, she was a strong proponent of the Conservation Hatchery Improvement Program (CHIP).

"The Pacific States Marine Fisheries Commission is a valuable resource in the development and promotion of programs like CHIP. I'm grateful for its support of the fisheries and the industry" Sen. Dukes said.

It gives the Pacific States Marine Fisheries Commission great pleasure to recognize the contributions of Senator Dukes through this award for 2001.



The Pacific Fisheries Information Network (PacFIN) provides timely and accurate data essential for effective fisheries management. The nation's first regional fisheries data network, PacFIN, provides information enabling agencies and industries to track commercial fish catches by area, and to manage and plan more effectively. The need for this data has become more critical as the intensity of U.S. fisheries has increased.

- In 2001, the Pacific Fisheries Information Network (PacFIN) office focused on:
  - Making new code list reports available on the PacFIN website. These reports allow the fisheries community and the general public to view the composition of each PacFIN code.
  - Resuming data feeds from the Canadian Department of Fisheries and Oceans (DFO),
  - Devloping new ADFG aggregated catch data feeds.
  - Developing a method for translating vessel, processor, and NWR/LE permit identifiers to fictitious identifiers.
  - Modifying the Pacific Coast Fisheries Data Committee (PCFDC) policy on access to confidential economic data from the commercial W-O-C fisheries.
  - Developing a report for numbers of vessels catching fish within each management group and in each quarter. This was done in response to frequent data requests by the U.S. Coast Guard for their periodic planning exercises.
  - Developing ad hoc retrievals to assist in a near shore groundfish study by the Oregon Department of Fish and Wildlife (ODFW)
- The PacFIN Office processed 164 data feeds from seven data sources and responded to 146 requests-for-information. The PacFIN website had 107,263 visits, an average of 8,939 visits per month



The **West Coast Groundfish Observer Program** (WCGOP) was implemented in July 2001 in response to the desire to increase data collection on discard rates in West Coast fisheries. The program provides coast-wide estimates of discards throughout the year. These estimates are important to stock assessments and the management of groundfish stocks. Observers collect scientific, management, and other data through on-board interviews of vessel captains and crew, observations of fishing operations, measurements of selected portions of the catch and fishing gear, and collection of samples.

The general goals of the WCGOP are to:

- Improve management of groundfish by improving estimate of total catch, primarily through ongoing collection of information on discarded catch which will complement current shore side information on landed catch.
- Improve estimate of total catch on prohibited species in the groundfish fishery.
- Improve management by collecting better biological and economic information from the groundfish fishery.
- Provide a timely and efficient system for collection, storage, analysis and communication of information.

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Observers work and live year-round in 13 different port groups from Bellingham, WA to Morro Bay, CA. A training class of 20 observers was held in early July 2001. In 2001, the program focused mainly on achieving approximately 10% coverage of the limited entry trawl fleet. Additional effort was spent on limited entry fixed gear vessels as a pilot project. The table below shows the sea time observers were onboard each type of gear by state from August 2001-December 2001.

	State	Total Sea Davs	Trawl	Longline	Pot
California	165	165	0	0	
Oregon	240	170	29	41	
Washington	90	53	26	11	
Totals	495	388	55	52	



The Alaska Fisheries Information Network (AKFIN) provides a framework that consolidates and supports the collection, processing, analysis, and reporting of a variety of information important for management of North Pacific fisheries. An annual grant award from National Marine Fisheries Service (NMFS) to PSMFC funds the program. These funds support an AKFIN Support Center (AKFIN-SC) and subcontracts to Alaska Department of Fish and Game (ADF&G) for related tasks.

The AKFIN-SC is a cooperative data program that maintains a fisheries information system composed of state and federal data for Alaska fisheries aggregated from:

- State of Alaska
  - ♦ ADF&G
  - Commercial Fisheries Entry Commission,
  - National Marine Fisheries Service (NMFS)
    - ♦ Alaska Region
    - Alaska Fisheries Science Center
- North Pacific Fishery Management Council (NPFMC)
- PSMFC

### In 2001, AKFIN-SC:

- provided non-confidential and confidential data sets to authorized users of AKFIN agency data.
  - Compiled data sets for:
    - NPFMC staff and contractors for analysis of vessel characteristics;
    - American Fisheries Act (AFA) Pollock processor harvests and products;
      - AFA catcher vessel ownership
      - area specific summaries of rockfish, lingcod and crab harvests.
- Information on commercial fishery operators was accessed by analysts with the(NMFS) and PSMFC.
- Provided a time series of sablefish and halibut harvest and processor information to an ADFG contractor.
- Developed tables to document area, gear, and year-specific groundfish TACs, ABC, state regulatory season, sablefish and halibut seasons and quotas, and AFA cooperative structures and harvests.



The **PSMFC-Regional Mark Processing Center** (RMPC) continues to provide regional services to all State, Federal, Tribal, and non-governmental agencies involved in marking anadromous salmonid fishes on the entire Pacific Coast, including Canada. These services include coast-wide coordination of tagging and fin marking programs, and maintenance of a regional database for releases and recoveries of coded wire tag (CWT) marked salmonids. In addition, the Mark Center serves as the single United States database to exchange CWT information with Canada for Pacific Salmon Treaty purposes.

In 2001 the RMPC:

- Made upgrades to PSC data exchange format.
  - The new version reflects the sampling shift from the traditional CWT focus (hatchery fish) to the more complex trend of mass marking and selective fisheries
- Converted historical data from PSC format.
  - Required extensive reprogramming in all aspects of data manage ment, including data loading, data validation, data warehousing, data exchange, and data retrieval
- Upgraded the RMIS application
- Updated the CWT data file definitions, specification, and validation docu ment
  - Includes the new fields and other changes introduced with Ver sion 4.0.
- Released a new Access-based 'Hatchery Release' application for fishery managers.
  - The application is designed to simplify reporting and processing hatchery release information.
- Completed and ratified a new charter, "Regional Coordination and Agreements on Marking and Tagging Pacific Salmonids" at the Annual Mark Meeting.

The 2001 Annual Mark Meeting also focused on the key issues of coastwide mass marking and selective fisheries activities. Updates were provided on Washington and Oregon's efforts to mass mark their respective production of hatchery coho and chinook. This included mass marking by the USFWS and by many of the Tribes in Washington.

The CWT data can be accessed through PSMFC's Regional Mark Information System (RMIS) via the internet (www.rmis.org or www.psmfc.org).



The Fisheries Economics Data Program is a cooperative data collection effort to address the needs of fisheries managers and industry for economic data and information on the West Coast and in Alaska. This project is being conducted by the Pacific States Marine Fisheries Commission as part of a cooperative agreement with the National Marine Fisheries Service and with the help of the Pacific and North Pacific Fishery Management Councils. The goal is to provide reliable and timely data to assist with the monitoring and measuring of the economic performance of the harvesting and processing components of West Coast and Alaska fisheries.

In 2001, the EFIN staff:

Completed the "Collecting Input Prices" step of the Input Price Data Investigation and Feasibility Study". This project task required staff to contact shipping and packaging companies who were willing to provide price information on shipping materials and the prices for shipping one container of fish from several origins to various destinations.

- Prepared and collected data for the West Coast Charter Boat Survey and the Alaska Halibut Charter Boat Survey
- Continued to conduct the monthly spot fuel price collection.
  - EFIN staff calls approximately 50 ports from Alaska to California and collects prices on what a fishing vessel would pay for 600 gallons of diesel fuel.
  - Fuel cost is an important input price for economic models since it is a large cost for fishermen.
  - Once each year the previous 3 years of fuel data are used to create a report that is sent to fuel suppliers and known economists that analyze cost/earnings
  - This report is available on the EFIN web page
- Collected data from and tracks several indexes that aid in the analysis of fisheries economics
  - Data are collected from these various sources on either a monthly or quarterly basis and posted on the EFIN web page
- Continued to maintain and add to an extensive list of social and economic bibliographies and links to external sources that are useful to fisheries economists.



The California **Anadromous Fish Database** is a cooperative effort with the National Marine Fisheries Service and California Department of Fish and Game. The database contains anadromous fish abundance count records.

Work was initiated to create a statewide 1:100,000 routed set of hydrography to serve as the geographic location tool for all stream/watershed based data which will be made available through the cooperative **CalFish** (www.calfish.org) Internet effort.

The California Habitat Restoration Project Database (CHRPD) contains data from

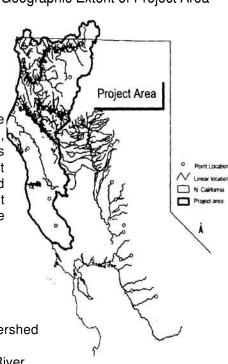
projects funded through the California Department of Fish and Game (CDFG) Fisheries Restoration Grants Program. The data consist of projects completed between 1981 and the present. At present, all CDFG funded projects that have been completed since 1981 have been entered into the database and verified.

In order to expand the database to include projects other than those funded by CDFG, contact was initiated with other agencies collecting and maintaining restoration project data. Data exchange agreements were reached with the Information Center for the Environment at UC Davis and the National Fish and Wildlife Foundation.

The State of California initiated the **North Coast Watershed Assessment Program** in 2001. PSMFC assisted the California Department of Fish and Game by providing field and technical staff and assistance to conduct stream habitat surveys and prepare watershed assessment plans. Initial program focal areas included the Mattole River Watershed, Gualala River

Watershed, and Redwood Creek Watershed.

Geographic Extent of Project Area







**StreamNet** is a cooperative data compilation, development, and distribution project among the state, tribal and federal fish and wildlife agencies in the Columbia River basin. It is funded by the Bonneville Power Administration (BPA) through the Fish and Wildlife Program (FWP) of the Northwest Power and Conservation Council (NPCC), and is administered by the Pacific States Marine Fisheries Commission (PSMFC).

StreamNet obtains specific fish related data from the basin's fish and wildlife management agencies, standardizes the data into a common format so that similar data are consistent and can be combined and compared across the Columbia River basin, and makes them available via the Internet or as custom data products. All data are referenced to hardcopy documents or electronic databases, with the references available in the StreamNet Library. The project provides data related services and assistance to the Fish and Wildlife Program, and publicly posts data from independent projects not part of StreamNet.

In 2001 StreamNet:

- Began to transform their Protected Areas database and the SDM data from the 1:250,000 LLID scale to the 1:100,000 scale.
- Developed summaries of all data and maps by subbasin to support the Subbasin Summaries.
- Finalized the compilation of data in response to a specific request from the NWPPC on the release of hatchery salmon that had been mass marked with an adipose fin clip in 2000.

# **Program Summaries**

# PTPIQIS

# **PIT Tag Information Systems**

Columbia Basin | ptagis.org

The Columbia River PIT Tag Information System (PTAGIS) is a data collection, distribution and coordination project. The project saw over 1,114,000 juvenile salmonids marked with passive integrated transponder (PIT) tags, for the 2001 out-migration through the Columbia and Snake river systems, compared to over 1,288,000 in 2000. In 2001, these fish generated over 6,827,000 interrogation records.

2001 marked the first year of operations of PIT tag detection systems that were installed at the Bonneville Dam Washington shore fish ladder. This system detects fish as they pass through the underwater orifices located in the ladder weir walls of the ladder. Fish passing over the top of the weir walls are not detected, since the read range of the current technology is inadequate. Fisheries agencies agreed to implement the technology that provided the best opportunity for detection in spite of this deficiency.

The PTAGIS project installed the adult PIT tag systems at Bonneville and McNary Dams in time for 2002 adult returns.

The PTAGIS project installed an in-stream pass-through PIT tag detector for the US Fish and Wildlife Service at the Abernathy Creek Fish Technology Center near Longview, Washington. The system can detect fish at two points across the width of Abernathy creek using 23mm PIT tags. This system is the first of its type in the Columbia Basin.

PTAGIS continues to support a number of agencies utilizing the "Separation by Code" (SbyC) system capability. This system has the capability to divert PIT tagged fish in various directions based upon distinct tag code. Support for this technology has become a key requirement for a number of large studies in the Columbia Basin.



# Aquatic Nuisance Species Prevention Program

Beginning in 1999, recognizing the potentially huge economic impact to its operations from zebra mussels (and secondarily mitten crabs), the Bonneville Power Administration (BPA), as well as the U.S. Fish and Wildlife Service (USFWS) contracted with and provide program support to, the Pacific States Marine Fisheries Commission (PSMFC), to conduct an aquatic nuisance species prevention program for the Columbia River Basin. Aquatic nuisance species (ANS) are nonindigenous species that threaten the diversity or abundance of native species or the ecological stability of infested waters, or commercial, agricultural, aquacultural or recreational activities dependent on such waters. ANS include species that may occur in inland, estuarine and marine waters and that presently or potentially threaten ecological processes and natural resources.

In 2001, the ANS prevention program:

- Conducted education and outreach work for Zebra Mussels
  - Traveler Information Stations (TIS): Using Sport Fish Restoration funding, a TIS system was set up on Highway 2 near Troy Montana in cooperation with the US Forest Service and the State of Montana (Department of Fish, Wildlife, and Parks). This low power radio station has a 2.5 mile broadcast radius and carries zebra mussel information to recreational boaters who travel along the highway.
- Conducted boater surveys for the presence and/or knowledge of zebra mussels.
  - In cooperation with state agencies in Washington, Oregon, Idaho, and Montana, PSMFC personnel surveyed and inspected boater/anglers and their recreational watercraft at boat ramps at popular fishing lakes.
- Provided support for zebra mussel substrate monitoring.
  - Dr. Mark Sytsma of Portland State University and a graduate student developed a protocol for recruiting and enlisting volunteers to deploy zebra mussel colonization substrates.
- Supported a Chinese Mitten Crab education and monitoring program.
  - PSMFC continued to administer a US Fish and Wildlife Service funded project being carried out in cooperation with Portland State University focusing on education and monitoring for mitten crabs in the lower Columbia River. No mitten crabs were detected during 2001.
- Implemented the Crime Witness Program/Zebra Mussel Hotline.
  - The Crime Witness Program is a toll-free crime informant hotline which allows citizens to report any illegal activity witnessed against the BPA, Bureau of Reclamation and US Army Corp of Engineers property. BPA has agreed to expand the hotline's capacity so that potential zebra mussel sightings can be reported in 17 states straddling or West of the 100<sup>th</sup> Meridian.

## Fish Habitat Education Program

The **Fish Habitat Education Program** works to protect habitat for salmon and other marine fish species through education, protection, and restoration activities. The Commission's habitat efforts are funded primarily by the Wallop-Breaux Sport Fish Restoration program

In 2001 the Habitat Education program worked on the following projects:

- Oregon coast salmon habitat protection and restoration
  - Salt Marsh Restoration— The program managed the design and implementation of two salt marsh restoration projects on Oregon's central coast that will benefit young of year and juvenile coho salmon as well as the juvenile Chinook, steelhead and chum salmon that use the Yaquina estuary.
  - Watershed Restoration—The program supported the efforts of the MidCoast Watersheds Council (MCWC).
- Salmon habitat and watershed education -Puget Sound, Washington
  - Watershed Tours—The program's Flying for Fish Habitat program, working in conjunction with LightHawk, conducted aerial watershed tours to inform decision makers of habitat issues in their communities.



- Groundfish and marine reserve outreach (California, Oregon, Washington)
  - The program gathered information, prepared, updated, and distributed written material, and staffed informational booths at sportfishing shows in California, Oregon, and Washington, at Fish Expo in Seattle, and at an Oregon policy meeting.
- Interstate and federal/state/tribe coordination
  - PSMFC's Habitat Program coordinates with the Pacific Fishery Management Council through serving as an active member of the Pacific Fishery Management Council's Habitat Committee



The **Recreational Fisheries Information Network (RecFIN)** is a cooperative effort between the state fishery agencies in Washington, Oregon, and California, the Pacific States Marine Fisheries Commission (PSMFC), and National Marine Fisheries Service (NMFS). The four goals of RecFIN are as follows:

- 1. Develop and implement a State/Federal cooperative program for a coastwide marine recreational fisheries data system;
- 2. Coordinate collection, management, and dissemination of Pacific coast marine recreational fishery data;
- Provide the data in a central location on a timely basis in the format needed to support state and federal work on Pacific marine recreational fisheries; and
- 4. Reduce and avoid duplication of data collection efforts between RecFIN members.

The database contains recreational fishery data for the years 1980-89 and 1993date. The primary source of data in the RecFIN database comes from the Marine Recreational Fisheries Statistics Survey (MRFSS) funded nationwide by NMFS along with state agency sampling program data. The survey is spread out over about 800 fishing sites coastwide in the three states. Of these sites, about 57% are in California, 10% in Oregon and 33% in Washington state.

In 2001:

- 32,700 anglers were interviewed in the field in the three states of California, Oregon and Washington in the MRFSS.
- A total of 57% of these were in California, 26% in Washington and 17% in Oregon.
- State sampling programs had a much higher sampling rate than the MRFSS, concentrating on ocean boat trips only.



The Northern Pikeminnow Predator Control Program is a joint effort between the fishery agencies of the states of Washington and Oregon, the Columbia River Treaty Tribes, the Columbia River Intertribal Fish Commission (CRITFC), and the Pacific States Marine Fisheries Commission (PSMFC). Washington ran the sport-reward registration/creel check stations throughout the river and handled all fish checked in to the program. Oregon provided fish tagging services, population studies, food habit and reproductive studies, as well as exploitation rate estimates. PSMFC provided fiscal and contractual oversight for all segments of the Program and processed all reward vouchers for the sport-reward anglers. CRITFC and the Treaty Tribes conducted angling at the dams and site specific removals by means of gillnets at tributary mouths to aid salmonid downstream migrant survival.

### In 2001:

- A total of 239,964 fish were harvested in the sport-reward fishery.
- Vouchers for 237,938 fish were submitted for payment totaling rewards of \$1,527,046.
  - Rewards were paid at \$4 for the first 100 fish caught during the season, \$5 for fish in the 101-400 range, and \$6 for all fish caught by an angler above 400 fish. Due to low river flows and less than average angler turnout, in July the pay tier structure was increased to \$5, \$6, and \$8 per fish, respectively.
- A total of 3,351 anglers who registered were successful in catching one or more fish in 2001. The 2001 season ran from May 14, 2001 through October 14, 2001.
- A total of 200 tagged fish were caught.
  - Anglers were issued a special tagged fish voucher for all tagged fish brought to the registration station. The tag voucher was then sent in with the tag for verification and payment of the special \$100 tagged fish reward.
  - As with the tier structure, the tag rewards were increased to \$1,000 to help promote interest in the fishery. This resulted in tag reward payments of \$87,900.

### **Financial Report**

The Commission receives its financial support from contributions from its member states, grants, contracts, and indirect cost charges on external contracts. Since 1977, the states' contributions have remained level funded at \$106,000 per year. These contributions are made available from the member states in accordance with Article X of the Interstate Compact which created the Commission. The formula calls for eighty percent of the total contributions to be shared equally by those states having as a boundary the Pacific Ocean and five percent from Idaho. The fifteen percent balance is divided by the states in proportion to the primary market value of the products of their commercial fisheries on the basis of the (then) latest 5-year catch records.

### 2001 Audit Report

To the Board of Commissioners Pacific States Marine Fisheries Commission Gladstone, Oregon

We have audited the accompanying general purpose financial statements of Pacific States Marine Fisheries Commission (the Commission) as of and for the year ended June 30, 2001 as listed in the table of contents. These general purpose financial statements are the responsibility of the Commission's management. Our responsibility is to express an opinion on these general purpose financial statements based on our audit.

We conducted our audit in accordance with auditing standards generally accepted in the United States and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the general purpose financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the general purpose financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the general purpose financial statements referred to above present fairly, in all material respects, the financial position of the Pacific States Marine Fisheries Commission as of June 30, 2001, and the results of its operations for the year then ended in conformity with accounting principles generally accepted in the United States.

In accordance with *Government Auditing Standards*, we have also issued a report dated June 17, 2002 on our consideration of the Commission's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grants.

Our audit was made for the purpose of forming an opinion on the general purpose financial statements taken as a whole. The accompanying schedule of expenditures of federal awards is presented for purposes of additional analysis as required by *U.S. Office of Management and Budget Circular A-133, Audit of States, Local Governments, and Non-profit Organizations,* and is not a required part of the general purpose financial statements. The accompanying supplemental information listed in the table of contents is also presented for purposes of additional analysis and is not a required part of the general purpose financial statements. The information has been subjected to the auditing procedures applied in the audit of the general purpose financial statements and, in our opinion, is fairly stated in all material respects in relation to the general purpose financial statements taken as a whole.

Aldrich, Kilbride & Tatone LLP June 17, 2002 Salem, Oregon

Editors Note: Copies of the complete auditor's report are available upon request

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